

AN INTEGRATIVE RESEARCH REVIEW: META-ANALYSIS  
OF PSYCHOSOCIAL CHARACTERISTICS  
OF ADOLESCENT PREGNANCY  
1964 THROUGH 1994

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A DISSERTATION  
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COLLEGE OF NURSING

BY  
STEPHEN D. GILLIAM, M.S.N.

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ABSTRACT

STEPHEN D. GILLIAM, M.S.N.

TEXAS WOMAN'S UNIVERSITY  
COLLEGE OF NURSING

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Pregnancy is a normal and healthy event in the life of a woman; for an adolescent, pregnancy is a complex event adding to a demanding time of life. For this reason many researchers from divergent fields of study have focused on the phenomenon. The purpose of this research was to collect and summarize the available research and to "determine what can be said with confidence" about psychosocial aspects of the phenomenon. This research addressed the question: In research from 1964 through 1994, what are the relative effect sizes of psychosocial factors influencing adolescent pregnancy, and do demographic attributes of study participants or study characteristics moderate these effects?

A collection of 290 research reports were identified from the literature that dealt with psychosocial aspects of adolescent pregnancy. Inclusion criteria of a control group

narrowed the field of studies included in the review to 68 which represented 12,106 subjects including 3,881 pregnant teens.

Conceptually similar variables from the 68 studies were grouped into 31 clusters which were subjected to a comprehensive analysis. This analysis included but was not limited to: determination of frequency, mean and standard deviation of study and sample characteristics, Weighted Effect Size ( $\underline{z_r}$ ), and 95% Confidence Interval.

After hypothesis testing and homogeneity analysis, the cluster variables that remained and were most strongly correlated with the pregnant adolescents included: an identification with traditional female roles ( $\underline{z_r} = 0.45$ ), positive beliefs about parenting ( $\underline{z_r} = 0.15$ ), and sexual activity ( $\underline{z_r} = 0.14$ ). The cluster variables most strongly correlated with the non-pregnant control group were contraception use ( $\underline{z_r} = 0.16$ ), educational expectations ( $\underline{z_r} = 0.21$ ), future orientation ( $\underline{z_r} = 0.15$ ), school grades ( $\underline{z_r} = 0.24$ ), and occupational expectations ( $\underline{z_r} = 0.18$ ).

During the meta-analysis of each cluster, study characteristics and study subject demographic variables were analyzed as potential moderator variables. Moderator variables indicate the need to look for sources of variance

within a meta-analysis other than the cluster variable. No pattern of variables were found to act as moderators across all or groups of the clusters. The implications of moderators were briefly considered; however, theoretical inference was left for future research.

## TABLE OF CONTENTS

COPYRIGHT . . . . .	iii
ACKNOWLEDGEMENTS . . . . .	iv
ABSTRACT . . . . .	vi
LIST OF TABLES . . . . .	xii
LIST OF FIGURES . . . . .	xiv

Chapter	Page
I. INTRODUCTION -----	1
Problem of Study -----	4
Rationale for the Study -----	5
Integrative Research Review	
- Research Synthesis -----	10
Assumptions -----	11
Research Questions -----	13
Definition of Terms -----	14
Limitations -----	15
Delimitations -----	16
II. REVIEW OF LITERATURE . . . . .	17
III. PROCEDURE FOR COLLECTION AND TREATMENT DATA . . .	50
Setting . . . . .	50
Population and Sample . . . . .	50
Instruments . . . . .	51
Data Collection . . . . .	53
Treatment of Data . . . . .	61
Quality of Study Instrument (QSI) . . . . .	61
Meta-Analysis of Clusters . . . . .	62
Effect Size Estimates . . . . .	64
Fisher's $\underline{z}_F$ . . . . .	70
Pooled $\underline{z}_F$ . . . . .	74

Chapter	Page
Average Weighted Effect Size and Confidence Interval . . . . .	78
Stouffer Method ( $z_{st}$ ) Combined Probability Associated With Study Results . . . . .	82
Fail-safe N ( $N_{fs.05}$ ) Robustness of Literature Review . . . . .	85
Homogeneity Analysis of Moderator Variables . . . . .	89
ANOVA, Cochran's $C$ , Scheffe Analysis and $Q_t$ Analysis . . . . .	93
IV. ANALYSIS OF DATA . . . . .	98
Quality of Study Instrument (QSI) . . . . .	99
Description of the Sample . . . . .	103
Study Characteristics . . . . .	103
Demographic Characteristics of Study Participants . . . . .	105
Findings . . . . .	110
Effect Size ( $z_r$ ) . . . . .	114
Stouffer Method ( $z_{st}$ ) . . . . .	118
Fail-safe N ( $z_{fs}$ ) . . . . .	122
Binomial Effect Size Display (BESD) . . . . .	126
Homogeneity Analysis and $Q_t$ Analysis . . . . .	130
Analysis for Moderator Variables . . . . .	134
Study Characteristics - Moderator Variables Demographic or Sample Characteristics - Moderator Analysis . . . . .	142 170
Summary of Findings . . . . .	189
V. SUMMARY OF THE STUDY . . . . .	192
Summary . . . . .	200
Moderator Analysis . . . . .	201
Conclusions . . . . .	211
Limitations of the Present Study . . . . .	213
Recommendations for Further Study . . . . .	222
Implications for Future Research . . . . .	222
Implications of Results for Practice . . . . .	229
REFERENCES . . . . .	231

## APPENDICES

APPENDIX A.	Formulas . . . . .	247
APPENDIX B.	Data Coding Form . . . . .	261
APPENDIX C.	Quality of Study Instrument & QSI Guide . . . . .	278
APPENDIX D.	Cluster Variables . . . . .	287
APPENDIX E.	Meta-Analysis of the Clusters . . . . .	309
APPENDIX F.	Study Characteristics . . . . .	359
APPENDIX G.	Participant Characteristics . . . . .	368
APPENDIX H.	Cluster ANOVA Tables & Qt / Scheffe Tables . . . . .	375



## LIST OF TABLES

Tables	Page
3.1 Correlation of pregnancy status and school grades	60
3.2 Formulas in the calculation of $r$ as effect size -	65
3.3 School Grades cluster $\underline{N}$ and $\underline{r}$ value summary ----	69
3.4 Formulas in the calculation of Fisher's $\underline{Z_r}$ -----	72
3.5 Formulas in the calculation of a within-study-pooled $\underline{Z_{rj}}$ -----	75
3.6 School Grades cluster $\underline{N}$ , $\underline{r}$ , and corrected Fisher's $\underline{Z_r}$ -----	77
3.7 Average weighted ( $\underline{df}$ as weight) effect size and confidence interval -----	80
3.8 Stouffer Method for combining studies -----	83
3.9 Fail-safe $\underline{N}$ ( $\underline{N_{fs.05}}$ ) calculations -----	87
3.10 Homogeneity analysis, $\underline{Q}$ statistic analysis -----	91
4.1 Comparison of quality of study instrument scores	101
4.2 Participant group characteristics -----	106
4.3 Clusters of independent variables from the adolescent pregnancy literature -----	112
4.4 Weighted effect size ( $\underline{z_r}$ ), standard deviation and 95% confidence interval per variable cluster	115
4.5 Stouffer method of analysis per variable cluster	120
4.6 Effect size and Fail-safe $\underline{N}$ by variable cluster	124

## LIST OF TABLES

Tables	Page
4.7 BESD group comparison (rate per 100)	
by variable cluster -----	128
4.8 Effect size and <u>Qt</u> /Chi-Square analysis	
by variable cluster -----	132
4.9 Study characteristic and demographic variables	
analyzed as potential moderator variables -----	137
4.10 <u>Qt</u> /Scheffe analysis - Study characteristic -	
Mean <u>Z<sub>r</sub></u> associated with variable levels -----	143
4.11 <u>Qt</u> /Scheffe analysis - Demographic variables -	
Mean <u>Z<sub>r</sub></u> associated with variable levels -----	171
5.1 Variable cluster and null hypothesis results	
by applied meta-analytic technique -----	197

## LIST OF FIGURES

Figures	Page
3.1 Analysis Flow Diagram -----	63
5.1 The Elemental Model of Teen Pregnancy (EMTP) ---	225

## Chapter 1

### INTRODUCTION

The phenomenon commonly labeled "adolescent pregnancy" is not thoroughly understood, despite intensive study by members of varied professions focusing on a range of variables. Variables of interest have included physical, psychological, and social aspects of the phenomenon. The physiological features of adolescent pregnancy may satisfactorily be explained by current biological and medical theories. However, the psychological and sociological components of the phenomenon are complex and poorly understood. This complexity is a result of issues of morality, family and social values, sexuality, difficulties in communications, underage subjects, and the dynamics of adolescence. The complexity and social sensitivity of these issues result in a research topic that is not easily categorized or controlled for observation.

Despite difficulties, researchers in the United States have actively been examining adolescent pregnancy since the 1940s (Phipps-Yonas, 1980). This researcher and others who have attempted to summarize this research have followed a convoluted path, beginning with the earliest research focused on physiological considerations of pregnancy in the

adolescent years. In the 1950s, the research path turned to a discussion of adolescent pregnancy as a psychological pathology. Another shift occurred in the 1960s with a broadening of the research focus to include adolescent pregnancy as a social problem, including implications of new birth control methods and a more "liberal" attitude toward sexual activity. The 1970s focused on the impact of abortion and expanded on themes of psychological and self-concept deficits in adolescents. Finally, researchers in the 1980s added concerns of the financial impact of adolescent pregnancy and the long-range outlook for children of the pregnant adolescent (Black & DeBlassie, 1985; Mercer, 1985; Norr 1988; Phipps-Yonas, 1980).

The large number of articles found in even the briefest review of the literature indicates that adolescent pregnancy has received considerable attention from a variety of perspectives. With this in mind it would be helpful to determine the current state of knowledge and to determine the important issues that research has left unresolved. One approach to this problem is a process of "creating generalization, and seeking the limits and modifiers of generalizations," that is, the process of research synthesis (Cooper & Hedges, 1994, p. 5).

Research synthesis in the form of an integrative research review will "pay attention to relevant theories, critically analyze the research they cover, try to resolve conflicts in the literature, and attempt to identify central issues for future research" (Cooper & Hedges, 1994, p. 5). This study will provide an integrated research review of studies from 1964 through 1994 and present the psychosocial variables found to influence adolescent pregnancy. This will be accomplished by application of research synthesis and meta-analytic techniques to summarize past research on adolescent pregnancy and by drawing conclusions from the many separate studies that address related or identical hypotheses.

### Problem of Study

The problem of this study is to determine what can be said with confidence about adolescent pregnancy.

Psychosocial factors that influence adolescent pregnancy and the impact of demographic and study attributes on those factors will be determined from the literature.

Determination of influence will be accomplished through meta-analysis and the comparison of effect sizes in research studies (published and unpublished) performed in the United States from 1964 through 1994. Specifically, the research will answer the questions:

In research from 1964 through 1994, what are the relative effect sizes of psychosocial factors influencing adolescent pregnancy, and do demographic attributes of study participants or study characteristics moderate these effects?

### Rationale for the Study

Adolescent pregnancy gained notice in the early 1940s (Norr, 1988). Norr (1988) stated: "The United States does not follow the overall pattern of decreasing adolescent pregnancy with industrialization" and "although the adolescent birth rate increased steadily throughout the 1950s adolescent pregnancy did not become defined as an important social problem until the mid-1960s" (p. 176).

The extent of the social problem may be demonstrated by analysis of the natality statistics produced by the U.S. Department of Health and Human Services (HHS), National Center for Health Statistics (NCHS). The NCHS reports yearly natality statistics in a variety of ways; of particular interest are Live Births, Fertility Rates and Birth Rates by age of mother. These rates are reported per 1,000 women in a given age group. The 1991 Natality report (National Center for Health Statistics, Vital Statistics of the United States, 1991) indicates that for the period from 1960 through 1991 the mean fertility rate for adolescents was 61.5 with a standard deviation of 11.14; means and standard deviations for the decades of the 1960s, 1970s and 1980s were 74.8 & 8.87, 57.6 & 5.75, and 52.2 & 2.07 respectively. In addition, the report indicates a peak adolescent (women 15 to 19 years of age) fertility rate



(live births per 1,000 women) in 1955 of 90.3 and a low of 50.2 in 1986, see table 1.1 for complete values. The peaks and lows in birth rate vary according to age group see figure 1.2 for comparison figures for each age group provided by the National Center for Health Statistics.

Though birth rates for adolescents may have dropped after 1955, there has been a rising trend in women below the age of 15 and since 1988 both the age groups 15 to 17 and 18 to 19 have experienced a rise in rate. Nakashima, in her 1977 article, pointed out that regardless of the rate the actual number of births to adolescents is increasing. Nakashima (1977) attributed these increases to changes in social attitudes, poor use of easily available contraception, earlier onset of menarche and a proportionate increase of adolescents in the population. Nakashima (1977) found that United States census figures indicated that "proportionately 7.1 percent of the population of the United States was comprised of young people between the ages of 15 -19, rising to 9.4 percent by 1970" (p. 11), a 2.3% increase of teenagers in the population. Nakashima (1977) also reported that menarchial age dropped from just over 14 years in 1900 to 12.5 years in 1967. This means that more girls were present in the population and were able to conceive earlier. According to Nakashima (1977), changes in social

attitudes were reflected by "changes in living arrangements," "greater acceptance of premarital sex" (p. 10), and the fact that "only 6% of new mothers choose to relinquish their babies for adoption" (p. 12) were because of "strong peer pressure and an abhorrence for therapeutic abortion" (p. 12).

Researchers have identified many of the outcome phenomena associated with adolescent pregnancy. Adolescent pregnancy (those carried to term or not) often results in or contributes to an elevated high school drop-out rate, low lifetime education level, and low earnings compared to peers. Other associated outcomes also include a high rate of repeat pregnancies, child abuse, divorce, and poverty (Black & DeBlassie, 1985; Norr, 1988). Each of these outcomes takes an individual toll on the adolescent child-bearing mothers and the children. Human suffering, lost capacity for advancement, lost productivity and a financial and emotional price of support are all costs to society of teenage child bearing (Black & DeBlassie, 1985; Norr, 1988).

The costs to society and the impact on young lives make adolescent pregnancy an important social issue. Thus, it has received a great amount of attention from a wide variety of disciplines, including business, economics, education, government, medicine, nursing, public health, psychology,

and sociology. Although each of these disciplines approach the topic from its own unique perspective, the relevant factors of study tend to fall into two categories: physiological or psychosocial.

The majority of physiological studies have occurred in medicine and nursing. Many of these have focused on the biological capacity of the teenager to produce a healthy child. Phipps-Yonas (1980) summarized much of this literature and indicated "it is gynecological maturity rather than chronological age that is critical, . . . there is no evidence of biomedical risk either to the mother or to her offspring associated with pregnancy for the average female over age 14. With proper health care and nutrition, the older teenager is ready, medically speaking, to become a mother" (pp. 406-407). She concluded further that "Girls younger than 15 tend as a group to have more difficulties that cannot be explained as a function of other factors and that probably are due to their physiological and anatomical immaturity" (Phipps-Yonas, 1980, p. 407). Topics of prenatal care and nutrition are addressed in a physiological nature in the literature, but little else is discussed.

The goals of nursing include the promotion of health over the full life span, care of persons with health problems and disabilities, and the enhancement of the

ability of individuals to respond effectively to actual or potential health problems (ANA, 1981). Promotion of health may be conceptualized to include the efforts to minimize the threats to health and resulting adverse effects. The physiological threat posed by adolescent pregnancy and the means of alleviating that physiological threat appear to be largely depicted in Phipps-Yonas's conclusions and will not be considered by this study. The less clearly described threats are represented by the psychosocial variables. Integration of research on these variables holds the possibility of the discovery of knowledge, gaps in knowledge, and direction for additional research.

Studies of psychosocial factors leading to pregnancy make up the largest research category, with topics including from legitimacy, drug use, social class, socioeconomic status, personality types, familial relationships, educational status, religion, and self-esteem. Of the sociological and psychological studies, Phipps-Yonas (1980) concluded that the overriding message is that there is "no unique common psychological profile common to most, much less all, pregnant adolescents" and "combinations of certain characteristics do increase the likelihood that a teenager will become pregnant"; however, "pregnancy is due to biological union" (p. 407).

Integration of research on the psychosocial variables in the adolescent-pregnancy literature will be the focus of this research review. The integrated research review will merge the empirical research, synthesize findings, and organize results into a coherent pattern (Duffy, 1988). Understanding the current state of knowledge will allow society in general and nursing in particular to design research in areas not previously investigated, and it may promote creation and testing of interventions supported by or based on research findings.

#### Integrative Research Review - Research Synthesis

The integrative research review summarizes past research by addressing study- and review-generated evidence. Study-generated evidence is present when a single study contains results that directly test the relation being considered. Study-generated evidence allows the reviewer to make statements concerning causality (Cooper, 1989). Review-generated evidence is created from the analysis of variations in procedures across studies. Review-generated evidence is used to examine potential moderators of relations.

The process of an integrative research review is inductive and requires the reviewer to begin the literature

search with a broad conceptual definition of the focal problem and "err on the side of overly inclusive decisions" (Cooper, 1989, p. 37). "They should begin with a few central operations but remain completely open to the possibility that other relevant operations will be discovered in the literature" (Cooper, 1989, p. 37). In later stages of the review, operations and data are excluded based on their lack of relevance or impurity. The review subsequently summarizes the results and draws conclusions.

The methods and reports of results used in the current research will reflect the format and standards established by Cooper and Hedges (1994). These suggested standards include attention to relevant theories, analysis of research covered, attention to conflicts in the literature, identification of central issues for future research, and a reporting format for the integrative research review.

### Assumptions

The following research assumptions were made for this study:

1. Pertinent research studies are available for meta-analysis.
2. Available research will address empirical relationships of the phenomenon under study.

3. Primary studies do not produce unequivocal answers to research questions.

4. No research is without flaws.

5. Accurate and complete information has been reported.

6. Research synthesis is a subjective endeavor.

7. Psychosocial factors can be observed and have been measured.

8. Integration of research findings can enlarge the understanding of the entire observed phenomena.

9. Meta-analysis is an effective means of integrating research findings across studies.

### Research Questions

Using meta-analytic techniques, this study will analyze existing literature to determine the psychosocial factors and demographic attributes of study subjects that are associated with adolescent pregnancy. Answers to the following research questions were sought:

1. What are the magnitude of the effect sizes of psychosocial factors associated with adolescent pregnancy?
2. Which study subject demographic characteristics function as moderator variables to the observed psychosocial variable effect sizes?
3. Which study characteristics function as moderator variables to the observed psychosocial variable effect sizes?



### Definition of Terms

For the purposes of this study the following terms were defined:

adolescent pregnancy - an impregnated female between the ages of 13 and 19, years of age inclusive. As a means of reference the selection of these ages are specified based on the custom of reported natality statistics produced by the U.S. Department of Health and Human Services (HHS), National Center for Health Statistics (NCHS).

study subject demographic characteristics ( generally abbreviated as demographic characteristics in the remainder of the study) - identifiable attributes of study subject, such as age, ethnic background, educational level, and socioeconomic class.

effect size - the magnitude of a relationship or a difference between two groups on a given measure. The effect size may be expressed as a correlation ( $r$ ), calculated and used to combine the results of studies and assess effectiveness of variables under study (Rosenthal, 1991).

psychosocial factors - observable phenomena, such as self-esteem, self-concept, sense of identity, ethical code, family structure, social attachments, and sense of community, generally expressed in the literature and

considered evidence of an individual's psychological and/or social structure.

study characteristics - identifiable attributes of study, such as setting, reliability and validity information, quality, and theoretical approach.

moderator variables - factors that are associated with variations in the magnitudes of the relationship between two variables (Rosenthal, 1991, p. 7).

### Limitations

The limitations of the proposed study are:

1. Differences in conceptual definitions and instruments measuring concepts under investigation may influence the results of the study.
2. Some of the published and unpublished studies, dissertations, and theses are not available to the researcher.
3. Statistical data necessary for meta-analysis are or may not be completely reported in the available studies.
4. Exclusion of unavailable and incomplete studies may bias the findings.
5. Research that did not report significant findings may not have been accepted for publication, thus biasing the available data set available for the sample.

### Delimitations

The following delimitation's of this integrative research review are:

1. The sample is limited to the research studies completed during the years 1963 through 1994.
2. The sample is limited to English language studies and does not include studies published/conducted outside of the United States.
3. The study sample had to be limited to adolescents between the ages of 13 and 19 inclusive; however, the comparison sample may be of any age.
4. The study sample consisted primarily of studies conducted in education, government, medicine, nursing, public health, psychology, and sociology.
5. Published and unpublished nursing, social science studies, and dissertations were utilized as available.
6. For meta-analysis of quantitative studies: (a) The study has to be a quantitative analysis of empirical data; (b) statistical data such as bivariate correlation's, t tests, F values, chi-square values, or means and standard deviations relative to adolescent pregnancy, and other independently measured variables must have been reported or available; and (c) only one study from a particular data set addressing a unique variable are included.

## Chapter 2

### REVIEW OF LITERATURE

Pregnancy in adolescence is not a new phenomenon; in some cultures it is the norm and quite acceptable. Mercer (1985), Norr (1988), and Phipps-Yonas (1980) summarized much of the changing perspective toward adolescent pregnancy in the United States. They presented information covering three decades, and they indicated pregnancy among adolescents has been identified as a problem and in some cases a crisis (Mercer, 1985; Norr, 1988; Phipps-Yonas, 1980). This review will examine their research, present perspectives supplied by other authors, and address studies concerning social and behavioral concerns.

Phipps-Yonas (1980) performed a traditional review of the literature related to teenage pregnancy and motherhood. The review addressed over 250 studies located in a variety of medical, public health, and social science journals. In addition to these journals, Phipps-Yonas found masters and doctoral theses addressing these issues and federally funded research projects that were providing preliminary reports.

The Phipps-Yonas article was found to be thorough and succinct. The author discussed the current status of research in terms of studies focused on the biomedical

differences between pregnancy in teens and older women, studies directed at identifying "the types of girls who become pregnant" (p. 407), studies focused on demographic characteristics of pregnant teens, studies utilizing psychological correlates of teen pregnancy, and studies comparing teenagers who utilize contraceptives and those who do not. The Phipps-Yonas categories were found to provide an understandable organization of the literature. However, she made no attempt to draw conclusions in an empirical way.

A principal conclusion useful in the present research was Phipps-Yonas's evaluation of medical studies. She found the focus of the medical studies to be "devoted to the question of whether there are biomedical differences between pregnancy in teenagers and pregnancy in older women" (p. 405). After a thorough analysis of the medical studies Phipps-Yonas concluded that, given quality prenatal care and good nutrition, girls over 15 years old are "medically speaking ready to become mothers" (p. 406). Girls younger than 15 were found as a group to have more difficulties, most likely due to their physiological and anatomical immaturity (p. 406). This finding supports the focus of the present study away from the physiological elements and more toward psychosocial aspects of adolescent pregnancy.

Psychological predictors of pregnancy were divided into two motivational classifications: "those who actively sought to conceive and those who conceived by default (those not actively seeking pregnancy)" (p. 409). Phipps-Yonas discussed the motivational classifications and research associated with each. She identified the young women who wished to assume the maternal role as motivated by a desire to "recapture an emotional loss, "capture" a particular male, compete or punish her [the teen's] mother" or by a need to "escape from an unhappy family life or resolv[e] deprivation and dependency needs" (pp. 409-410). Within this category Phipps-Yonas included teens who consider pregnancy as a source of self-esteem or the "pinnacle" or "most sacred of female roles" (p. 409-410).

Phipps-Yonas described those who conceived by default as blaming their behavior on their inability to obtain contraception, or on their frustrations with public health facilities. She also contended that "the more commonly given reasons are the 'it-won't-happen-to-me' attitude," "guilt regarding sexual intercourse," and the response that "they did not expect to have intercourse" (p. 410). Each of these behaviors or attitudes resulted directly or indirectly in no precautions or preparation by the adolescent for the potentiality of intercourse.

Problems in the research identified by Phipps-Yonas included "the adequacy and availability of control groups, choice of appropriate criteria to index outcomes, and the generalizability of findings from one sample to another" (p. 405). An additional threat was that "many of the measures studied were confounded by variables that are moderately to highly correlated with teenage pregnancy, such as race and social class" (p. 405).

The literature review written by Mercer (1985) concurred with Phipps-Yonas and focused on "nursing research on teenage pregnancy as a community health problem" (p. 49). Mercer found no citations prior to 1961 and only one between 1961 and 1963 in the Cumulative Index to Nursing and Allied Health Literature on teenage pregnancy. Mercer found 77 reports of research that met her criteria and focus published before 1982. Mercer's review required at least one nurse author, and the report had to be research based.

In detailing the studies, Mercer divided them into six content categories: etiology or prevention, reproductive decision making, prenatal care, intrapartum and postpartum care, family relationships, and mothering. The etiologic and reproductive decision making studies are pertinent to the present research. The etiologic studies indicated that teens who had a negative relationship with their parents and

the adolescent with few extracurricular interests were at risk to be sexually active and vulnerable to pregnancy. There was also agreement that adolescent knowledge about contraception was lacking.

Mercer (1985) summarized studies of reproductive decision making with two observations. First, "the most important finding was that women did nothing to prevent pregnancy when they first became sexually active, and they inconsistently used birth control measures once their use was begun" (p. 60). And second, "there was a lack of agreement on whether initial contraceptive information [was] obtained from friends, schools, parents or the mass media" (p. 60).

Mercer's results were presented as a percentage of the total number of studies reviewed. Few original statistical data were presented and little was done to evaluate the reviewed studies objectively. The paper was found to be a fertile resource for references to original data.

The literature review presented by Black and DeBlassie (1985) concurs with many of the factors found by Phipps-Yonas and Mercer. Black and DeBlassie (1985) provided an overview of adolescent pregnancy, focusing on contributing factors, consequences, treatment, and solutions. Contributing factors included societal influences (modeling



of adult behavior), personal attitudes/needs (hope of more attention), ignorance concerning sexual matters (ignorance of the menstrual cycle), and problems with contraceptive methods (ignorance of or lack of access to various methods). Consequences of adolescent pregnancy included a physical threat to both mother and child, such as poor job and income prospects, social isolation, repeat unplanned pregnancies, and the psychological consequences of anxiety and depression for the mother. Black and DeBlassie identified treatment solutions from the literature as preventive measures (sex education, family life education, family planning, and interpersonal training), group therapy, vocational planning, and counseling.

Black and DeBlassie presented their results in a narrative form, and no statistical data or objective analysis of studies was presented. Like the Mercer paper, the article was found to be a fruitful resource for references to original data.

Nakashima's 1977 article "Teenage Pregnancy: Its Causes, Costs and Consequences" is typical of many of the early articles found in the literature. Based on Nakashima's experiences in the Young Mother's Clinic (University of Colorado Medical Center) and a review of the literature, an "overview" of the problem was presented. The

causes identified included an increase in sexual activity, peer pressure and support, sexual acting-out, a desire for experimentation and a response to parental pressure. Greater acceptance of premarital sex, out-of-wedlock pregnancies, earlier menarche and more easily available contraception were considered contributing factors to early and increased sexual activity. Costs of teen pregnancy were considered medical, nutritional, and/or obstetrical complications, special concerns for the teen's self-image and unrealistic perceptions of pregnancy. The consequences of teen pregnancy included 94% of mothers keeping their children, teen marriages (that have a divorce rate approximately twice the national average), social isolation of the mother, frequent school drop-out rate, and a reduced annual and lifetime family income. Nakashima concluded the article by suggesting sex education, family planning services, and abortion counseling as primary means of prevention.

Nakashima presented her results in a narrative form with no statistical data or objective analysis of studies. Studies were presented only to sustain the author's points; no studies were presented with opposing views or information. The article included references to original

data and vital information that contributed to the representation of the topic.

Hopkins (1977) reviewed the literature on sexual behavior in adolescence, emphasizing data on incidence of premarital sexual intercourse. The review indicated a liberalization of sexual behavior based on evidence of earlier sexual experimentation in both early, middle and late adolescents. The review focused on studies performed in the 1970s but also included data from earlier research. Hopkins concluded that the liberalization of sexual behavior resulted from the following: a major shift in attitudes regarding acceptability of premarital intercourse; an increase in incidence of premarital coitus; earlier participation in coitus in adolescent years; and liberalization in patterns of sexual expression (increased number of partners, increased frequency of coitus, less insistence on an emotional attachment, and willingness to experiment with sexual technique). Hopkins's primary conclusion was that sexual experience for both males and females was occurring in younger adolescents.

In Hopkins's review technique no quantitative methods were employed. However, he did address the threats to the validity of the studies and discussed the reliability of the

data based on cultural context and "technical" terminology used in the research.

Using a 50-60 minute (author developed) structured interview and a conventional unstructured psychiatric interview, Gottschalk, Titchener, Piker, and Stewart (1964) identified psychosocial factors associated with pregnancy in adolescent girls. Subjects for the study were a group of pregnant and nonpregnant girls, 16 years of age and younger, selected "unsystematically" over a period of two years from three different obstetric services. The sample consisted of 131 girls: 26 "white and pregnant", 19 "white and nonpregnant", 50 "Negro and pregnant", and 36 "Negro and nonpregnant."

Data was collected in three ways: "a standardized contact interview," a "less structured conventional psychiatric interview," and repeated observations. Observations were gathered through a 50-60 minute (author developed) structured interview and a conventional unstructured psychiatric interview.

Responses were "classified, tabulated, and counted." Chi-square was used to determine group differences,  $p < .05$ , and group means and variances were reported in tabular form. Significant findings indicated that pregnant girls were less frequently disciplined by parents, attended church less,

dated more, began menstruation earlier, experienced less anxiety with menses, were less informed about sex, and had a peer or relative who was or had been a pregnant teen. The authors cautioned that "[study findings] even when statistically significant, probably have no causal relationship to a girl's becoming pregnant. The statistical tests we have applied indicate association of variables only" (p. 534). While supporting findings in other research, these are preliminary and should act only as a basis for future research. The research was well done and statistics were applied appropriately.

The relationship between pre-marital pregnancy and locus of control was assessed for 165 female junior and senior high school students from two metropolitan high schools, one middle-class white and one lower-class black (Segal & DuCette, 1973). All students in the convenience sample completed the Rotter Internal-External Scale (I-E Scale), which measures locus of control. No reliability data were provided. Results were analyzed using chi-square to compare the groups.

No significant difference was found between school scores for the two schools. Within-school scores indicated that pregnant girls and nonpregnant girls did demonstrate a significant difference,  $p < .05$ . Within the white middle-

class school, pregnant girls tended to score external and nonpregnant girls scored internal. Within the black lower-class school the opposite result was found. The authors explained this result by suggesting it represents the internally oriented girl's capacity to accurately understand her environment and behave in ways that maximize reinforcement of her environment. Segal and DuCette (1973) indicated the environment makes different demands for the girls in the different socioeconomic situations. For the white middle-class girl, premarital pregnancy was unwanted and to be avoided, while for the black lower-class girl it was more the norm and in many ways reinforced. The internally oriented girls accurately perceived their environment and behave accordingly or "they are controlling their actions in a manner they perceive will be most adaptive" (p. 890).

The use of nonpregnant subjects functioned as a control group for comparison in this project; this is one of the study's strengths. A small sample size and limited statistical analysis weakened the study design. The seemingly conflicting results of pregnant black internal scoring students and differences by race/socioeconomic status contribute to the rationale for the present study; it clearly calls for analysis of existing research and an

analysis based on demographic variables of the subjects involved.

Jessor and Jessor (1975) performed cross-sectional and longitudinal comparisons (over a 4-year period), on personality, perceived environment and behavioral measures to study the transition from virginity to nonvirginity among 432 high school students and 180 college students. The sample included both males and females "almost entirely Anglo-American in ethnic background and middle-class in socioeconomic status" (p. 474).

The instrument used was a 50-page questionnaire consisting of various psychometric scales "that have adequate psychometric properties and Chronbach's alpha index of reliability" (p. 476). Jessor and Jessor's principal findings were that nonvirgins and those who were going to have sexual experience in the subsequent year considered independence important, had loosened their ties to the family in favor of peers, and had engaged more in other nonconventional or transitional behaviors such as alcohol and marijuana use. These results were comparable and consistent for both male and female subjects.

While these results do not apply directly to the issue of the pregnant teen, they apply in that the precursor to pregnancy is sexual activity. The data also agreed with

information noted previously, alluding to the teen's desire for more self-reliance and the value of the peer group. This presents a sense of triangulation for a theoretical construct of adolescent sexual activity and pregnancy.

Data were collected on the same subjects over a period of 4 years but no actual longitudinal analysis of the data was performed. A time series analysis of the data might have strengthen the results. The researchers's neglect in specifying reliability and validity data for the instruments prior to and for the present research was a weakness. This weakness could have been eliminated easily in one of the many tables that presented results.

Zongker (1977) compared self-concept of pregnant adolescent girls ( $\underline{N} = 88$ ) to a stratified random control group of their peers ( $\underline{N} = 108$ ) using the Tennessee Self-Concept (TSC) Scale. The groups were compared on the subscales of the TSC and five demographic variables. Thirteen of 27 variables measured demonstrated significant differences between the groups. Demographic variables indicated that school-age mothers were significantly less likely to have fathers in the home, were older, and were more often black. The self-concept variables indicated that the pregnant students had: a lower sense of self-worth; were dissatisfied with familial relationships and their feelings



of value in the family; were dissatisfied with their physical self; exhibited more dissonance in self description; and reflected inconsistency from one area of self-perception to another.

A stratified random control group, an established instrument, and appreciable and quantifiable demographic variables added strength to Zongker's study. However, matching of socioeconomic variables and a randomization of subjects would have strengthened the methods. The research has limited use in a meta-analysis in that variance was not reported in the results. These results support the following work by Patten (1981).

Patten (1981) used the Tennessee Self-Concept Scale (test-retest  $\underline{r}$  = .92), the Rosenberg Self-Esteem Scale (test-retest  $\underline{r}$  = .85), a 15-item (author developed) questionnaire to measure "subjects' feelings about contributing causes of their pregnancies and their expectations for the future" (p. 769), and a demographics form to collect data from a convenience sample of 37 subjects in residence at an agency providing care to pregnant teens in Tennessee. Patten then compared the results obtained in this study in 1979 to "national norms" for the standardized tests and to study results obtained in 1963 and 1970.

A statistically significant difference existed between the 1979 sample and the mean standard population norm scores for self-concept ( $\underline{t} = 4.87$ ,  $p < .001$ ) and for self-esteem ( $\underline{z} = 2.70$ ;  $p < .01$ ). This finding supported previous findings that some pregnant adolescents have diminished self-concepts and self-esteem. Important differences in the study were that the 1979 sample had higher unemployment, came from disrupted homes and knew less about their parents than subjects in the 1963 and 1970 samples.

Patten's (1981) research study exhibited a sophisticated application of statistics and research design. Though the study used a convenience sample the design was enhanced through the use of well documented instruments and by comparison of the sample to samples from previous years and to national norms.

Landy, Schubert, Cleland, Clark, and Montgomery's (1983) study explored psychosocial characteristics of teens who become mothers, using a population of 14 pregnant teenagers, aged sixteen years and younger matched with a group of nonpregnant teens ( $\underline{N} = 12$ ) and pregnant women twenty years or older ( $\underline{N} = 12$ ). The study used a longitudinal design and studied the pregnant teens and their interaction with their children.

Landy, et. al. (1983), included a control group of pregnant teens ( $N = 12$ ) in the design to help regulate testing effects. Subjects were given a battery of tests, including TAT, Rorschach, Totter Sentence Completion, H.T.P., Bellak, open-ended interview and the Depression Inventory. No information was provided on validity or reliability for any of the instruments.

The two "statistically significant results" were reported without supporting statistics, however, an accompanying note indicated the statistical analysis was "available upon request." The first "significant result" was that "there appears to be a trend for the nonpregnant girls to be slightly more 'emotionally stable and mature' and to be more 'relaxed, tranquil and composed' than the pregnant girls or women" (p. 686). A significant  $F$  statistic,  $F(2.46) = 28.023$ ,  $p < .001$ , and a Newman-Keuls test was reported for the second "significant result". This result indicated "the nonpregnant teenagers had a significantly better father-[daughter]-relationship score than any of the other groups ( $p < .01$  for all comparisons)" (p. 686). The authors concluded by indicating that their "findings give no support to those theories which have claimed that there are specific personality characteristics typical of young pregnant girls" (p. 687).

The sample was matched for socioeconomic and marital status, intellectual ability, and ethnicity. It also included a control group. These were all strengths of the research. A lack of actual longitudinal analysis of the data and the researchers's neglect in specifying reliability and validity data for the instruments prior to and for the present research were weaknesses in this study. The significant result in the father-[daughter]-relationship supports the importance of the parental role in the life of the teen.

In 1984, Ierson assessed the impact of sex roles on adolescent pregnancy with a sample of 161 women, 13 to 18 years of age, in several health-related agencies in the Pacific Northwest. The sample was divided into three groups: the birth control group ( $N = 82$ ), the pregnant groups ( $N = 43$ ) and the nonpregnant group ( $N = 36$ ). The measures used were borrowed or adopted from other measures: reliability was calculated for sex roles ( $\alpha = .68$ ), sex-typing of aspired occupation ( $\alpha = .83$ ), occupational aspiration ( $\alpha = .84$ ), and personal control ( $\alpha = .38$ ).

Analysis was carried out by using cross-tabulation,  $t$  tests, and discriminant function analysis;  $p < .05$  was considered significant. Age and socioeconomic status were

used as control variables. The results indicated that the pregnant teens showed more traditional sex-typing of activities, lower educational expectations and occupational aspirations, lower school grades and a greater tendency to be school drop-outs.

The researcher did not use a random sample but data were collected using staff blind to the hypothesis. The use of age and socioeconomic status as controls added to the strength of the analysis. Discriminate function analysis is statistically robust, and it enabled the researcher to identify the variables that discriminate most effectively between two or more groups.

Barnett, Papini, and Gbur's (1991) study provided an excellent example of 1990s psychosocial research involving the pregnant teen. They examined familial, demographic, and individual characteristics and the probability of pregnancy among 124 sexually active adolescent females. These 12- to 19-year-old subjects attended health clinics in northwest Arkansas.

Instruments used in the study included a demographic questionnaire, a sexual history questionnaire, three measures of perceptions of family functioning and one scale to measure "individual development characteristics" (p. 458). The family function instruments were the Family

Adaptability and Cohesion Evaluation Scale (FACES III)

(test-retest,  $\underline{r} = .83$ ,  $\alpha = .92$ ); Family Strengths Questionnaire (FS) (test-retest,  $\underline{r} = .58$ ,  $\alpha = .89$ ); and the Parent Adolescent Communication Scale (PAC) (test-retest,  $\underline{r} = .78$ ,  $\alpha = .91$ ). The individual development scale was the Adolescent Self-Esteem Scale (ASES) (test-retest  $\underline{r} = .83$ ,  $\alpha = .89$ ).

Barnett, Papini, and Gbur (1991) used a stepwise logistic regression analysis "to determine whether a combination of demographic variables, familial variables and individual developmental factors and their interactions were associated with the probability that an adolescent was pregnant" (p. 463). Six variables emerged as predictors of adolescent pregnancy status ( $\underline{p}$  value for improvement chi-square,  $\underline{p} < .05$ ) and were used to form a model for further analysis. The predictor variables included family strengths, parental communication, adolescent marital status, family income, family composition, and use of birth control.

Means and standard errors of a convenience sample of pregnant ( $\underline{N} = 64$ ) and nonpregnant individuals ( $\underline{N} = 55$ ) were compared for the continuous variables, including family strengths, parental communication, family adaptability,

family cohesion and self-esteem. The results of this study were consistent with other literature and the researchers' expectations. This was particularly true when the results that indicated that the groups differed, but not significantly, on self-esteem and family cohesion were considered. Pregnant subjects had lower self-esteem, a weaker sense of family cohesion, and less pride and harmony in their families when compared with nonpregnant teens.

Random selection of the subjects, rather than taking all available subjects, might have improved the study design. Standard procedures and instruments were strengths of the study. Use and reporting of statistics appropriate to the data set and the types of questions asked were also study strengths. It is very helpful to the meta-analyst when the researcher reports means and standard errors of continuous variables.

Sheaff and Talashek's (1995) study provided an excellent example of current research involving the pregnant teen. Using a holistic nursing conceptual frame work, Sheaff and Talashek (1995) considered demographic, sociocultural, physiological, psychological, and cognitive variables among 136 adolescent females, 41 ever-pregnant and 95 never-pregnant, admitted to a temporary housing shelter for teens over the course of one year. The convenience

sample of study subjects ranged in age from 12 to 18 years, and were residents in a housing shelter for abused and neglected adolescents in a suburb of a large metropolitan area.

Use of a comparison group, a strong theoretical base and through grounding in the adolescent pregnancy literature were strengths of the study. Talashek's Nursing Model for Teen Pregnancy and the literature review presented in the study reflected the central concepts previously presented in this review from the adolescent pregnancy literature. Key variables from the literature presented by Sheaff and Talashek included age, race, family structure, daughters of adolescent mothers, sexual abuse, sexual activity, use of contraception, religion, prior pregnancy, age at menarche, age at first sexual activity, ego strength, self-esteem, self-concept, future orientation, educational expectations, school grades, gang membership and physical abuse.

The instrument used in the study was a standardized data collection form used for chart review. Study data were gathered from information routinely collected upon admission and during the adolescents stay in the shelter. Study data included demographic data, sexual history, and psychological data gathered by a psychologist to determine developmental stage based on Erikson's theory of development. The



psychologist also provided results of the Stanford-Binet Intelligence Scale, and the guidance counselor provided assessment of reading level. The data source for much of the remaining variables were from subject self-report or observations from other professional staff members. No information on instrument or data collection reliability or validity was provided.

Sheaff and Talashek (1995) used chi-square and t tests for much of their data analysis. Twenty-two variables were considered and five differed significantly between the pregnant and non-pregnant groups. Variables considered in this study included: age, race, family structure, parental substance abuse, mother's age at first birth, religion, gang membership, physical abuse, sexual abuse, incest, rape, voluntary sexual activity, contraception, age at menarche, gynecological age, psychological maturity, current grade in school, reading level, IQ, and pregnancy status. The pregnant adolescents were found to have significantly higher chronological age, higher gynecological age, higher school grade level, increased history of rape, and increased history of voluntary sexual activity ( $p < .05$ ).

The population from which the sample was drawn was not representative of all female adolescents and was the primary limitation of this study. The study population was more

representative of female adolescents in temporary teenage-housing shelters and because of intake policies may not be typical of these adolescents. Random selection of the subjects rather than taking all available subjects might improve the study design. Self-reporting of data and retrieval of data from chart reviews also represent limitations in the study. These issues represent problems of reliability and validity that were not addressed in the study presentation. Adoption of standard procedures and instruments would strengthen the study design and improve the reliability and validity.

Sheaff and Talashek conclude that the adolescents in temporary housing shelters were at twice the risk of teens in the general population. They also conclude these teens had fewer economic, family, psychological, and cognitive resources to allow them to effectively cope with adolescent pregnancy. The authors suggest further research into the problem using a multiple-site national approach with the ultimate goal of developing interventions to prevent pregnancies. In evaluation of the Nursing Model of Teen Pregnancy the authors suggest "it is a comprehensive and flexible framework for the study of a complex problem" (Sheaff and Talashek, 1995, p. 43). Talashek's Nursing

Model for Teen Pregnancy bring many of the issues of adolescent pregnancy into a concise position.

Okonofua's (1995) study of adolescent pregnancy in rural Nigeria, provided a superb example of current international research which illustrated that the dilemma of the pregnant teen is not solely an issue in the United States. Through focus group discussion and a survey conducted by four female adolescent interviewers, Okonofua (1995) collected data regarding sociodemographic, reproductive history, and knowledge and use of modern contraceptive methods for 132 pregnant and 131 nonpregnant girls and their families. All girls identified that met the inclusion criteria and agreed to participate in the study were included. Data analysis consisted of descriptive statistics, chi-square test, unpaired  $t$  test, odd ratios and logistic regression.

Study results indicated that marriage was the most important explanation for term pregnancy among the rural adolescents sampled. A "substantial proportion" of the girls married because of an unintentional premarital pregnancy, thus complicating the marriage pregnancy link. Schooling and occupational status, i.e., involvement in vocational or other education delayed both marriage and pregnancy. No difference was observed between groups

regarding age of menarche, early age of menarche, subsequent early sexual activity, and risk of marriage and pregnancy. Neither structure of the family or occupational status of the parents were important determinants of marriage or pregnancy, however, girls with higher socioeconomic backgrounds were less likely to be married or pregnant. Analysis along religious groupings revealed that Catholics were more likely to be pregnant and less likely to be married than both Muslims and Protestants. Finally the study revealed that the nonpregnant girls had better knowledge of contraception and reproduction than the pregnant girls, and that in both groups the younger girls had poor and inappropriate knowledge of contraception and family life education.

Okonofua (1995) concluded that early completion of formal education without prospects for additional education or training was the most important risk factor for early marriage and pregnancy among the adolescents in rural Nigeria. Significant contributing factors included sexual relations with older men, low socioeconomic status, and poor information on reproductive health. In addressing most of the current risks, Okonofua (1995) suggested interventions based on education and service delivery programs for both

male and female adolescents and increasing the legal age of entry to marriage and sexual relationships.

Norr's (1988) article was not a research article, but more of a monograph on the state of adolescent pregnancy and the community; it reviewed the history and state of adolescent pregnancy in the United States with an eye on the problem as a community rather than an individual concern. She addressed adolescent pregnancy patterns, individual, social and community influences, and community-based interventions and she recommended actions for the nursing profession.

In addressing individual, social and community influences, Norr addressed many of the themes encountered in the research literature. The following "individual" points were identified as likely antecedents to adolescent pregnancy: early initiation of sexual activity, less use of contraception, less use of abortion, low self-esteem, low sense of control, more traditional sex-role attitudes, less positive attitudes toward sexuality, and poorer school performance. Social and community influences that encourage adolescent pregnancy included: larger families, less educated mothers, single-parent families, presence of sister or peer with adolescent pregnancy, less parental supervision of dating behavior, less positive and communicative

relations with parents, low socioeconomic status, minority origin (especially black or Hispanic), urban living, lower level of racial integration, and the absence of quality sex education.

Like Black and DeBlassie (1985), Norr presented her results in a narrative form, and no statistical data or objective analysis of studies was presented. It also seems that studies were presented only to sustain the author's agenda and opinions. Norr's article contributed to the literature as a summary and assessment of the issues.

Caldas (1993) revisited many of the issues presented by Norr as he reviewed the current theoretical perspectives on adolescent pregnancy in the United States. Caldas (1993, p. 4) assessed the scope of the problem in the United States by summarizing statistical information from several sources. He concluded that in 1988 (most recently available data at the time) there were 860,000 adolescent pregnancies, 84% unintended, 46% ended in abortion, and two-thirds (90% of black adolescent births) were out of wedlock. Caldas concluded that the consequences of these pregnancies were "abbreviated educations, unstable marriages, additional unintended pregnancies, and incompetent child-rearing practices" (1995, p. 5). Caldas summarized the current theoretical explanation for the high rates of adolescent

pregnancy in the United States as hypotheses and then reviewed the basis of each. These hypotheses included: reproductive-ignorance, psychological-needs, welfare, parental-role-model/supervision, social-norms, and physiological.

Caldas addressed the reproductive-ignorance hypothesis and concluded that a large majority of sexually active adolescents are knowledgeable of effective contraceptive techniques. He cited studies that revealed 85% of students in American school districts had received "some form" of sexuality education and that "only 12% of adolescents are completely ignorant of effective contraception" (p. 6). School-based sexuality education programs, which were often incomplete, were considered the most important source of sexuality and birth control information and information from peers was frequently "misinformation." Caldas found that families play a very small role in sexuality information; however, they were the most important source of attitudes towards sexuality. Additionally, Caldas confounds the supposition that sexuality education increases unintended pregnancies; he cited diverse studies that indicated informed adolescents are more "sexually responsible" than unformed adolescents, that there is no evidence that sexuality education increases pregnancy, and that in fact

"the study of 37 countries revealed that adolescent pregnancy rates were lower in countries where sexuality education was more comprehensive" (pp. 6 - 7).

In consideration of the psychological-needs hypothesis, Caldas focused on the adolescent's attempt to improve self-esteem through either sexual activity or early child bearing. He indicates that White adolescents and adolescents who have "more hopeful economic or educational goals" have more of a tendency to avoid pregnancy than non-Whites and adolescents who have poorer future orientations (p. 8). It was also suggested that some adolescents engage in cost/benefit analysis of the consequences of their sexual behavior and they perceive "welfare to be enough of a benefit to offset the costs of adolescent childbearing" (Caldas, 1993, p. 8).

In reviewing the hypothesis and the literature that adolescent childbearing is motivated by a desire to receive welfare payments Caldas reported that "the empirical evidence to support or refute the claim is inconclusive." It was found that "53% of the total Aide to Families with Dependent Children (AFDC) outlays went to families begun by adolescent mothers," and, "as the AFDC rate increased, there was a significant increase in both Black, and White adolescent birth rates" (Caldas, 1993, p. 9). Further



research on the relationship between welfare payments and adolescent childbearing was suggested.

"The parental role model/supervision hypothesis emphasized the influence of an adolescent's home environment on childbearing-related behavior" (p. 10). This hypothesis stressed the issues of single parent home, female-headed household, decreased parental supervision/control, and supervision of dating behavior. Conditions of single parent households, female-headed household, and decreased parental supervision/control made the adolescent more vulnerable to negative peer influence and a higher incidence of pregnancy. Adolescents from single-parent families were more likely to bear children early and give birth before marriage. Supervision of dating behavior significantly reduced the chance of teens becoming pregnant. In sum, Caldas found support for the parental-role-model/supervision hypothesis and suggested further research in the area.

Caldas considered adolescent childbearing in terms of the social norms hypothesis. It was observed that the general social condition of the adolescent maybe the most important determinant of adolescent behavior. Improvements in educational level seem to reduce pregnancy rates, this observation was found to be stronger for White rather than Black adolescents. In fact, Black adolescents were found to

have a childbearing rate twice as high as Whites based on 1980 statistics. This condition was attributed to greater unfavorable conditions for Black adolescents and "a greater tolerance of Black adolescent childbearing" (p. 12). Caldas also found that peer influence, "social ambivalence regarding what should be done about it [adolescent childbearing]," and mixed messages from music, radio, TV, and movies have presented American adolescents with more conflicting societal messages regarding sex than their counterparts in other industrialized countries.

In reviewing the physiological hypothesis Caldas indicated that little research had been focused on this area as a determinate of behavior. "Until recently, social scientists had relegated hormones to the secondary role of causing pubertal development" and "sent a social signal to society and the adolescent that sexual behavior was now appropriate" (p. 14). Caldas sites studies that suggest hormonal effects overwhelm the effects of social controls and were strongly related to sexual motivation. Physiological development is now being considered with social influences as having an effect on adolescent sexual behaviors.

In summary, Caldas states "it is more likely that complex interaction of the factors stressed by each

hypothesis that accounts for the high adolescent pregnancy and birthrates in the United States" (p. 15). Caldas suggests interventions such as early and consistent education, readily available effective contraception, vigorous encouragement of preventive and contraceptive measures, and ultimately "amelioration of economic and social ills that are the root causes" of early pregnancy in some groups. Caldas, also, suggests a comprehensive study to better identify or describe the complex interaction of the factors leading to adolescent childbearing.

Caldas presented his results in a narrative form, and no statistical data or objective analysis of studies was presented. Like Black and DeBlassie (1985) and Mercer (1985), the article was found to be an excellent summary on current "theories" or attitudes toward adolescent pregnancy, and a fruitful resource for references to original data.

#### Summary

Several authors (Black and DeBlassie, 1985; Caldas, 1993; Hopkins, 1977; Mercer, 1985; Nakashima, 1977; Norr, 1988; Phipps-Yonas, 1980) have illustrated that a large body of literature with common themes on teen pregnancy exists. The problems in the research, identified by Phipps-Yonas (1980, p. 405), of adequate control groups, variability in the choice of appropriate criteria to index outcomes, and

difficulties in the generalizability of findings from one sample to another support the rationale for a meta-analysis of social and behavioral factors in adolescent pregnancy. The evidence of good quality research provided by several studies (Barnett, Papini, and Gbur, 1991; Ierson, 1984; Jessor and Jessor, 1975; Landy, Schubert, Cleland, Clark, and Montgomery, 1983; Okonofua, 1995; Patten, 1981; Segal and DuCette, 1973; Sheaff and Talashek, 1995; and Zongker, 1977) further support the rationale for a integrative review and meta-analysis of social and behavioral factors in adolescent pregnancy.

## Chapter 3

### PROCEDURE FOR COLLECTION AND TREATMENT DATA

#### Setting

The meta-analysis techniques described by Cooper (1989), Glass, et. al. (1981), Hedges and Olkin (1985), and Rosenthal (1991) were used to analyze data from studies collected through the libraries of the Association for Higher Education of North Texas. Studies not available from this association were located, when possible, through inter-library loan or directly from the authors.

#### Population and Sample

The population of interest was the group of studies which focused on social and behavioral aspects of adolescent pregnancy. With this population, this study strove to achieve the goal of meta-analysis, that is, to obtain as many studies as is reasonably possible, rather than using a random sample (Cooper, 1989). This study developed a non-probability convenience sample and included studies with both significant and nonsignificant results, as well as contrary findings, to ensure that the population had been adequately sampled and bias was minimized.

Studies from the population that met established criteria were included in the sample. The sample included studies that were completed between January 1964 and December 1994, used adolescent pregnancy as an independent variable, used social and/or behavioral characteristics of the subjects as a dependent variable, and reported statistical tests and results.

The sample of studies was drawn from searches of printed indices and computerized databases of government documents and the disciplines of education, nursing, medicine, sociology, psychology, and public health. As study reports were obtained, the study reference lists were reviewed for additional study references. In an effort to obtain unpublished studies, requests for information were placed on psychology, sociology, family science, nursing, and medical electronic bulletin boards in the BITNET and/or INTERNET computerized networks. Additionally, selected authors of articles and dissertations were asked to suggest others.

### Instruments

The instruments used in this study included a data coding form (Appendix B) and a quality of study instrument (Appendix C). The data coding form was adapted for this

study based on examples found in other meta-analyses (Ayers, 1990; Hanson, 1988; Munday, 1989; Neatherlin, 1993) and suggestions from experts such as Cooper (1989), Hedges and Olkin (1985), Rosenthal (1991), and Smith and Stullenbarger (1991). The data coding form includes characteristics of the research report, such as authors, report or study source, and year published; characteristics of the study, such as reliability and validity, research design, sampling methods, setting, and variables; study sample characteristics, such as sample size, age, gender, ethnicity, and educational level; and study outcomes, including direction of relationships, results of hypotheses testing, and level of significance.

A major threat to the validity of a research review is the issue of the judgment of the quality of research included in the review. "The decision to include or exclude studies on an a priori basis requires the reviewer to make an overall judgment of quality that is often too subjective to be creditable" (Cooper, 1989, p. 67). To control this threat, Cooper (1989) suggests thorough coding of the design aspects of each study to determine whether the outcome is related to how the study was conducted. The design aspects of studies included in the analysis were coded on the data

coding sheet, and the quality of each study was assessed by a "quality-of-study" instrument.

The "quality-of-study" instrument was adapted from Smith and Stullenbarger's (1991) Journal of Advanced Nursing article, "A Prototype for Integrative Review and Meta-Analysis of Nursing Research". Smith and Stullenbarger developed this instrument specifically for use in meta-analyses. The instrument produces a quality score based on the design aspects of the study under consideration. No validity or reliability data for the instrument was provided. Permission for reproduction and use of the instrument was obtained from the authors.

### Data Collection

Following study approval from the Graduate School of Texas Woman's University, published and unpublished studies that met the sample criteria were obtained. To locate published studies seven computerized and printed indices were searched. The seven indices searched were the Cumulative Index to Allied Health Literature (CINAHL), Dissertation Abstracts International (DAI), Educational Resources Information Center (ERIC), Medical Literature (MEDLINE), Psychological Abstracts (PSYCHINFO or PSYC), Sociological Abstracts (SOCA), and the Sigma Theta Tau



International Electronic Library. The search terms adolescents, pregnancy, pregnancy in adolescence, adolescent pregnancy, teenage pregnancy and other variations were used as a method of locating published studies of adolescent pregnancy. As articles were retrieved, each article's reference list was reviewed for additional studies.

In an effort to find unpublished studies, selected authors of related research found during the computer search of dissertation abstracts were asked to suggest unpublished studies or other authors who had conducted related research. Requests were made using electronic mail, phone, or conventional mail.

In an additional effort to obtain unpublished studies, an electronic bulletin board "request for information" was placed on psychology, sociology, family science, nursing and medical electronic bulletin boards in the BITNET and/or INTERNET computerized networks. The requests were revised and reissued so that they remained on the various bulletin boards for a period of six months, from June through November 1994.

To be considered, a study had to contain an analysis of quantifiable data from samples of adolescents. From the quantitative studies only those that met the following criteria were used in the analysis: (a) The study had to be

a quantitative analysis of empirical data; (b) the sample had to include adolescents between 13 and 19 years of age; and (c) statistical data such as bivariate correlations, t tests, F values, chi-square values, or means and standard deviations relative to adolescent pregnancy, and other independently measured variables must have been reported or available. If there were several articles reporting different types of analyses from one data set, the one that most closely fit the criteria was included. Articles that reported separate statistics for separate samples were calculated as separate samples in the meta-analysis.

As studies were selected for inclusion, the necessary data were recorded on the data collection form. Subsequently, the data were transferred from the data collection forms to a computerized database. The data extracted and coded were the zero-order (bivariate) correlations of various psychosocial variables with adolescent pregnancy; t tests; F values; chi-square values or means and standard deviations as they were provided; reliability estimates for the measures administered and associated variables; the specific measures used for all variables; sample size; sample/subject demographic data; setting type; and author, date, and citation information.

Smith and Stullenbarger (1991) developed an instrument that provides a systematic approach to the assessment of the essential elements of a research report. Their instrument was applied in this integrated review and provides for each study a rating of the following: justification for the study, theoretical framework, study problem, review of research, hypotheses, operational definitions, study design, control of threats to validity, sample size, data collection procedures, instrumentation, statistical treatment, discussion, conclusions, recommendations, and discussion of alternative explanations.

When the data in the published report were incomplete, the authors were asked to provide the missing information. Obtainable research reports frequently did not fully report nonsignificant results. Requests for data were made using electronic-mail, phone, or conventional mail. These requests were for full correlation matrices, measurement reliability information, and for correlations not provided in the article. While these data were requested to improve representation of the population of interest and complete the picture of available research only two authors provided the requested information, representing less than 5% of those approached.

A first step in research synthesis is the conceptual and operational definition of the variables to be included in the study. This study used a broad conceptualization of the psychosocial variables considered for inclusion. It is common for a meta-analyst to broadly define a problem, so multiple operationalizations of a concept may be included in the study. As Cooper (1989), suggests "a few central operations were considered" (p. 35) and variables were dictated by those commonly found in the literature. Cooper (1989) indicated that "multiple realizations of concepts are desirable" and "if multiple operations produce similar results, numerous rival interpretations for the findings may be ruled out" (p. 35). This orientation helped to enhance the robustness and generality of results.

An important consequence of a broad conceptualization of the variables was that few studies included in this research synthesis examined the same specific outcome variables. However, study results from variables labeled differently were combined when, in the researcher's judgment, the variables define conceptually similar phenomena. Studies with conceptually similar phenomena or variables that measure the same outcome effect were grouped into clusters.

Clusters consisted of groups of studies that typically express a theme or common concept in the literature. The common theme in the cluster labeled School Grades was a typical example. Eight studies were identified as having variables that reflect an adolescent's academic performance expressed as grades, specific subject grades, past grades, self-report of grades, overall average grade or grade point average. These variables were considered multiple operations of a central phenomena; therefore, these studies were grouped into a cluster.

Limitations to the use of multiple variables or "multiple operations of a central concept" include a limited ability to generalize results to a specific definition of the variable. This restriction is known as the apples and oranges limitation. Conceptually related apples and oranges may be combined; however, generalizations of the results must be done with care. Rosenthal (1991) states that "It is very useful to be able to make general statements about fruit" and "it is also useful to make general statements about apples, about oranges (as subgroups), and about the differences between them" (pp. 129 - 130).

In the School Grades cluster, two of the variables combined as a representation of school grades were "specific subject grades" and "overall average grade." The result of

this combination, taken with the other variables, allows the researcher to make generalizations about an adolescent's academic performance expressed as grades. Study results indicate that the study control group had higher grades than the pregnant group of adolescents. The difference is expressed as an effect size of  $z_r = 0.24$ , and when expressed as a ratio per 100 students, the control group has a higher ratio of performance toward higher school grades (see Table 3.1).

Study results, if analyzed in terms of subgroups of variables, may also allow the researcher to make useful general statements about specific subject grades, overall average grade, and about the differences between them. This contrasting of subgroups was not a purpose of this study and was not performed with any of the subgroups. However, it would be possible and might provide interesting information about the relationships.

Table 3.1

Correlation of pregnancy status and school grades

 $(z_r = 0.24)$ 


---

	School Grades		Total
	Higher <sup>a</sup>	Lower <sup>a</sup>	
PG	38	62	100
CG	62	38	100
Total	100	100	

---

Note. This presentation is an example of the Binomial Effect Size Display as suggested by Cooper and Hedges (1994): "The correlation is shown to be the simple difference in outcome rates between experimental and control groups in a standard table" (p. 242).

<sup>a</sup>Higher and Lower are relative terms in this research. The authors of the various studies included in the School Grades analysis defined "higher grades" only in terms of a statistically significant difference between the pregnant vs. the non-pregnant groups, i.e., one group had grads that were (statistically) significantly higher than the other group.

### Treatment of Data

Quality of Study Instrument (QSI). The initial data set considered for analysis was the result of the application of the Quality of Study Instrument (QSI) which was assessed for interrater reliability. First, a random sample of studies ( $n = 24$ ) included in this research project, was selected for analysis for internal consistency and interrater reliability. This subset of studies, copies of the QSI, the guide sheet to the QSI (see Appendix C), and detailed instructions were provided to a doctorally prepared reviewer for scoring. Then a standardized alpha (coefficient alpha) was calculated using ANOVA for both the random sample of studies and the complete group of 68 studies included in the analysis. Next, a Pearson correlation coefficient between the two sets of scores was calculated as a measure of agreement between the reviewer and the researcher. The Pearson correlation coefficient was calculated for the subset of 24 studies considered by both the researcher and reviewer; the desired level of significance for agreement was  $p < .01$ . Additional training for both the researcher and reviewer in the use of the instrument was to be considered if the  $p < .01$  level of agreement was not reached. Analysis results for internal

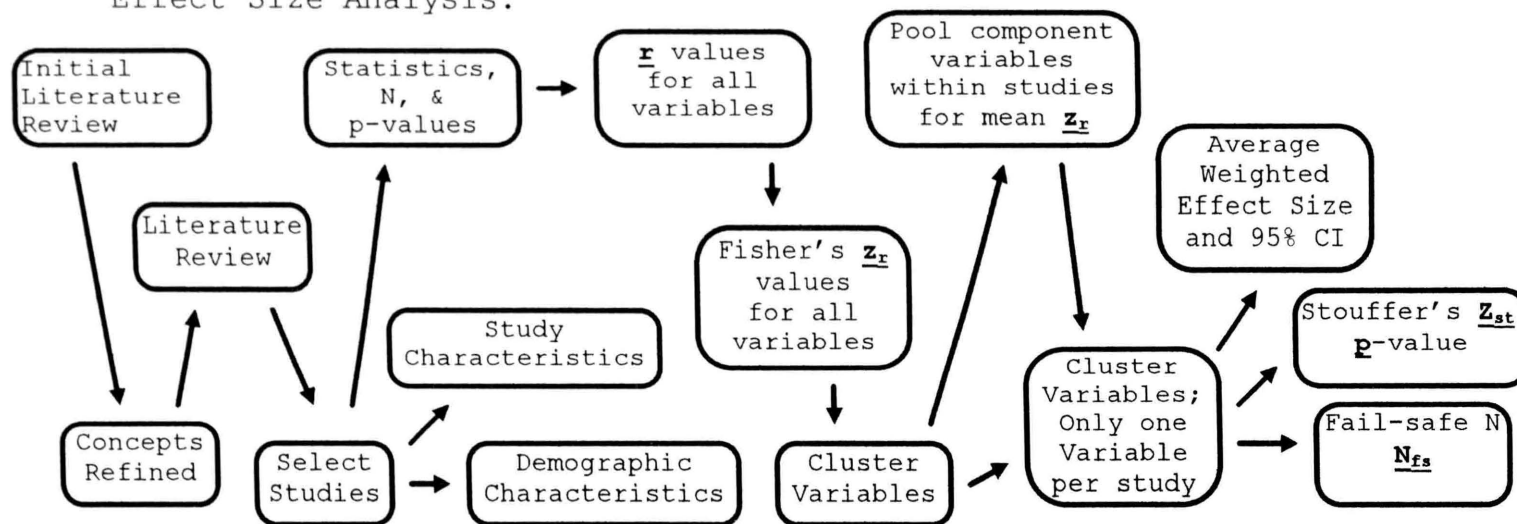


consistency and interrater reliability are presented in chapter 4, "Results."

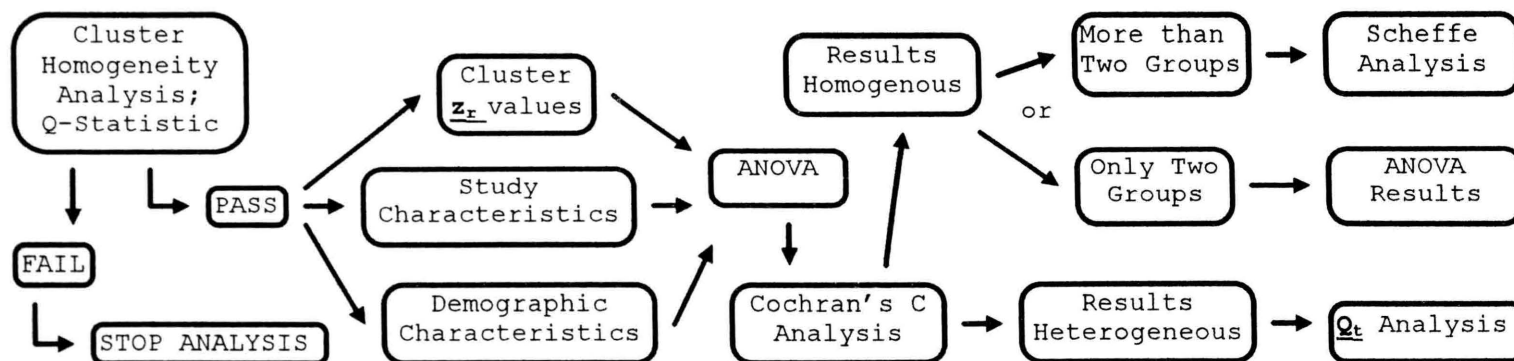
Meta-Analysis of Clusters. Clusters of studies were analyzed using research synthesis methods described in the following sections. Figure 3.1, Analysis Flow Diagram, provides an overview of the steps and techniques employed in this analysis. The analysis essentially consisted of concept refinement, study selection, instrument application/data collection, calculation of effect size estimates, evaluation of the validity of the effect size estimates, and assessment of the completeness of the review. The second half of Figure 3.1 illustrates the process of assessing the data for sources of variance. This assessment for variance is a search to determine if any study subject demographic characteristics or study characteristics function as moderator variables of the observed psychosocial variable effect size's magnitude.

Figure 3.1 Analysis Flow Diagram

### Effect Size Analysis.



### Analysis for Moderator Variables.



Effect Size Estimates. The Analysis Flow Diagram

(Figure 3.1) indicates that the first step in data analysis occurs after concept refinement, study selection, and instrument application/data collection. This first step in data analysis is the calculation of effect size estimates. The correlation coefficient  $\underline{r}$  is the effect size estimate that was used throughout this research. When  $\underline{r}$  was not available directly, it was calculated from the data presented in the research report or original study.

Original data from the studies were used to calculate an  $\underline{r}$  as an effect size estimate. The equations used for these calculations are suggested by Rosenthal (1991, pp. 17-20) and are reproduced in Appendix A, "Formulas." The most commonly used formulas to calculate an  $\underline{r}$  as an effect size estimate are provided below in Table 3.2. The results of these calculations for the School Grades cluster are presented in Table 3.3. In the remainder of this chapter the School Grades cluster results are used to illustrate the application of the techniques described.

TABLE 3.2

Formulas in the calculation of  $\underline{r}$  as effect size.

---

Original Data

Formulas

---

means and standard deviation

$$\underline{d} = \frac{|\text{mean } \underline{X_c} - \text{mean } \underline{X_e}|}{\underline{sd_c}}$$

$$\underline{r} = \underline{d} / \sqrt{\underline{d}^2 + 1/\underline{pq}} \quad (1)$$

(Cooper, 1989, p. 101; Rosenthal, 1991, pp. 19-20).

Where equation terms are defined as:

mean  $\underline{X_c}$  = mean score of the control group,

mean  $\underline{X_e}$  = mean score of the experimental group,

$\underline{sd_c}$  = standard deviation of the control group,

$\underline{d}$  = effect size estimate d-index,

$\underline{p}$  = proportion of the total population in the first of the two groups being compared,

$\underline{q}$  = the proportion of the total population that is in the second of the two groups being compared,

When  $\underline{p}$  and  $\underline{q}$  are equal, or when they can be viewed as equal in principle,  $1/\underline{pq}$  is simplified to 4 (Cooper, 1989, p. 101; Rosenthal, 1991, p. 20).

---

$\underline{p}$  values and  $\underline{Z}$  scores;

convert  $\underline{p}$  to its equivalent  $\underline{Z}$  score.

$$\underline{r} = \sqrt{\underline{Z}^2 / \underline{N}} \quad (2)$$

Where equation terms are defined as:

$\underline{Z}$  = standard normal deviate  $\underline{Z}$  score,

$\underline{N}$  = the total number of subjects.

(Rosenthal, 1991, p. 19; Cooper & Hedges, 1994, p 239).

---

chi-square ( $\chi^2$ ) values

$$\underline{r} = \sqrt{\chi^2 / \underline{n}} \quad (3)$$

Where equation terms are defined as:

$\chi^2$  = provided chi-square value

$\underline{n}$  = the total number of subjects.

(Cooper, 1989, p. 104; Cooper & Hedges, 1994, p 239).

---

$\underline{t}$  values

$$\underline{r} = \sqrt{\underline{t}^2 / (\underline{t}^2 + \underline{df})} \quad (4)$$

&

$$\underline{df} = \underline{n}_1 + \underline{n}_2 - 2$$

Where equation terms are defined as:

$\underline{t}$  = provided  $\underline{t}$  values,

$\underline{n}_1$  = subjects group 1,

$\underline{n}_2$  = subjects group 2.

(Cooper, 1989, p. 104; Rosenthal, 1991, p. 19).

---

F values

$$\underline{r} = \sqrt{\frac{\underline{F}(1,-)}{\underline{F}(1,-) + \underline{df}_{\text{error}}}} \quad (5)$$

Where equation terms are defined as:

F(1,-) indicates any F value with df = 1 in the numerator,

$$\underline{df}_{\text{error}} = \underline{n}_1 + \underline{n}_2 - 2.$$

(Rosenthal, 1991, p. 19).

---

TABLE 3.3

School Grades cluster n and r value summary.

Study No.	Variable	<u>n</u>	<u>r</u>
1003	School Grades	125	0.183
1008	Math Grades	128	0.340
1008	English Grades	128	0.317
1024	Self report GPA	52	0.278
1036	GPA	60	0.362
1040	Grades	287	0.044
1052	Past Grades	173	0.402
1053	Overall Grade	129	0.219
	Average - Black Students		
1053	Overall Grade	64	0.144
	Average - White Students		
1065	Grades	64	0.406

Note. This cluster represents eight studies and a total of 1018 individuals. Two studies 1008 and 1053 have two sets of variables that will be included in the cluster analysis.



Fisher's  $z_r$ . The effect size estimator used in this study was the correlation coefficient  $\underline{r}$  as recommended by Rosenthal (1991). Rosenthal prefers this estimator despite his acknowledgment of its principal disadvantage: "as the population value of  $\underline{r}$  gets further and further from zero the distribution of  $\underline{r}$ 's sampled from that population become more skewed" (p. 21). This difficulty with  $\underline{r}$  complicates the calculation and combinations of  $\underline{r}$ 's. Therefore, a transformation derived by Fisher (Fisher's  $\underline{z_r}$ ) and suggested by Rosenthal (1991) that is normally distributed was used in this study to correct for the bias in  $\underline{r}$ .

Though use of  $\underline{z_r}$  corrects the bias in the  $\underline{r}$  distribution, a small bias also exists in the  $\underline{z_r}$  when the  $\underline{N}$  is small and the  $\underline{r}$  population value is substantial (Rosenthal, 1991, p. 21). In other cases of  $\underline{z_r}$  when  $\underline{N}$  is larger and the  $\underline{r}$  population value is not as substantial, the  $\underline{z_r}$  value approaches the  $\underline{r}$  value. Since it was not clear from Rosenthal what circumstances constituted a small  $\underline{N}$  and a substantial  $\underline{r}$  population value, the bias (eb) was estimated and the  $\underline{z_r}$  was corrected for all study values of the  $\underline{r}$  correlation.

Each individual  $\underline{r}$  value was transformed to a Fisher's  $\underline{z_r}$  in order to normalize the  $\underline{r}$  distribution. Formulas 6, 7, and 8, provided in Table 3.4, were used for effect size

adjustment for the  $\underline{r}$  distribution. The Fisher's  $\underline{z_r}$  is a transformation of  $\underline{r}$  that is normally distributed and makes the variance independent of the unknown true value of the correlation.

TABLE 3.4

Formulas in the calculation of Fisher's  $\underline{z_r}$ .

---

Original Data

Formulas

---

Fisher's  $\underline{z_r}$

$$\underline{z_r} = 0.5 \{ \text{Log}_e \left[ \frac{(1 + \underline{r})}{(1 - \underline{r})} \right] \} \quad (6)$$

Then, correct the bias in the Fisher's  $\underline{z_r}$  distribution,

$$\underline{eb} = \underline{r} / [ 2 (N - 1) ] \quad (7)$$

And finally correct the Fisher's  $\underline{z_r}$  value,

$$\text{Corrected } \underline{z_r} = \underline{z_r} - \underline{eb} \quad (8)$$

(Rosenthal, 1991, p. 21-22; Cooper & Hedges, 1994, p 237, 240) .

Where equation terms are defined as:

$\text{Log}_e$  = natural logarithm function,

$\underline{r}$  = the effect size expressed as an  $\underline{r}$  value,

$\underline{eb}$  = the estimated bias in the  $\underline{z_r}$  distribution.

---

Using the values of School Grades from study 1003, the first variable in the School Grades cluster, the formulas were applied as follows: Calculated initial  $\underline{z_r}$  value by application of Formula 6.

$$\underline{z_r} = 0.5 \left\{ \text{Log}_e \left[ \frac{(1 + 0.1835)}{(1 - 0.1835)} \right] \right\}$$

$$\underline{z_r} = 0.5 \left\{ \text{Log}_e [1.4494] \right\}$$

$$\underline{z_r} = 0.5 \{0.3716\}$$

$$\underline{z_r} = 0.1856$$

Error bias determined by applying Formula 7.

$$\underline{eb} = 0.1835 / [2 (125 - 1)]$$

$$\underline{eb} = 0.1835 / [248]$$

$$\underline{eb} = 0.00074$$

And, finally corrected the Fisher's  $\underline{z_r}$  value using Formula 8.

$$\text{Corrected } \underline{z_r} = 0.1856 - 0.00074$$

$$\text{Corrected } \underline{z_r} = 0.18486$$

Pooled  $z_r$ . When studies presented several separate statistical analyses for components of a single dependent variable, the effect sizes were combined. After  $r$  values were calculated,  $z$  transformations for the component variables were pooled to create a single  $z_r$  for each of the dependent variables for that given study. Hedges and Olkin (1985) suggest that "some studies report data in a manner that makes it difficult to extract a single effect size estimate from the study" (p. 210). Hedges and Okin (1985) also suggest "the rationale for these methods is that effect size estimates calculated using each of the measures (within a study, or sub-scales) contain some information about the putative population effect" (pp. 220-221). The available effect size estimates are combined to extract all of the information (about the common effect size) that is provided by the estimates. By pooling the correlated effect size estimates a more precise estimate of the common underlying (population) effect size is obtained (Hedges and Okin, 1985).

Data from study results were correlated; therefore, Rosenthal's simplest form of combining study results was selected as a means of pooling study results within the same study. The formula and process for pooling within study results using Fisher's  $z$  are provided in Table 3.5.

TABLE 3.5

Formula in the calculation of a Within-Study-Pooled  $\underline{z_{rj}}$ .

---

Original Data

Formulas

---

Step 1 Using previously presented formulas compute the effect size  $\underline{r}$  and Fisher's  $\underline{z_r}$  for each component variable within the study being combined.

Step 2 Apply the following formula for a within-study component variable pooled  $\underline{z_{rj}}$ .

$$\text{pooled } \underline{z_{rj}} = (\sum \underline{z_{rj}}) / \underline{K} \quad (9)$$

Where equation terms are defined as:

$\underline{z_{rj}}$  = the Fisher's  $\underline{z_r}$  to any  $\underline{r_j}$ ,

$\underline{K}$  = the number<sup>a</sup> of component variables being combined.

(Hedges and Okin, 1985, p. 220-221)

---

Note. <sup>a</sup>If the number of component variables differed a weighted mean  $\underline{z_{rj}}$  was calculated.

In the School Grades cluster, study number 1008 has two variables, Math GPA and English GPA, that were combined into one variable "Grades." These variables were combined because they represented the students on a larger concept of overall GPA or grades and because there was an insufficient number of other studies with the same variables to form clusters of Math and/or English grades.

The corrected  $\underline{z}_r$  for Math GPA and English GPA variables are 0.353 and 0.327, respectively. Application of formula 9 is as follows:

$$\text{pooled } \underline{z}_{rj} = (0.680) / 2$$

$$\text{pooled } \underline{z}_{rj} = 0.340$$

The resulting pooled variables,  $\underline{r}$  and  $\underline{z}_r$  values for the School Grades cluster, are presented in Table 3.6.

TABLE 3.6

School Grades cluster  $\underline{n}$ ,  $\underline{r}$ , and Corrected Fisher's  $\underline{z_r}$ .

Study No.	Variable	$\underline{n}$	$\underline{r}$	$\underline{z_r}$
1003	School Grades	125	0.183	0.185
1008	Grades <sup>a</sup>	128	0.340	0.340
1024	Self Report GPA	52	0.278	0.283
1036	GPA	60	0.362	0.376
1040	Grades	287	0.044	0.044
1052	Past Grades	173	0.402	0.425
1053	Grades <sup>a</sup>	129	0.219	0.182
1065	Grades	64	0.406	0.428

Note. <sup>a</sup>The indicated variable represent pooled component variables,  $\underline{r}$  and  $\underline{z_r}$  values.



Average Weighted Effect Size and Confidence Interval.

The average weighted effect size and confidence intervals were calculated to test the relationship between each dependent variable cluster and adolescent pregnancy. If the value of  $\underline{r} = 0$  is not in the confidence interval, the null hypothesis that there is no relation between the dependent variable category and adolescent pregnancy was rejected (Cooper, 1989, p. 110). The average weighted effect size and confidence interval were calculated using the formulas in Table 3.7.

Using formulas from Table 3.7, the average weighted effect size and confidence intervals were calculated for the School Grades cluster. The application of formula 12 yields an average weighted effect size ( $\underline{z}_w$ ) of 0.236.

$$\underline{z}_w = \frac{234.37}{994}$$

$$\underline{z}_w = 0.236$$

The confidence interval is calculated using formula 13 as below.

$$\underline{CI}_{z.95\%} = 0.236 \pm \frac{1.96}{\sqrt{994}}$$

$$\underline{CI}_{z.95\%} = 0.236 \pm \frac{1.96}{31.528}$$

$$\text{Upper } \underline{CI}_{z.95\%} = 0.298$$

$$\text{Lower } \underline{CI}_{z.95\%} = 0.174$$

The value of  $\underline{r} = 0$  is not in the confidence interval; therefore, the null hypothesis that there is no relation between the School Grades and adolescent pregnancy was rejected.

TABLE 3.7

Average weighted (df as weight) effect size and confidence interval.

---

Original Data

Formulas

---

$$\underline{z}_w = \frac{\sum (\underline{n}_j - 3) \underline{z}_j}{\sum (\underline{n}_j - 3)} \quad (10)$$

Where equation terms are defined as:

$\underline{z}_w$  = the average weighted effect size,

$\underline{z}_j$  = the standard normal deviate for any one study  $j$ ,

$\underline{n} - 3$  = the weight for any one study  $j$  (other desired weights, such as estimated quality, may be used).

(Cooper, 1989, p. 109).

The confidence interval is calculated using the following formula:

$$\underline{CI}_{z.95\%} = \underline{z}_w \pm \frac{1.96}{\sqrt{\sum (\underline{n}_j - 3)}} \quad (11)$$

Where equation terms are defined as:

$\underline{CI}_{z.95\%}$  = The 95% confidence interval,

$\underline{z}_w$  = the average weighted effect size,

$\underline{n}_j$  = the number of sampling units to any  $\underline{r}$  on which it  
is based, i.e., the sample total  $\underline{N}$  value.

(Cooper, 1989, p. 110).

---

Stouffer Method ( $z_{st}$ ) Combined Probability Associated

With Study Results. The Stouffer Method of combining results was used as a means to estimate a probability that "describes the combined likelihood that the series of results included in the analysis could have been generated by chance if the null hypothesis were true for every study" (Cooper, 1989, p. 95). This probability is the probability associated with the cumulative set of individual probabilities for each study result. The probability is discovered when the  $z_{st}$  score derived from the Stouffer Method is referred to a table of standard normal deviates.

The Stouffer Method for combining studies is one of the basic methods of cumulating results that use the probability level associated with original study results. Original  $p$  values were used when they were available; otherwise, the  $p$  value was derived from the  $r$  statistic and degrees of freedom. The  $r$  statistic and degrees of freedom were utilized in a FORTRAN program written by Dr. David Marshall (personal communication, 1994). Marshall's program utilizes calculus conversions to derive the  $p$  value. The program was verified against and found in agreement with standardized tables of  $r$ , degrees of freedom, and associated  $p$  values. The Stouffer Method (Cooper, 1979, p. 134; 1989, pp. 94 - 95) is presented in Table 3.8, below.

TABLE 3.8

Stouffer Method for combining studies.

Original Data

Formulas

The probability associated with study results

Z score associated with each probability

$$\underline{z}_{st} = \frac{\sum \underline{z}_{si}}{\sqrt{K}} \quad (12)$$

Where equation terms are defined as:

z<sub>st</sub> = the standard normal deviate for the cluster,z<sub>si</sub> = the standard normal deviate for each *i*<sup>th</sup> study  
included in the cluster,K = the total number of studies included.

(Cooper, 1989, p. 94).

The Stouffer Method for combining studies was applied to the School Grades cluster. The probability associated with the results for each study of the School Grades cluster was obtained either directly from the study or through application of the program developed by Marshall (1994). The probability was then transformed to its Z score; results are as follows:

Study No.	Variable	<u>n</u>	<u>Z<sub>p</sub></u>
1003	School Grades	125	1.700
1008	Grades	128	3.665
1024	Self report GPA	52	1.700
1036	GPA	60	2.600
1040	Grades	287	0.000
1052	Past Grades	173	4.270
1053	Grades	129	1.725
1065	Grades	64	3.150

Formula 12 was applied as follows;

$$\begin{aligned} \underline{Z_{st}} &= \frac{14.14}{\sqrt{(8)}} \\ \underline{Z_{st}} &= 4.998 \end{aligned}$$

This  $z_{st}$  score is associated with a cumulative probability of  $p < 0.000$ , indicating a low combined likelihood that the series of results included in the analysis could have been generated by chance if the null hypothesis were true for every study.

#### Fail-safe $N$ ( $N_{fs.05}$ ) Robustness of Literature Review.

The fail-safe  $N$  addresses the "file drawer problem": the fact that nonsignificant results are not frequently published and remain in the original researcher's filing cabinets or computers. No matter how comprehensive the search, it is unlikely that a researcher will retrieve all the studies addressing the research topic. Nonsignificant results are simply less likely to be available or retrieved than significant ones.

The fail-safe  $N$  was calculated to address the file drawer problem and assist the researcher (and ultimately the research report reader) in evaluation of the strength of a review against the felt completeness of the sampling procedure (Cooper, 1979, p. 135). The fail-safe  $N$  allows an answer to the question "How many studies totaling a null hypothesis confirmation would be needed to reverse the conclusion that a relationship exists?". The fail-safe  $N$  assumes a summed null relation in undiscovered studies and



it estimates the number of additional studies needed to increase the meta-analysis probability to above 0.05. Fail-safe N calculations are provided in Table 3.9.

TABLE 3.9

Fail-safe  $\underline{N}$  ( $\underline{N}_{fs.05}$ ) calculations.

Original Data

Formulas

The probability associated with study results

$$\underline{N}_{fs.05} = \left[ \frac{\sum \underline{z}_{si}}{1.645} \right]^2 - \underline{K} \quad (13)$$

Where equation terms are defined as:

$\underline{N}_{fs.05}$  = the number of additional studies needed to increase the meta-analysis probability to above 0.05,

$\underline{z}_{si}$  = the standard normal deviate as calculated for the Stouffer analysis for each study included,

$\underline{K}$  = the total number of studies included.

1.645 represents the standard normal deviate associated with  $p < 0.05$  (one tail).

(Cooper, 1989, p. 97).

Continuing with the example, the fail-safe  $\underline{N}$  was calculated for the School Grades cluster using formula 13, the standard normal deviate as calculated for the Stouffer analysis ( $\underline{Z_{si}}$ ), and the total number of studies ( $\underline{K}=8$ ) in the analysis. The fail-safe  $\underline{N}$  ( $\underline{N_{fs,.05}}$ ) was calculated as follows:

$$\underline{N_{fs,.05}} = \left[ \frac{18.81}{1.645} \right]^2 - 8 \quad (13)$$

$$\underline{N_{fs,.05}} = (11.435)^2 - 8$$

$$\underline{N_{fs,.05}} = 130.751 - 8$$

$$\underline{N_{fs,.05}} = 122.751$$

This fail-safe  $\underline{N}$  answers the question "How many studies totaling a null hypothesis confirmation are needed to reverse the conclusion that a relationship exists between adolescent pregnancy and school grades?". The fail-safe  $\underline{N}$  procedure assumes a summed null relation in undiscovered studies and estimates that 122.751, or 123, additional studies are necessary to raise the School Grades cluster meta-analysis probability to above  $\underline{p} = 0.05$ ; therefore, no relationship exists between adolescent pregnancy and school grades.

### Homogeneity Analysis of Moderator Variables.

Categories or "clusters" of dependent variables were established for variables that were considered conceptually linked by the researcher. The categories depended on the literature review. If conceptually linked variables were found in a minimum of three studies, a cluster was formed. The selection of three as a minimum was based on examples provided by (Cooper, 1989, p. 115) and Rosenthal (1991, p. 75). Separate meta-analyses were accomplished for each cluster.

After  $r$  values were calculated for each variable, homogeneity analysis as described by Cooper (1989) was performed for each cluster of dependent variables. Homogeneity analysis was conducted using a  $Q$  statistic that is distributed as chi-square (Table 3.10).

According to Cooper (p. 115) the  $Q$  statistic tests whether the average effects of the groupings are homogeneous. Homogeneity analysis results in a  $Q$  statistic distributed as chi-square. If the  $Q$  statistic is significant it indicates that, given the sizes of the grouped samples, the range is too great to be explained by sampling error alone (Cooper, 1989, p. 115). Homogeneity analysis answers the question, "Is the variance in effect sizes significantly different from that expected by sampling

error?" (Cooper, 1989, p. 114). If the answer is no, then the null hypothesis is supported: the studies are not considered enough alike (i.e., not necessarily addressing the same subject) for further analysis and analysis stops. If the answer is yes, the studies are considered enough alike (i.e., addressing the same subject) for further analysis for other potential sources of variance.

TABLE 3.10

Homogeneity analysis,  $\underline{Q}$  statistic<sup>a</sup> analysis.

Original Data

Formulas

$$\underline{Q}_t = \sum (\underline{n}_i - 3) \underline{z}_i^2 - \left[ \frac{[\sum (\underline{n}_i - 3) \underline{z}_i]^2}{\sum (\underline{n}_i - 3)} \right] \quad (14)$$

Distributed as chi-square, with  $\underline{K} - 1$  df.

Where equation terms are defined as:

$\underline{n}_i$  = the number of sampling units to any  $\underline{r}$  on which it is based,

$\underline{z}_i$  = the standard normal deviate for any one study,

$\underline{K}$  = the number of studies being combined.

(Cooper, 1989, p. 112, 115).

Note. <sup>a</sup>If the  $\underline{Q}$  statistic, distributed as chi-square, is significant, the values compared are significantly homogeneous.

Continuing with the example, sample size weighted  $\underline{z}_r$  values for the School Grades cluster variables were calculated. Subsequently, homogeneity analysis using the  $\underline{Q}$  statistic as described by Cooper (1989) was performed using formula 14. The  $\underline{Q}$  statistic was calculated for the School Grades cluster as follows:

Apply formula 14.

$$\underline{Q}_t = \Sigma(\underline{n}_i - 3) \underline{z}_i^2 - \left[ \frac{[\Sigma(\underline{n}_i - 3) \underline{z}_i]^2}{\Sigma(\underline{n}_i - 3)} \right] \quad (14)$$

$$\Sigma(\underline{n}_i - 3) \underline{z}_i^2 = 77.311$$

$$[\Sigma(\underline{n}_i - 3) \underline{z}_i]^2 = [234.3660]^2$$

$$\Sigma(\underline{n}_i - 3) = 994$$

$$\underline{Q}_t = 77.311 - [54927.421956 / 994]$$

$$\underline{Q}_t = 22.0520$$

Distributed as chi-square, with  $\underline{K} - 1$  df.

Homogeneity analysis resulted in a  $\underline{Q}_t = 22.05$ , with 7 degrees of freedom for the School Grades cluster. The  $\underline{Q}_t$  value of 22.05 was significant, based on a chi-square test

with 7 degrees of freedom. Therefore, the Q statistic indicated that the range, given the sizes of the samples on which the value is based, is too great to be explained by sampling error alone. Homogeneity analysis rejects the null hypothesis that there was no significant difference in the effect sizes greater than what would be expected by sampling error alone. Homogeneity analysis supports the need for further analysis of the School Grades cluster for other potential sources of variance.

#### ANOVA, Cochran's C, Scheffe Analysis and $Q_t$ Analysis.

An ANOVA analysis was used to determine if study characteristics and demographic variables were correlated with the magnitude of the observed effect sizes for each cluster. The analysis of variance was conducted with the various levels of the study characteristics and demographic variables, followed by Cochran's C to assess homogeneity of variance in the results (Winer, 1962). If results were homogeneous, ANOVA results were interpreted and post hoc analysis was performed using Scheffe post hoc procedures.

If the Cochran's C analysis indicated the variance in the ANOVA results were heterogeneous, the ANOVA analysis was considered invalid and  $Q_t$  analysis was performed on the various levels of the study characteristics and demographic



variables. The results of these tests helped in the explanation of the correlation of the variable cluster.

Using the SPSS statistical package, an ANOVA analysis was applied to the School Grades cluster effect sizes and the various levels of the study characteristics and demographic variables, followed by Cochran's C to assess homogeneity of variance in the results (see Table 3.8). The Cochran's C indicates that the following variables are homogeneous: publication year, publication form, journal type, source, author, study field, research type, funding, pregnant group sample size, sample size total, quality of study, comparison group age, comparison group ethnicity, comparison group family income, comparison group educational status, pregnant group age, pregnant group family income, pregnant group educational status, setting, non-nursing theory, statistic used, and observation type. Therefore, ANOVA analysis was appropriate for these variables. For all the variables listed above, with the exception of setting, the ANOVA analysis indicated that no two variable subgroups were significantly different at the  $p < 0.05$  level.

Scheffe analysis was not applied to the setting variable. There were only two subgroups under the setting variable; they were found to be significantly different at

$p < .05$ . For these two variables, clinic ( $z_r = 0.12$ ) and other ( $z_r = 0.34$ ), there was a significant difference in the magnitude of the effect size observed. This result would require the researcher to attempt to discover or explain this difference. One possible explanation might be that the subcategory other was not sufficiently or specifically defined for accurate coding. After this potential is investigated other explanations should be required. In variables where the Cochran's  $C$  analysis indicated that the variance in the ANOVA results were heterogeneous, the ANOVA analysis was considered invalid and  $Q_t$  analysis was accomplished.

Homogeneity analysis using the  $Q_t$  statistic (and formula 12) as described by Cooper (1989) was performed for each of the levels of study characteristics and subject demographic variables. The  $Q_t$  statistic tests whether the average effects of the groupings are homogeneous (Cooper, 1989). The  $Q_t$  statistic is distributed as chi-square and, if significant, tells us that, given the sizes of the grouped samples, the range is too great to be explained by sampling error alone (Cooper, 1989, p. 115). Homogeneity analysis answers the question "Is the variance in effect sizes significantly different from that expected by sampling error?" (Cooper, 1989, p. 114). If the answer is no, then

the null hypothesis is supported: the studies are not considered enough alike (i.e., not necessarily addressing the same subject) for further analysis and analysis stops. If the answer is yes, studies are considered enough alike (i.e., addressing the same subject) for further analysis and a theoretical explanation of the groupings must be considered to describe the sources of variance.

For six variables in the School Grades cluster - study design, sampling method, control group sample size, control group marital status, pregnant group ethnicity, and pregnant group marital status - the Cochran's  $\underline{C}$  analysis indicated the variance in the ANOVA results were heterogeneous and the ANOVA analysis was considered invalid. Subsequently, the various levels of these study characteristics and demographic variables were analyzed using the  $\underline{Q}_t$  analysis (see Table 3.9). Subgroups in study design, control group sample size, control group marital status, pregnant group ethnicity, and pregnant group marital status were found to be significantly different at the  $\underline{p} < .05$  level. For example, the pairing of the effect size magnitudes for the subgroups white ( $\underline{z}_r = 0.19$ ), black ( $\underline{z}_r = 0.04$ ) and mixed group ( $\underline{z}_r = 0.34$ ) were found to be significantly different from each other at the  $\underline{p} < .05$  level. These results must be

considered in light of the literature on which they are based, sample size, and existing theoretical structures.

Q<sub>t</sub> analysis did not find a statistically significant difference in the levels of the sampling method subgroup levels. And it was not necessary to apply Q<sub>t</sub> analysis to the nursing theory or standard instrument variables. The variables nursing theory and standard instrument were designed with two subgroups; however, in the school grades cluster there was no variation analysis because there were subjects in only one subgroup in these variables.

## Chapter 4

### ANALYSIS OF DATA

This integrative research review was conducted to determine what can be said with confidence about research into psychosocial characteristics that influence adolescent pregnancy. Determination of influence was accomplished through application of meta-analysis techniques to discover effect sizes and to quantify consequences of study subject demographic attributes of study participants and study characteristics on the effect sizes. The results in this chapter address the question: In research from 1964 through 1994, what are the relative effect sizes of psychosocial characteristics influencing adolescent pregnancy and do demographic attributes of study participants or study characteristics serve as moderator variables for the observed magnitude of these effects?

Quality of Study Instrument (QSI). Study quality was rated using the Smith and Stullenbarger's Quality of Study Instrument (QSI), a Likert scale from zero to three; the technically ordinal level values were summed and treated as interval level data. The QSI scores of the 68 studies ranged from 1.5 to 2.95; the mean was 2.21 with a standard deviation of 0.395 and the mode was 2.50. The mean and mode indicated primarily moderate to high level ratings on the QSI.

The QSI study instrument was assessed for reliability and validity. Cronbach's Alpha was calculated for the study sample as a means of measuring internal consistency and according to Nunnally (1978, p. 230) "coefficient alpha is the basic formula for determining the reliability based on internal consistency". Additionally, Waltz, Strickland and Lenz (1991, p. 166) state "the alpha coefficient is the preferred index of internal consistency reliability because it is a single value and it represents all possible split-half coefficients associated with a particular data set."

The alpha obtained by the researcher for the 68 studies was 0.930. To test the researcher's results, a random subset of 24 studies were provided to a doctorally prepared reviewer. The reviewer applied the QSI to the subset of studies and produced an alpha of 0.855. The researcher's

0.930 alpha and reviewer's 0.855 alpha are in the range Nunnally (1978, p. 245) indicates as sufficient for an instrument in used in basic research.

The Pearson correlation coefficient was calculated between the two sets of scores provided by the reviewer and the researcher. The correlation coefficient was used as a measure of agreement between the reviewer and the researcher. The Pearson correlation coefficient for the subset of 24 studies considered by both the researcher and reviewer was 0.62, which is significant at the  $p < .01$  level. The mean item score for the researcher was 2.21 and for the reviewer 1.64. The difference in item scores ranged from -0.3 to 2.04; the researcher was consistently 0.65 points higher than the reviewer (see Table 4.1).

The Pearson's correlation coefficient of 0.62, which is significant at the  $p < .01$  level, met the a priori desired acceptable level of agreement between the reviewer and the researcher. Since the correlation coefficient of 0.62 only accounts for only 38% of the variability in the two scores, additional training in the use of the instrument was considered. However, since a Pearson's correlation above  $r = 0.5$  is considered an indication of a "strong linear relationship," no further action was taken (Burns and Grove, 1993, p. 511).

TABLE 4.1

Comparison of Quality of Study Instrument scores.

Item	Researcher		Reviewer		Difference
	Mean	SD	Mean	SD	
Q1	2.46	0.531	1.50	0.933	0.96
Q2	2.28	0.595	0.83	1.239	1.45
Q3	2.49	0.560	2.00	1.022	0.49
Q4	2.25	0.678	1.88	1.076	0.38
Q5	1.99	0.611	1.92	0.974	0.07
Q6	2.47	0.634	1.88	1.035	0.60
Q7	1.68	0.800	1.58	1.213	0.09
Q8	2.34	0.536	1.92	0.929	0.42
Q9 <sup>a</sup>	2.04	0.558	NA	NA	2.04
Q10	2.35	0.686	2.17	1.050	0.19
Q11	2.50	0.586	1.00	0.722	1.50
Q12	2.44	0.583	1.96	0.908	0.48
Q13	1.69	0.778	0.67	1.857	1.02
Q14	1.69	0.797	0.96	1.805	0.73
Q15	2.43	0.581	2.13	1.076	0.30
Q16	1.91	0.728	2.21	0.884	-0.30



Item	Researcher		Reviewer		Difference
	Mean	SD	Mean	SD	
Q17	2.44	0.500	2.25	0.989	0.19
Q18	2.41	0.496	1.83	0.917	0.58
Q19	2.50	0.533	1.75	0.847	0.75
Q20	2.50	0.586	2.08	0.881	0.42
Q21	2.40	0.626	1.29	1.197	1.11
Q22	1.40	0.626	0.54	0.932	0.86
Cronbach's Alpha					
	0.930		0.855		
	( <u>N</u> = 68)		( <u>N</u> = 24)		
Pearson Correlation Coefficient				0.616	
(Samples Matched, <u>N</u> = 24)					

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Note. "The reviewer did not consider item nine, which addresses "Control of Validity issues," was sufficiently or properly addressed in the studies reviewed. Therefore, the reviewer indicated the item was not appropriate for the studies reviewed and she did not score the studies on this item. The researcher scored the studies using item nine and it was included in the researcher's calculation of alpha.

### Description of the Sample

Study Characteristics. The sample includes studies that (a) were completed between January 1964 and December 1994, (b) used adolescent pregnancy as an independent variable, (c) used social and/or behavioral aspects of the subjects as a dependent variable, and (d) reported statistical tests and results. The study sample was selected from the population of research that investigated psychosocial aspects of adolescent pregnancy. Initially, 290 research reports were identified from searches of printed indexes, computerized databases and reference lists of articles and reviews that dealt with some psychosocial aspects of adolescent pregnancy. The sample was eventually reduced to 68 studies that met inclusion criteria. Use of a comparison group was the primary study feature considered for inclusion of studies into the sample.

Study designs were primarily correlational (50, 74%); the remainder were descriptive (18, 27%) and most used convenience sampling (58, 85%). Theoretical frameworks were found in 36 (53%) of the study reports included. Only two of these studies used an identifiable nursing theory. Studies came from the fields of nursing (9, 13%), sociology (7, 10%), medicine (10, 15%), psychology (33, 49%), Education (7, 10%), and public health (2, 3%).

Twenty-seven studies (41%) indicated a "clinic" research setting. A conspicuous portion (28, 42%) of the studies did not indicate a research site. Funded studies (13, 19%) were financed by either federal (4, 6%), foundation (4, 6%), or "other" (5, 7%) unknown funding sources; a notable number of studies were conducted without funding (7, 10%), or it was not identified (48, 71%) if the study was funded or not.

The 68 studies came from a variety of sources, including CINAHL (6, 9%), ERIC (4, 6%), MEDLINE (3, 4%), PSYC (4, 6%), DAI (25, 37%), and article reference lists and literature review articles (26, 38%). The studies were published in article (42, 62%) and dissertation (26, 38%) forms between 1964 and 1993. One study included in the analysis was published in 1964; 12 were published in the 1970s, 36 in the 1980s, and 19 in the 1990s. The 68 studies represent findings from 12,106 subjects, with 8,225 in nonpregnant control groups and 3,881 in pregnant groups. The average sample size was 178; the pregnant group sample size average was 57; and the nonpregnant control group sample size average was 121 (see Appendix F, Table F1, "Study Characteristics").

### Demographic Characteristics of Study Participants.

Study participant characteristics collected from the various studies include age, ethnic group, educational status, marital status, and family income. Table 4.2, "Participant Group Characteristics," provides a comparison of pregnant group (PG) and nonpregnant comparison group (CG) attributes, including  $t$  test and  $\chi^2$  results; no significant differences were found between the groups. Group ages are approximately the same around 16.5 years; the calculated  $t$  value between these two groups ( $t = 0.24413$ ,  $df = 134$ ) indicated the two groups are not significantly different in age. Studies predominately presented ethnic results in mixed groups (PG 63.2%, CG 58.8%) without clear ethnic divisions. The majority of study subjects in both groups were single (PG 69.1%, CG 73.5%), low-income (PG 58.8%, CG 55.9%), and educated at a high school or lower level (PG 67.6%, CG 69.1%). Complete participant characteristics are presented in Appendix G, Tables G2 and G3.

TABLE 4.2

## Participant Group Characteristics

		Comparison		Pregnant	
		Group	CG%	Group	PG%
Age <sup>a</sup>	MEAN	16.4		16.8	
	SD	1.6		2.2	
	MAX	23		27	
	MIN	12		14	
	$t = 0.2441$ , $df = 134$ No significant difference.				
		CG No	CG%	PG No	PG%
Ethnicity	White	10	14.7%	9	13.2%
	Black	14	20.6%	13	19.1%
	Hispanic	1	1.5%	1	1.5%
	Mixed group <sup>b</sup>	40	58.8%	43	63.2%
	Other	3	4.4%	2	2.9%
		$\chi^2 = 0.9998$ , $df = 5$ No significant difference.			

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		CG No	CG%	PG No	PG%
<hr/>					
Education	6 <sup>th</sup> to 9th Grade	11	16.2%	12	17.6%
Status	10th to 12th	36	52.9%	34	50.0%
	High School Grad	1	1.5%	1	1.5%
	College or Tech	1	1.5%	0	0.0%
	Mixed group <sup>2</sup>	19	27.9%	21	30.9%
$\chi^2 = 0.9616, \underline{df} = 5$ No significant difference.					

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		CG No	CG%	PG No	PG%
<hr/>					
Marital	Single	0	73.5%	47	69.1%
Status	Married	0	0.0%	0	0.0%
	Mixed group <sup>b</sup>	6	8.8%	9	13.2%
	Other	12	17.6%	12	17.6%
$\chi^2 = 0.9999, \underline{df} = 4$ No significant difference.					

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		CG No	CG%	PG No	PG%
<hr/>					
Family	Low	38	55.9%	40	58.8%
Income <sup>c</sup>	Middle	15	22.1%	14	20.6%
	High	0	0.0%	0	0.0%
	Unknown	15	22.1%	14	20.6%
 $\chi^2 = 0.9999$ , <u>df</u> = 4      No significant difference.					

---

Note. <sup>a</sup>Age mean and standard deviation were calculated on the entire sample size. Maximum and minimum numbers represent single data points. Maximum values above the inclusion criteria indicate individual studies that did not maintain samples with consistently adolescent subjects.

<sup>b</sup>Mixed group was used to describe the condition within a study where the sample did not describe the characteristic clearly enough to break it into its component parts.

<sup>c</sup>Family Income was the income level ascribed to the Comparison or Pregnant Groups in the original study. Original study terms were applied whenever possible; generally the researchers described the income levels as low, middle, or high without definition. In the few

conditions where dollar arrangements amounts were provided  
the amounts and levels were equated as follows:

Low           \$00,000 to \$14,999

Middle       \$15,000 to \$44,999

High          \$45,000+

For additional information and description of this  
sample see the Data Coding Form, Glossary, Appendix B.



## Findings

Studies with conceptually similar independent variables were sorted into 31 "clusters," or groups of studies. Clusters were established from variables identified in the literature review. Examples of variables identified in the literature review include, but are not limited to: (a) relationship with parents and extracurricular interests (Mercer, 1985); (b) ignorance of sexual matters, anxiety, depression, and family life education (Black & DeBassie, 1985); (c) sexual behavior (Hopkins, 1977); (d) discipline, church attendance, onset of menstruation, anxiety, sexual information, and peer or relative as a pregnant teen (Gottschalk, et. al., 1964); (e) locus of control (Segal & DuCette, 1973); (f) family ties and self-reliance (Jestor & Jestor, 1975); (g) self-concept (Patten, 1981; Zongker, 1977); and (h) self-esteem (Patten, 1981). Clusters evolved as concepts were identified in the literature review; concepts were grouped if they were linked in the literature or if in the opinion of the researcher they fit together (see Appendix D for the complete list of variables). All clusters were established prior to any analysis.

A minimum of three studies was considered necessary to form a cluster (Cooper, 1989, p. 115; Rosenthal, 1991, p. 72). Separate meta-analyses were accomplished for each

cluster (results for each are presented in alphabetical order in Table 4.3). A complete comparison of results of the meta-analyses for the various clusters can be seen in Appendix E, Table E4. Integrative research review methods applied to the clusters include determination of frequency, mean and standard deviation of study and sample characteristics, Weighted Effect Size ( $\underline{z}_r$ ), 95% Confidence Interval, Stouffer Analysis, Fail-safe  $\underline{N}$  ( $\underline{N}_{fs}$ ), BESD analysis,  $\underline{Q}$  statistic and Homogeneity Analysis, and Moderator Analysis using ANOVA and post hoc statistics or  $\underline{Q}_t$ -analysis.

The total number of studies in the sample was 68, representing 12,106 subjects. The number of studies investigating conceptually linked clusters ranged from Dependency, with 4 studies of 567 subjects to Family Dynamics, with 38 studies and 6,333 subjects. There is an average of 15 studies and 2,509 subjects in a cluster analysis. Table 4.3 provides the number of studies and subjects for each cluster.

TABLE 4.3

Clusters of independent variables from the  
Adolescent Pregnancy Literature.

ABV	Variable Cluster	Subjects	Studies
MADATA	Total Sample Of Studies	12106	68
ACPER	Academic Performance	1944	18
ANX	Anxiety	764	8
APCOM	Parental Communication	883	9
BAPAR	Parenting Beliefs	2873	11
CHRCH	Religious Activity	2843	11
CONUSE	Contraception Use	1311	10
DADH	Father in Home	906	9
DATE	Dating Relationship	3049	12
DPNCY	Dependency	567	4
DPSN	Depression	985	6
EDEX	Educational Expectations	2449	9
EGOST	Ego Strength	3328	27
FAMC/S	Family Dynamics	6333	38
FUTRO	Future Orientation	3814	14
GRDS	School Grades	1018	8

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ABV	Variable Cluster	Subjects	Studies
<hr/>			
KNOSC	Sexual Knowledge	1480	11
LAR	Living Arrangements	3574	14
LOC	Locus of Control	1386	15
MAFE	Role Identity	377	5
MENSTU	Menstruation Onset	678	5
OCEX	Occupational Expectations	1594	6
PARNT	Parental Relationship	4676	28
PEERS	Peer Relationship	2883	14
PTRM	Pregnant Role Model	701	7
RDAD	Father Relationship	2129	20
RMOM	Mother Relationship	3493	23
SEXAT	Sexual Activity	5312	27
SIBS	Sibling Relationship	2826	14
SLFCN	Self-concept	5205	32
SLFES	Self-esteem	4451	23
SOCAC	Social Responsibility	3940	16

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Effect Size ( $z_r$ ). The independent variable clusters were found to have average weighted effect sizes ( $z_r$ ) ranging from a low of  $z_r = 0.01$  (SD 0.272) for the Peer Relationship cluster to a high of  $z_r = 0.45$  (SD 0.482) for the Role Identity cluster. The value of  $r = 0$  was found in the 95% Confidence Interval (95%CI),  $p < .05$ , of five of the clusters: Dating Relationship, Ego Strength, Locus of Control, Menstruation Onset, and Peer Relationship. For these clusters the null hypothesis that there is no relationship between the independent variable cluster and adolescent pregnancy cannot be rejected with confidence. The value of  $r = 0$  was not found in the 95%CI of the remaining 26 clusters; therefore, the null hypothesis that there is no relation between the independent variable cluster and adolescent pregnancy was rejected for those clusters (Cooper, 1989, p. 110). See Table 4.4 for average weighted effect sizes ( $z_r$ ) and 95% confidence intervals for each cluster.

TABLE 4.4

Weighted Effect Size ( $\underline{z_r}$ ), Standard Deviation and 95% Confidence Interval per Variable Cluster.

Cluster	$\underline{z_r}$	SD	Lower	Upper
Academic Performance	0.11	0.323	0.065	0.150
Anxiety	0.12	0.123	0.045	0.185
Parental Communication	0.30	0.525	0.235	0.360
Parenting Belief	0.15	0.195	0.110	0.180
Religious Activity	0.12	0.178	0.075	0.150
Contraception Use	0.16	0.502	0.105	0.210
Father In Home	0.07	0.272	-0.013	-0.001
Dating Relationship <sup>a</sup>	0.04	0.279	-0.070	0.001
Dependency	0.11	0.179	0.025	0.190
Depression	0.12	0.102	0.057	0.180
Education Expectations	0.21	0.237	0.165	0.240
Ego Strength <sup>a</sup>	0.02	0.232	-0.015	0.055
Family Dynamics	0.07	0.311	0.040	0.090
Future Orientation	0.15	0.389	0.120	0.180
School Grades	0.24	0.130	0.170	0.300
Sexual Knowledge	0.06	0.102	0.010	0.110

Cluster	<u>z<sub>r</sub></u>	SD	Lower	Upper
Living Arrangements	0.09	0.339	0.055	0.120
Locus Of Control <sup>a</sup>	0.02	0.278	-0.040	0.070
Role Identity	0.45	0.482	0.350	0.550
Menstruation Onset <sup>a</sup>	0.05	0.187	-0.025	0.125
Occupational Expectations	0.18	0.151	0.130	0.230
Parental Relationship	0.14	0.320	0.105	0.160
Peer Relationship <sup>a</sup>	0.01	0.282	-0.030	0.040
Pregnant Role Model	0.12	0.122	0.040	0.190
Father Relationship	0.13	0.228	0.080	0.165
Mother Relationship	0.10	0.191	0.060	0.130
Sexual Activity	0.14	0.241	0.110	0.165
Sibling Relationship	0.10	0.196	0.060	0.130
Self-Concept	0.12	0.265	0.095	0.150
Self-Esteem	0.11	0.308	0.080	0.140
Social Responsibility	0.09	0.177	0.060	0.120

Note. Results are based on weighted z<sub>r</sub>. Weighting is based on study total (N); the formula for this approach is presented in the methodology chapter and in Appendix A.

<sup>a</sup>Indicates a cluster where zero is found in the confidence interval. For these clusters the null hypothesis that there

is no relationship between the independent variable cluster  
and adolescent pregnancy cannot be rejected with confidence.



Stouffer Method ( $z_{st}$ ). The Stouffer method ( $z_{st}$ ) of combining study results was used as prescribed by Cooper (1989, p. 95);  $z_{st}$  "describes the combined likelihood that the series of results included in the analysis could have been generated by chance if the null hypothesis were true for every study." The weighted  $z_{st}$  produced probabilities greater than the  $p = 0.05$  level for five clusters: Dating Relationship, Ego Strength, Locus Of Control, Menstruation Onset, And Peer Relationship. Consequently, for these five clusters the null hypothesis of no relationship between the independent variable cluster and adolescent pregnancy was supported. Through retention of the null hypothesis for the clusters Dating Relationship, Ego Strength, Locus Of Control, Menstruation Onset, And Peer Relationship, the Stouffer Method sustained the results of the  $z_r$  95%CI analysis for the same five clusters.

The Stouffer Method estimated a combined probability that did not support the  $z_r$  95%CI results for four clusters: Anxiety, Parental Communication, Dependency, and Sexual Knowledge. The  $z_r$  95%CI analysis rejected the null hypothesis for the four clusters; the weighted  $z_{st}$  values produced probabilities for these clusters greater than  $p = 0.05$  and supported retention of the null hypothesis of no significant relationship.

The Stouffer method supported the  $z_r$  95%CI results for the remaining 22 clusters by yielding weighted  $z_{st}$  values with associated  $p$  values less than  $p = .05$ . This  $p$  value supports rejection of the null hypothesis and suggests a significant relationship exists between these variable clusters and adolescent pregnancy. The null hypothesis was rejected for the following clusters: Academic Performance, Parenting Belief, Religious Activity, Contraception Use, Father in Home, Depression, Educational Expectations, Family Dynamics, Future Orientation, School Grades, Living Arrangements, Role Identity, Occupational Expectations, Parental Relationship, Pregnant Role, Father Relationship, Mother Relationship, Sexual Activity, Sibling Relationship, Self-concept, Self-esteem, Social Responsibility. (For complete Stouffer analysis,  $z_{st}$  and  $p$  values, see Table 4.5.)

TABLE 4.5

Stouffer Method Analysis per Variable Cluster.

Cluster	<u>Z</u> <sub>st</sub>	<u>p</u> Value
Academic Performance	2.68	0.004
Anxiety <sup>a,B</sup>	0.85	0.212
Parental Communication <sup>a,B</sup>	1.53	0.067
Parenting Belief	5.57	0.000
Religious Activity	4.49	0.000
Contraception Use	3.24	0.001
Father In Home	2.68	0.004
Dating Relationship <sup>a</sup>	0.43	0.674
Dependency <sup>a,B</sup>	1.53	0.067
Depression	1.97	0.026
Educational Expectations	6.77	0.000
Ego Strength <sup>a</sup>	0.17	0.579
Family Dynamics	3.96	0.000
Future Orientation	7.07	0.000
School Grades	5.00	0.000
Sexual Knowledge <sup>a,B</sup>	0.50	0.692
Living Arrangements	5.42	0.000

Cluster	<u>Z<sub>st</sub></u>	<u>p</u> Value
Locus Of Control <sup>a</sup>	0.02	0.500
Role Identity	4.48	0.000
Menstruation Onset <sup>a</sup>	1.09	0.147
Occupational Expectations	4.78	0.000
Parental Relationship	5.07	0.000
Peer Relationship <sup>a</sup>	1.61	0.055
Pregnant Role Model	2.95	0.002
Father Relationship	4.23	0.000
Mother Relationship	4.60	0.000
Sexual Activity	6.26	0.000
Sibling Relationship	4.34	0.000
Self-Concept	2.56	0.005
Self-Esteem	1.81	0.036
Social Responsibility	2.25	0.012

Note. <sup>a</sup>Combined probabilities for these clusters were greater than  $p = 0.05$  and support retention of the null hypothesis of no significant relationship between the variable cluster and adolescent pregnancy.

<sup>b</sup>The Stouffer method did not sustain the results of the  $\underline{z_r}$  95%CI results for these clusters.

Fail-safe N ( $N_{fs}$ ). The fail-safe N ( $N_{fs}$ ) is a descriptive statistic that is related to the Stouffer  $z_{st}$  and allows the user to evaluate the cumulative result of the review against an assessment of how exhaustively the reviewer searched the literature (Cooper, 1989, p. 97). Assuming the sum of unretrieved studies or studies left out of the analysis is equal to an exact null hypothesis, the fail-safe N represents the number of studies necessary to raise the combined  $z_{st}$  probability to above  $p = 0.05$  and reverse a significant result. It follows that the higher the fail-safe N the more confidence the user can have in the researcher's efforts.

Fail-safe N was less than the number of studies included in the current analysis for six of the nine clusters that had previously supported the null hypothesis (Anxiety, Parental Communication, Dating Relationship, Ego Strength, Menstruation Onset, and Peer Relationship) and three additional clusters (Father In Home, Pregnant Role Model, and Mother Relationship). The remaining 22 clusters required a number of "exact null" studies equal to or greater than those in the current analysis to raise the  $z_{st}$  probability above  $p = .05$  and change the conclusion that a relation exists.

When addressing the problem of how large a fail-safe N is "necessary," Cooper (1989, p. 97) indicates that "no steadfast rule is intuitively obvious, so reviewers should argue anew for the resistance of their findings each time the formula is applied." The standard used in this study requires a Fail-safe N larger than the number of studies in the analysis for any confidence in the result. For example, the Parenting Beliefs cluster contains 11 studies and the Fail-safe N is 130; this indicates that 130 additional studies with an "exact null" hypothesis would be necessary to raise the z<sub>st</sub> probability above p = .05 and change the conclusion that a relationship exists between Parenting Beliefs and adolescent pregnancy. Alternatively, the Anxiety cluster contains 8 studies and the Fail-safe N is 6; this indicates that only 6 studies would be necessary to raise the z<sub>st</sub> probability above p = .05 and reverse the conclusion that a relationship exists between Anxiety and adolescent pregnancy. The higher the Fail-safe N is above the number of studies in the analysis the more confidence the reader and researcher can have about the results and completeness of the review.

TABLE 4.6

Effect size and Fail-safe  $N$  by Variable Cluster.

Cluster	Studies	$\underline{z_r}$	$\underline{N_{fs}}$
Academic Performance	18	0.11	94
Anxiety <sup>a</sup>	8	0.12	6
Parental Communication <sup>a</sup>	9	0.30	3
Parenting Belief	11	0.15	130
Religious Activity	11	0.12	109
Contraception Use	10	0.16	25
Father In Home <sup>a</sup>	9	0.07	4
Dating Relationship <sup>a</sup>	12	0.04	11
Dependency	4	0.11	5
Depression	6	0.12	13
Educational Expectations	9	0.21	146
Ego Strength <sup>a</sup>	27	0.02	10
Family Dynamics	38	0.07	171
Future Orientation	14	0.15	204
School Grades	8	0.24	123
Sexual Knowledge	11	0.06	11
Living Arrangements	14	0.09	84

Cluster	Studies	$\underline{z_r}$	$\underline{N_{fs}}$
Locus Of Control	15	0.02	15
Role Identity	5	0.45	58
Menstruation Onset <sup>a</sup>	5	0.05	2
Occupational Expectations	6	0.18	50
Parental Relationship	28	0.14	95
Peer Relationship <sup>a</sup>	14	0.01	4
Pregnant Role Model <sup>a</sup>	7	0.12	5
Father Relationship	20	0.13	23
Mother Relationship <sup>a</sup>	23	0.10	6
Sexual Activity	27	0.14	233
Sibling Relationship	14	0.10	72
Self-Concept	32	0.12	246
Self-Esteem	23	0.11	113
Social Responsibility	16	0.09	56

Note. <sup>a</sup>The Fail-safe  $\underline{N}$  was less than the number of studies included in the current analysis for these studies.



Binomial Effect Size Display (BESD). The binomial effect size display (BESD) was provided in Table 4.7 to illustrate the practical importance of the correlation coefficient. The BESD shows the simple difference in an outcome ratio per 100 subjects between comparison groups. Ordinarily, comparison groups are experimental and control groups; however, Cooper and Hedges (1994) provide an example of simple non-experimental comparison groups (p. 243). The comparison groups in the current research were the pregnant and control groups. The goal of the BESD is to show plainly the incidence of the effect size variable expressed per 100 subjects. The effect size variable of better grades in the School Grades cluster, with an effect size of  $\underline{z}_r = 0.24$ , produces a BESD of 62/100 for the control group and 38/100 for the pregnant group. The incidence of better grades, as illustrated, favored the control group.

The BESD illustrated the direction of nine clusters favoring the Pregnant Group. The Pregnant Group was shown to have a greater incidence of Anxiety, positive beliefs about parenting, an active dating/relationship with a boyfriend, dependency needs, depression, an identification with traditional female roles, frequent early onset of menses, a pregnant teenage relative, friend or mother, and sexual activity.

The BESD illustrated a profile for the control group that might be considered stronger and/or more socially acceptable. The control group was shown to have better academic performance, adolescent/parent communication, church activity, use of contraception for sexually active teens, a father living in the home, educational expectations, ego strength, family adaptability, future orientation, higher grades, knowledge of sexuality and contraception, living arrangements, an external locus of control, occupational expectations, relationship with parents, relationship with peers, relationship with their father, relationship with their mother, relationship with siblings, self-concept, self-esteem, and social acceptance or responsibility.

TABLE 4.7

BESD Group Comparison, proportion of total in each group  
(ratio per 100) by Variable Cluster.

Cluster	Control	Pregnant <sup>a</sup>	Effect Size ( $\underline{z_r}$ )
Academic Performance	0.55	0.45	0.110
Anxiety*	0.44	0.56	0.115
Parental Communication	0.65	0.35	0.295
Parenting Belief*	0.43	0.57	0.145
Religious Activity	0.56	0.44	0.115
Contraception Use	0.58	0.42	0.160
Father In Home	0.53	0.47	0.065
Dating Relationship*	0.48	0.52	0.035
Dependency*	0.45	0.55	0.105
Depression*	0.44	0.56	0.120
Educational Expectations	0.60	0.40	0.207
Ego Strength	0.51	0.49	0.020
Family Dynamics	0.53	0.47	0.067
Future Orientation	0.58	0.43	0.150
School Grades	0.62	0.38	0.240
Sexual Knowledge	0.53	0.47	0.060

Cluster	Control	Pregnant <sup>a</sup>	Effect Size ( $\underline{z_r}$ )
Living Arrangements	0.55	0.46	0.090
Locus Of Control	0.51	0.49	0.015
Role Identity*	0.28	0.73	0.450
Menstruation Onset*	0.48	0.53	0.050
Occupational Expectation	0.59	0.41	0.180
Parental Relationship	0.57	0.43	0.135
Peer Relationship	0.50	0.50	0.005
Pregnant Role Model*	0.56	0.44	0.115
Father Relationship	0.56	0.44	0.125
Mother Relationship	0.55	0.45	0.095
Sexual Activity*	0.43	0.57	0.140
Sibling Relationship	0.55	0.45	0.095
Self-Concept	0.56	0.44	0.120
Self-Esteem	0.56	0.45	0.110
Social Responsibility	0.55	0.46	0.090

Note. <sup>a</sup>The BESD illustrates the direction of the nine clusters marked by the asterisk as favoring the pregnant group. The direction of all other clusters (22) favored the control group.

### Homogeneity Analysis and Q Statistic. Homogeneity

analysis answers the question "Is the variance in effect sizes significantly different from that expected by sampling error?" (Cooper, 1989, p. 114). If the answer is no, then the null hypothesis is supported and analysis stops. If the answer is yes, then analyses for other potential sources of variance are necessary. Homogeneity analysis was conducted using a chi-square procedure (Rosenthal, 1991) and a Q statistic (Cooper, 1989); both analyses produced the same values and identical results.

Homogeneity analysis sustained the z<sub>st</sub> results for the Anxiety and Sexual Knowledge clusters. The Q<sub>t</sub>-statistic was not greater than the critical value, and the hypothesis that the variance in effect sizes was produced by sampling error alone could not be rejected. Two additional clusters, Depression and Pregnant Role Model, also did not produce Q<sub>t</sub> values sufficient to reject the null hypothesis. Homogeneity analysis contradicted z<sub>st</sub> and/or 95%CI results for Parental Communication, Dating Relationship, Dependency, Ego Strength, Locus Of Control, Menstruation Onset, and Peer Relationship. These seven and the remaining twenty clusters produce a Q<sub>t</sub> statistic that is greater than or equal to the critical value at  $p < .05$ , resulting in rejection of the hypothesis that the variance in effect sizes was the result

of sampling error alone (see Table 4.8, below). Rejection of this hypothesis dictates examination of the data for other potential sources of variance, that is, for moderator variables.

TABLE 4.8

Effect size and  $Q_t$ /Chi-Square Analysis by Variable Cluster.

Cluster	$\underline{z}_r$	$\underline{Q}_t$ /Chi-Sq	$\underline{df}$	$\underline{p} <$
Academic Performance	0.11	182.3	17	0.010
Anxiety	0.12	6.5	7	0.500
Parental Communication	0.30	260.6	8	0.010
Parenting Belief	0.15	34.8	10	0.010
Religious Activity	0.12	29.2	10	0.010
Contraception Use	0.16	169.5	9	0.010
Father In Home	0.07	46.7	8	0.010
Dating Relationship	0.04	101.0	11	0.010
Dependency	0.11	8.3	3	0.050
Depression	0.12	8.1	5	0.250
Educational Expectations	0.21	66.1	8	0.010
Ego Strength	0.02	141.0	26	0.010
Family Dynamics	0.07	338.4	37	0.010
Future Orientation	0.15	166.6	13	0.010
School Grades	0.24	22.1	7	0.010
Sexual Knowledge	0.06	17.3	10	0.100
Living Arrangements	0.09	106.7	13	0.010

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Cluster	<u>z<sub>r</sub></u>	<u>Q<sub>t</sub></u> /Chi-Sq	<u>df</u>	<u>p</u> <
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Locus Of Control	0.02	75.5	14	0.010
Role Identity	0.45	79.6	4	0.010
Menstruation Onset	0.05	17.4	4	0.010
Occupational Expectation	0.18	31.1	5	0.010
Parental Relationship	0.14	319.9	27	0.010
Peer Relationship	0.01	134.7	13	0.010
Pregnant Role Model	0.12	7.5	6	0.500
Father Relationship	0.13	53.9	19	0.010
Mother Relationship	0.10	43.5	22	0.010
Sexual Activity	0.14	175.3	26	0.010
Sibling Relationship	0.10	32.2	13	0.010
Self-Concept	0.12	279.7	31	0.010
Self-Esteem	0.11	257.9	22	0.010
Social Responsibility	0.09	79.2	15	0.010

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Analysis for Moderator Variables. Variable clusters were analyzed using meta-analytic techniques to answer the research questions:

Which study characteristics function as moderator variables to the observed psychosocial variable effect sizes?

Which study subject demographic characteristics function as moderator variables to the observed psychosocial variable effect sizes?

Twenty-seven clusters undergoing meta-analysis were tested for moderator variables. The clusters which failed homogeneity analysis and failed to reject the null hypothesis (i.e., Anxiety, Sexual Knowledge, Depression, And Pregnant Role Model) were not analyzed further. During the meta-analysis of each cluster, 30 study characteristics or study subject demographic variables were analyzed as potential moderator variables. Moderator variables are "variables that are associated with effect magnitude" (Cooper & Hedges, 1994, p. 24). It is important to note that in this context moderator variables may be but are not considered intervening, extraneous, or confounding variables.

The goal of this study was to identify potential moderators, determine the associated size of the effect magnitude, and present the association for discussion and theoretical considerations. Confirmation of the variables as moderators and development of the theoretical implications are not in the scope of this research analysis and have been left to future research.

ANOVA and the post hoc Cochran's  $C$  statistic were used to determine if effect sizes for study characteristics or demographic variables were homogeneous. When effect sizes associated with a study characteristic or demographic variable were found to be homogeneous, ANOVA and the post hoc Scheffe procedure were employed for assessment of the levels of the variable as a potential source of variance. When effect sizes associated with a study characteristic or demographic variable were found to be heterogeneous, the assumptions associated with ANOVA could not be met. Therefore,  $Q_t$  analysis was used to assess study characteristics or demographic variables as a source of variance.

Study characteristics or demographic variables had between one and seven levels or conditions; for example, the study characteristic Research Design took two forms, descriptive and correlational, and the variable Study Field

had six categories: nursing, sociology, medicine, psychology, education, and public health. Each of the 175 pairs of the various study characteristics or demographic variables for each cluster of studies was subjected to either ANOVA or  $Q_t$  analysis (see Appendix H). Because of the large number of variable pairs, it is expected that approximately 5% will be found to be significant based on sampling error alone. The study characteristics and demographic variables analyzed as potential moderator variables and their frequency of occurrence in the sample population are presented in Table 4.9, below.

TABLE 4.9

Study Characteristic and Demographic Variables Analyzed as Potential Moderator Variables.<sup>a</sup>

Variable	Abbreviation	Levels	Frequency
Publication Form	PUBFORM / PF	(1) Journal (2) Dissertation (3) Report (4) Book	42 26 0 0
Publication Year	PUBYEAR / PY	(1) LOW through 1979 (2) 1980 through 1989 (3) 1990 through HIGH	13 36 19
Journal Type	JOURTYP / JT	(1) Specialty (2) NA	43 25
Source	SOURCE / SO	(1) CINAL (2) ERIC (3) MEDLINE (4) PSYC (5) REF List (6) DAI	6 4 3 4 26 25
Study Field	STUDYFLD / SF	(1) Nursing (2) Sociology (3) Medicine (4) Psychology (5) Public Health (6) Education	9 7 10 33 2 7

Variable	Abbreviation	Levels	Frequency
Research Type	RESTYPE / RT	(1) Independent research (2) Funded research (3) Dissertation (4) Unknown	32 12 16 8
Funding Source	FUNDING / FU	(1) Unknown (2) None (3) Other	48 7 5
Study Design	DESIGN / DS	(1) Descriptive (2) Correlational (3) Experimental (4) More than one	18 50 0 0
Sampling Methods	SAMPMTHD / SM	(1) Matched (2) Random and matched (3) Convenience	6 4 58
Comparison Group Sample Size	CN	(1) Low through 99 (2) 100 through 299 (3) 300 through High	40 14 4
Pregnant Group Sample Size	PN	(1) Low through 99 (2) 100 through 299 (3) 300 through High	60 8 0
Total Sample Size	TOTALN / TN	(1) Low through 99 (2) 100 through 299 (3) 300 through High	36 24 8
Quality of Study	QUALSTD / QS	(1) Low through 1.99 (2) 2 through 2.49 (3) 2.5 through 3	23 20 25

Variable	Abbreviation	Levels	Frequency
Comparison Group Age	CAGE / CA	(1) Low through 15.99 (2) 16 through High (3) Missing	34 20 14
Comparison Group Ethnicity	CGETH / CE	(1) White (2) Black (3) Hispanic (4) Mixed group (5) Other	10 14 1 40 3
Comparison Group Marital Status	CGMAR / CM	(1) Single/Never Married (2) Married (3) Mixed Group (4) Other	50 0 6 12
Comparison Group Family Income	CGFAM\$ / C\$	(1) Low (2) Middle (3) High (4) Unknown	38 15 0 15
Comparison Group Educational Status	CGED / CD	(1) 6th to 9th grade (2) 10th to 12th Grade (3) High School Graduate (4) College or Technical (5) Mixed Group	11 36 1 1 19
Pregnant Group Age	PAGE / PA	(1) Low through 15.99 (2) 16 through High (3) Missing	15 40 13
Pregnant Group Ethnicity	PGETH / PE	(1) White (2) Black (3) Hispanic (4) Mixed group (5) Other	9 13 1 43 2

Variable	Abbreviation	Levels	Frequency
Pregnant Group Marital Status	PGMAR / PM	(1) Single/Never Married (2) Married (3) Mixed group (4) Other	47 0 9 12
Pregnant Group Family Income	PGFAM\$ / P\$	(1) Low (2) Middle (3) High (4) Unknown	40 14 0 14
Pregnant Group Educational Status	PGED / PD	(1) 6th to 9th grade (2) 10th to 12th Grade (3) High School Graduate (4) College or Technical (5) Mixed Group	12 34 1 0 21
Study Setting	SETTING / SE	(1) Hospital (2) Clinic (3) University (4) Home (5) Long-term Facility (6) Unknown (7) Other	4 27 2 3 1 28 2
Nursing Theory	NSGTHRY / NT	(1) Yes (2) No	2 66
Other/ Non-Nursing Theory	NONSGTH / TH	(1) Yes (2) No	36 32
Standardized <sup>a</sup> Instrument	STAND / SI	(1) Standardized instrument (2) Nonstandardized instrument	**

Variable	Abbreviation	Levels	Frequency
Statistic <sup>a</sup> Used	STATUSD / SU	(1) Frequency, means, percentage, variance (2) Chi-square, Fisher's Exact, McNemar (3) ANOVA, $\bar{t}$ (4) ANCOVA (5) Multivariate corr, $\bar{r}^2$ , etc. (6) Other	**
Observation <sup>a</sup> Type	OBTYPE / OT	(1) Chi-square (2) $\bar{Z}$ value (3) $\bar{t}$ value (4) $\bar{F}$ value (6) Other	**

Note. Study Characteristic and Demographic variables were analyzed as potential moderator variables; each level of each variable was subjected to Qt or Scheffe analysis.

<sup>a</sup>Frequencies are not provided here for these variables. The frequencies for these variables are analysis specific and vary with each of the 31 clusters of variables.



Study Characteristics - Moderator Variables. Study

characteristics were previously defined as identifiable attributes of a study, such as setting, reliability and validity information, quality, and theoretical approach. The seventeen variables analyzed as study characteristics included publication year, publication form, journal type, source, number of authors, study from, research type, funding, design, sampling method, quality of study, setting, nursing theory, non-nursing theory, standard instrument, statistic used, and observation type. No discernible pattern of study characteristics as moderator variables was observed in the 27 clusters analyzed.

The variables found to be significant at the  $p < 0.05$  level and the magnitude of effect associated with each level of the various study characteristics are presented in Table 4.10, which follows.

TABLE 4.10

Qt/Scheffe Analysis - Study Characteristics -  
Mean Zr Associated with Variable Levels

Variables/Clusters	Academic Performance	Parental Communication	Parenting Beliefs
Publication Year			
(1) Low Through 1979	0.14	0.38	*
(2) 1980 Through 1989	0.14	0.02	*
(3) 1990 Through High	0.07	0.62	*
Publication Form			
(1) Journal	0.12	0.63	0.15
(2) Dissertation	0.11	0.13	0.21
Journal Type			
(2) Specialty	0.12	0.63	0.15
(3) NA	0.11	0.13	0.21
Source			
(1) CINAHL	0.05	1.65	0.06
(2) ERIC	0.49	EMPTY	EMPTY
(3) MEDLINE	-0.01	EMPTY	EMPTY
(4) PsychLit	0.01	EMPTY	0.19
(5) REF List	0.21	0.13	0.16
(6) DAI	0.11	0.13	0.21
Author			
(1) 1	0.08	0.19	0.17
(2) 2	0.26	0.16	EMPTY
(3) 3	-0.01	1.65	0.08
(4) 4	0.07	-0.29	0.25
(5) 5	EMPTY	EMPTY	EMPTY
Study Field			
(1) Nursing	0.08	EMPTY	*
(2) Sociology	0.13	0.07	*
(3) Medicine	EMPTY	EMPTY	*
(4) Psychology	0.11	0.36	*
(5) Education	0.31	EMPTY	*
(6) Public Health	0.04	EMPTY	*

Variables/Clusters	Academic Performance	Parental Communication	Parenting Beliefs
<b>Research Type</b>			
(1) Independent research	*	*	0.05
(2) Funded research	*	*	0.17
(3) Dissertation	*	*	0.21
(4) Unknown	*	*	0.26
<b>Funding</b>			
(1) Unknown	0.11	0.19	0.13
(2) None	0.25	0.16	0.39
(3) Other	0.06	1.65	0.19
(4) Federal	*	-0.29	0.32
(5) Foundation	*	EMPTY	0.10
<b>Design</b>			
(1) Descriptive	*	-0.29	*
(2) Correlational	*	0.37	*
<b>Sampling Method</b>			
(1) Matched	0.18	*	*
(2) Random and matched	1.03	*	*
(3) Convenience	0.04	*	*
<b>Quality of Study</b>			
(1) Low through 1.99	*	0.35	*
(2) 2 through 2.49	*	0.72	*
(3) 2.5 through 3	*	0.19	*
<b>Setting</b>			
(1) Hospital	0.12	*	*
(2) Clinic	0.02	*	*
(3) School/Community	EMPTY	*	*
(4) Other	0.22	*	*
(5) Long Term Facility	EMPTY	*	*
(6) University	-0.42	*	*
(7) Unknown	*	*	*
<b>Nursing Theory</b>			
(1) Yes	*	*	0.06
(2) No	*	*	0.18
<b>Other/Non Nursing Theory</b>			
(1) Yes	0.11	*	*
(2) No	0.13	*	*

Variables/Clusters	Academic Performance	Parental Communication	Parenting Beliefs
<hr/> Standard Instrument			
(1) Standard Instrument	*	*	*
(2) Nonstandard	*	*	*
<hr/> Statistic Used			
(1) Frequency, percentage, means, variance	*	*	*
(2) Chi-square, Fisher's Exact, McNemar	*	*	*
(3) ANOVA, $\bar{t}$	*	*	*
(4) ANCOVA	*	*	*
(5) Multivariate corr, $\bar{r}_2$ , etc.	*	*	*
(6) Other	*	*	*
<hr/> Observation Type			
(1) Chi-square	0.07	0.31	*
(2) $\bar{Z}$ value	-0.55	EMPTY	*
(3) $\bar{t}$ value	0.12	0.43	*
(4) $\bar{F}$ value	0.37	-0.02	*
(5) Other	0.09	EMPTY	*

Variables/Clusters	Religious Activity	Contraception Use	Father In Home
Publication Year			
(1) Low Through 1979	*	*	*
(2) 1980 Through 1989	*	*	*
(3) 1990 Through High	*	*	*
Publication Form			
(1) Journal	*	0.25	*
(2) Dissertation	*	0.00	*
Journal Type			
(2) Specialty	*	0.25	*
(3) NA	*	0.00	*
Source			
(1) CINAHL	*	EMPTY	*
(2) ERIC	*	0.00	*
(3) MEDLINE	*	EMPTY	*
(4) PsychLit	*	0.12	*
(5) REF List	*	0.29	*
(6) DAI	*	-0.01	*
Author			
(1) 1	*	0.02	-0.04
(2) 2	*	0.60	EMPTY
(3) 3	*	EMPTY	EMPTY
(4) 4	*	0.18	-0.18
(5) 5	*	EMPTY	EMPTY
Study Field			
(1) Nursing	*	*	*
(2) Sociology	*	*	*
(3) Medicine	*	*	*
(4) Psychology	*	*	*
(5) Education	*	*	*
(6) Public Health	*	*	*
Research Type			
(1) Independent research	0.06	0.41	*
(2) Funded research	0.05	0.18	*
(3) Dissertation	0.36	-0.13	*
(4) Unknown	EMPTY	EMPTY	*

Variables/Clusters	Religious Activity	Contraception Use	Father In Home
Funding			
(1) Unknown	0.27	*	*
(2) None	-0.01	*	*
(3) Other	EMPTY	*	*
(4) Federal	0.11	*	*
(5) Foundation	0.08	*	*
Design			
(1) Descriptive	*	*	*
(2) Correlational	*	*	*
Sampling Method			
(1) Matched	EMPTY	0.60	*
(2) Random and matched	-0.11	EMPTY	*
(3) Convenience	0.19	0.07	*
Quality of Study			
(1) Low through 1.99	*	*	*
(2) 2 through 2.49	*	*	*
(3) 2.5 through 3	*	*	*
Setting			
(1) Hospital	*	0.63	*
(2) Clinic	*	0.22	*
(3) School/Community	*	EMPTY	*
(4) Other	*	0.00	*
(5) Long Term Facility	*	EMPTY	*
(6) University	*	-1.23	*
(7) Unknown	*	EMPTY	*
Nursing Theory			
(1) Yes	*	*	*
(2) No	*	*	*
Other/Non Nursing Theory			
(1) Yes	*	0.02	*
(2) No	*	0.29	*
Standard Instrument			
(1) Standard Instrument	*	0.17	*
(2) Nonstandard	*	0.11	*

Variables/Clusters	Religious Activity	Contraception Use	Father In Home
Statistic Used			
(1) Frequency, means, percentage, variance	0.20	0.15	-0.10
(2) Chi-square, Fisher's Exact, McNemar	EMPTY	EMPTY	0.00
(3) ANOVA, $\bar{t}$	0.01	0.06	0.11
(4) ANCOVA	EMPTY	0.05	0.00
(5) Multivariate corr, $\bar{r}^2$ , etc.	EMPTY	EMPTY	EMPTY
(6) Other	EMPTY	EMPTY	EMPTY
Observation Type			
(1) Chi-square	0.20	0.38	*
(2) $\bar{Z}$ value	EMPTY	-1.23	*
(3) $\bar{t}$ value	-0.01	0.00	*
(4) $\bar{F}$ value	0.03	0.12	*
(5) Other	EMPTY	EMPTY	*

Variables/Clusters	Dating Relationship	Social Responsibility	Self- Esteem
Publication Year			
(1) Low Through 1979	*	-0.01	0.01
(2) 1980 Through 1989	*	0.23	0.11
(3) 1990 Through High	*	0.10	0.33
Publication Form			
(1) Journal	*	0.03	0.27
(2) Dissertation	*	0.24	0.11
Journal Type			
(2) Specialty	*	0.03	0.27
(3) NA	*	0.24	0.11
Source			
(1) CINAHL	EMPTY	EMPTY	0.64
(2) ERIC	-0.13	EMPTY	0.09
(3) MEDLINE	EMPTY	0.55	EMPTY
(4) PsychLit	-0.39	0.48	0.05
(5) REF List	0.01	0.15	0.11
(6) DAI	-0.04	0.24	0.12
Author			
(1) 1	*	0.24	0.12
(2) 2	*	0.06	EMPTY
(3) 3	*	-0.01	0.45
(4) 4	*	0.07	0.12
(5) 5	*	EMPTY	EMPTY
Study Field			
(1) Nursing	*	0.15	0.15
(2) Sociology	*	0.05	0.14
(3) Medicine	*	EMPTY	0.01
(4) Psychology	*	0.20	0.25
(5) Education	*	0.17	0.07
(6) Public Health	*	EMPTY	EMPTY
Research Type			
(1) Independent research	*	*	0.21
(2) Funded research	*	*	0.08
(3) Dissertation	*	*	0.06
(4) Unknown	*	*	1.47



Variables/Clusters	Dating Relationship	Social Responsibility	Self- Esteem
Funding			
(1) Unknown	-0.16	*	0.16
(2) None	0.24	*	0.07
(3) Other	EMPTY	*	0.50
(4) Federal	0.14	*	*
(5) Foundation	-0.01	*	*
Design			
(1) Descriptive	*	0.11	0.13
(2) Correlational	*	0.16	0.18
Sampling Method			
(1) Matched	EMPTY	EMPTY	*
(2) Random and matched	-0.24	0.22	*
(3) Convenience	-0.04	0.15	*
Quality of Study			
(1) Low through 1.99	*	*	0.09
(2) 2 through 2.49	*	*	0.21
(3) 2.5 through 3	*	*	0.20
Setting			
(1) Hospital	-0.43	*	EMPTY
(2) Clinic	0.13	*	0.32
(3) School/Community	EMPTY	*	0.02
(4) Other	0.03	*	0.10
(5) Long Term Facility	EMPTY	*	-0.04
(6) University	-0.51	*	EMPTY
(7) Unknown	EMPTY	*	0.13
Nursing Theory			
(1) Yes	*	*	0.13
(2) No	*	*	0.18
Other/Non Nursing Theory			
(1) Yes	*	0.20	0.20
(2) No	*	0.06	0.16
Standard Instrument			
(1) Standard Instrument	*	*	0.12
(2) Nonstandard	*	*	0.26

Variables/Clusters	Dating Relationship	Social Responsibility	Self- Esteem
Statistic Used			
(1) Frequency, means, percentage, variance	*	0.11	0.15
(2) Chi-square, Fisher's Exact, McNemar	*	EMPTY	0.66
(3) ANOVA, $\bar{t}$	*	0.16	0.12
(4) ANCOVA	*	EMPTY	0.08
(5) Multivariate corr, $r^2$ , etc.	*	EMPTY	0.13
(6) Other	*	EMPTY	0.42
Observation Type			
(1) Chi-square	*	*	0.74
(2) $\bar{Z}$ value	*	*	0.47
(3) $\bar{t}$ value	*	*	0.12
(4) $\bar{F}$ value	*	*	0.17
(5) Other	*	*	0.01

Variables/Clusters	Dependency	Educational Expectations	Ego Strength
Publication Year			
(1) Low Through 1979	0.27	*	*
(2) 1980 Through 1989	0.05	*	*
(3) 1990 Through High	0.02	*	*
Publication Form			
(1) Journal	0.19	*	*
(2) Dissertation	0.02	*	*
Journal Type			
(2) Specialty	0.19	*	*
(3) NA	0.02	*	*
Source			
(1) CINAHL	EMPTY	*	*
(2) ERIC	0.05	*	*
(3) MEDLINE	EMPTY	*	*
(4) PsychLit	EMPTY	*	*
(5) REF List	0.27	*	*
(6) DAI	0.02	*	*
Author			
(1) 1	0.02	*	*
(2) 2	0.25	*	*
(3) 3	0.07	*	*
(4) 4	EMPTY	*	*
(5) 5	EMPTY	*	*
Study Field			
(1) Nursing	EMPTY	*	*
(2) Sociology	EMPTY	*	*
(3) Medicine	EMPTY	*	*
(4) Psychology	0.18	*	*
(5) Education	0.07	*	*
(6) Public Health	EMPTY	*	*
Research Type			
(1) Independent research	*	*	0.07
(2) Funded research	*	*	0.02
(3) Dissertation	*	*	0.08
(4) Unknown	*	*	0.14

Variables/Clusters	Dependency	Educational Expectations	Ego Strength
Funding			
(1) Unknown	0.19	*	0.08
(2) None	0.02	*	0.09
(3) Other	EMPTY	*	0.19
(4) Federal	EMPTY	*	0.07
(5) Foundation	EMPTY	*	-0.13
Design			
(1) Descriptive	0.05	*	*
(2) Correlational	0.18	*	*
Sampling Method			
(1) Matched	0.46	*	*
(2) Random and matched	0.07	*	*
(3) Convenience	0.04	*	*
Quality of Study			
(1) Low through 1.99	*	*	*
(2) 2 through 2.49	*	*	*
(3) 2.5 through 3	*	*	*
Setting			
(1) Hospital	EMPTY	*	*
(2) Clinic	0.24	*	*
(3) School/Community	EMPTY	*	*
(4) Other	0.07	*	*
(5) Long Term Facility	EMPTY	*	*
(6) University	EMPTY	*	*
(7) Unknown	EMPTY	*	*
Nursing Theory			
(1) Yes	*	*	*
(2) No	*	*	*
Other/Non Nursing Theory			
(1) Yes	0.05	0.12	*
(2) No	0.46	0.23	*
Standard Instrument			
(1) Standard Instrument	*	*	*
(2) Nonstandard	*	*	*

Variables/Clusters	Dependency	Educational Expectations	Ego Strength
Statistic Used			
(1) Frequency, means, percentage, variance	EMPTY	0.26	-0.08
(2) Chi-square, Fisher's Exact, McNemar	EMPTY	-0.35	0.36
(3) ANOVA, $\underline{t}$	0.05	0.21	0.10
(4) ANCOVA	0.46	EMPTY	-0.17
(5) Multivariate corr, $\underline{r^2}$ , etc.	EMPTY	EMPTY	EMPTY
(6) Other	EMPTY	EMPTY	0.52
Observation Type			
(1) Chi-square	EMPTY	0.17	*
(2) $\underline{Z}$ value	EMPTY	EMPTY	*
(3) $\underline{t}$ value	0.04	0.21	*
(4) $\underline{F}$ value	0.07	0.21	*
(5) Other	EMPTY	EMPTY	*

Variables/Clusters	Family Dynamics	Future Orientation	School Grades
Publication Year			
(1) Low Through 1979	*	EMPTY	*
(2) 1980 Through 1989	*	0.08	*
(3) 1990 Through High	*	0.12	*
Publication Form			
(1) Journal	*	0.23	*
(2) Dissertation	*	-0.05	*
Journal Type			
(2) Specialty	*	0.23	*
(3) NA	*	-0.05	*
Source			
(1) CINAHL	0.75	0.19	*
(2) ERIC	0.00	EMPTY	*
(3) MEDLINE	0.62	0.18	*
(4) PsychLit	-0.08	0.13	*
(5) REF List	0.05	0.28	*
(6) DAI	0.01	-0.05	*
Author			
(1) 1	0.03	-0.05	*
(2) 2	0.26	0.24	*
(3) 3	0.23	0.13	*
(4) 4	-0.04	0.34	*
(5) 5	EMPTY	EMPTY	*
Study Field			
(1) Nursing	*	0.04	*
(2) Sociology	*	0.30	*
(3) Medicine	*	0.09	*
(4) Psychology	*	-0.06	*
(5) Education	*	0.36	*
(6) Public Health	*	0.09	*
Research Type			
(1) Independent research	0.12	0.31	*
(2) Funded research	0.00	0.17	*
(3) Dissertation	-0.07	-0.09	*
(4) Unknown	0.37	EMPTY	*

Variables/Clusters	Family Dynamics	Future Orientation	School Grades
<b>Funding</b>			
(1) Unknown	0.05	0.00	*
(2) None	0.20	0.20	*
(3) Other	0.75	0.23	*
(4) Federal	0.10	EMPTY	*
(5) Foundation	0.02	0.09	*
<b>Design</b>			
(1) Descriptive	0.01	0.45	0.04
(2) Correlational	0.10	0.03	0.32
<b>Sampling Method</b>			
(1) Matched	0.03	*	0.38
(2) Random and matched	-0.09	*	EMPTY
(3) Convenience	0.09	*	0.27
<b>Quality of Study</b>			
(1) Low through 1.99	*	0.43	*
(2) 2 through 2.49	*	0.18	*
(3) 2.5 through 3	*	0.15	*
<b>Setting</b>			
(1) Hospital	-0.19	EMPTY	EMPTY
(2) Clinic	0.19	0.27	0.12
(3) School/Community	-0.34	-0.27	EMPTY
(4) Other	0.09	0.14	0.34
(5) Long Term Facility	EMPTY	EMPTY	EMPTY
(6) University	-0.34	-0.27	EMPTY
(7) Unknown	EMPTY	EMPTY	EMPTY
<b>Nursing Theory</b>			
(1) Yes	*	*	*
(2) No	*	*	*
<b>Other/Non Nursing Theory</b>			
(1) Yes	0.06	-0.01	*
(2) No	0.10	0.20	*
<b>Standard Instrument</b>			
(1) Standard Instrument	*	*	*
(2) Nonstandard	*	*	*

Variables/Clusters	Family Dynamics	Future Orientation	School Grades
Statistic Used			
(1) Frequency, means, percentage, variance	0.03	0.05	*
(2) Chi-square, Fisher's Exact, McNemar	0.32	EMPTY	*
(3) ANOVA, $\bar{t}$	0.02	0.15	*
(4) ANCOVA	-0.09	EMPTY	*
(5) Multivariate corr, $\bar{r}_2$ , etc.	-0.04	EMPTY	*
(6) Other	0.07	EMPTY	*
Observation Type			
(1) Chi-square	*	0.23	*
(2) $\bar{Z}$ value	*	-1.24	*
(3) $\bar{t}$ value	*	0.14	*
(4) $\bar{F}$ value	*	0.17	*
(5) Other	*	EMPTY	*



Variables/Clusters	Living Arrangements	Self- Concept	Sibling Relationship
Publication Year			
(1) Low Through 1979	0.04	0.01	*
(2) 1980 Through 1989	-0.02	0.14	*
(3) 1990 Through High	0.11	0.28	*
Publication Form			
(1) Journal	0.07	0.22	*
(2) Dissertation	-0.01	0.14	*
Journal Type			
(2) Specialty	0.07	0.22	*
(3) NA	-0.01	0.14	*
Source			
(1) CINAHL	EMPTY	0.47	EMPTY
(2) ERIC	EMPTY	0.09	-0.33
(3) MEDLINE	EMPTY	0.07	0.35
(4) PsychLit	EMPTY	0.14	0.07
(5) REF List	0.07	0.13	0.10
(6) DAI	-0.01	0.15	0.14
Author			
(1) 1	0.00	0.14	0.11
(2) 2	0.05	0.08	0.16
(3) 3	0.09	0.37	0.09
(4) 4	-0.01	0.17	0.07
(5) 5	EMPTY	EMPTY	EMPTY
Study Field			
(1) Nursing	0.12	0.13	0.30
(2) Sociology	0.06	0.17	0.19
(3) Medicine	0.02	-0.02	0.07
(4) Psychology	-0.10	0.22	0.05
(5) Education	0.05	0.14	0.06
(6) Public Health	EMPTY	0.15	EMPTY
Research Type			
(1) Independent research	0.13	0.19	0.12
(2) Funded research	0.01	0.09	0.08
(3) Dissertation	-0.07	0.11	0.14
(4) Unknown	0.14	0.75	0.14

Variables/Clusters	Living Arrangements	Self- Concept	Sibling Relationship
Funding			
(1) Unknown	-0.01	0.15	0.13
(2) None	0.17	0.16	EMPTY
(3) Other	EMPTY	0.42	0.11
(4) Federal	EMPTY	0.11	EMPTY
(5) Foundation	0.02	0.05	0.09
Design			
(1) Descriptive	0.03	0.11	-0.04
(2) Correlational	0.01	0.19	0.20
Sampling Method			
(1) Matched	EMPTY	EMPTY	0.22
(2) Random and matched	-0.16	0.03	0.00
(3) Convenience	0.03	0.18	0.11
Quality of Study			
(1) Low through 1.99	0.37	0.13	*
(2) 2 through 2.49	0.17	0.24	*
(3) 2.5 through 3	0.14	0.17	*
Setting			
(1) Hospital	*	EMPTY	*
(2) Clinic	*	0.26	*
(3) School/Community	EMPTY	0.02	*
(4) Other	*	0.14	*
(5) Long Term Facility	EMPTY	-0.04	*
(6) University	*	EMPTY	*
(7) Unknown	EMPTY	0.13	*
Nursing Theory			
(1) Yes	*	0.13	*
(2) No	*	0.18	*
Other/Non Nursing Theory			
(1) Yes	-0.07	0.23	0.12
(2) No	0.10	0.13	0.09
Standard Instrument			
(1) Standard Instrument	*	*	*
(2) Nonstandard	*	*	*

Variables/Clusters	Living Arrangements	Self- Concept	Sibling Relationship
Statistic Used			
(1) Frequency, means, percentage, variance	0.00	-0.03	0.10
(2) Chi-square, Fisher's Exact, McNemar	0.10	0.66	0.29
(3) ANOVA, $\bar{t}$	EMPTY	0.15	0.11
(4) ANCOVA	EMPTY	0.15	EMPTY
(5) Multivariate corr, $r^2$ , etc.	EMPTY	0.13	-0.33
(6) Other	EMPTY	0.42	EMPTY
Observation Type			
(1) Chi-square	0.10	0.73	0.13
(2) $Z$ value	-0.54	EMPTY	0.26
(3) $\bar{t}$ value	EMPTY	0.16	0.08
(4) $\bar{F}$ value	EMPTY	0.16	0.14
(5) Other	0.00	EMPTY	EMPTY

Variables/Clusters	Locus of Control	Role Identity	Menstruation Onset
Publication Year			
(1) Low Through 1979	0.02	1.44	-0.13
(2) 1980 Through 1989	0.17	0.32	0.22
(3) 1990 Through High	-0.14	0.41	0.12
Publication Form			
(1) Journal	*	*	*
(2) Dissertation	*	*	*
Journal Type			
(2) Specialty	*	*	*
(3) NA	*	*	*
Source			
(1) CINAHL	*	0.22	*
(2) ERIC	*	EMPTY	*
(3) MEDLINE	*	EMPTY	*
(4) PsychLit	*	EMPTY	*
(5) REF List	*	1.44	*
(6) DAI	*	0.39	*
Author			
(1) 1	0.02	0.35	*
(2) 2	0.10	1.44	*
(3) 3	0.11	EMPTY	*
(4) 4	-0.08	EMPTY	*
(5) 5	EMPTY	EMPTY	*
Study Field			
(1) Nursing	*	*	*
(2) Sociology	*	*	*
(3) Medicine	*	*	*
(4) Psychology	*	*	*
(5) Education	*	*	*
(6) Public Health	*	*	*
Research Type			
(1) Independent research	-0.02	0.39	0.38
(2) Funded research	-0.01	0.22	-0.02
(3) Dissertation	0.11	EMPTY	0.12
(4) Unknown	EMPTY	1.44	-0.15

Variables/Clusters	Locus of Control	Role Identity	Menstruation Onset
Funding			
(1) Unknown	0.07	0.64	0.12
(2) None	-0.01	0.67	EMPTY
(3) Other	0.01	0.22	0.06
(4) Federal	0.05	EMPTY	EMPTY
(5) Foundation	0.14	EMPTY	0.10
Design			
(1) Descriptive	*	*	*
(2) Correlational	*	*	*
Sampling Method			
(1) Matched	*	1.44	-0.15
(2) Random and matched	*	0.08	0.14
(3) Convenience	*	0.43	0.09
Quality of Study			
(1) Low through 1.99	*	*	*
(2) 2 through 2.49	*	*	*
(3) 2.5 through 3	*	*	*
Setting			
(1) Hospital	*	*	*
(2) Clinic	*	*	*
(3) School/Community	*	*	*
(4) Other	*	*	*
(5) Long Term Facility	*	*	*
(6) University	*	*	*
(7) Unknown	*	*	*
Nursing Theory			
(1) Yes	-0.05	*	*
(2) No	0.04	*	*
Other/Non Nursing Theory			
(1) Yes	*	*	*
(2) No	*	*	*
Standard Instrument			
(1) Standard Instrument	*	*	*
(2) Nonstandard	*	*	*

Variables/Clusters	Locus of Control	Role Identity	Menstruation Onset
Statistic Used			
(1) Frequency, means, percentage, variance	*	*	-0.06
(2) Chi-square, Fisher's Exact, McNemar	*	*	EMPTY
(3) ANOVA, $\bar{t}$	*	*	0.38
(4) ANCOVA	*	*	0.12
(5) Multivariate corr, $\bar{r}^2$ , etc.	*	*	EMPTY
(6) Other	*	*	EMPTY
Observation Type			
(1) Chi-square	0.03	EMPTY	-0.06
(2) $\bar{Z}$ value	EMPTY	EMPTY	EMPTY
(3) $\bar{t}$ value	0.13	0.69	EMPTY
(4) $\bar{F}$ value	-0.19	EMPTY	0.38
(5) Other	0.03	0.08	0.12

Variables/Clusters	Occupational Expectations	Parental Relationship	Peer Relationship
<hr/>			
Publication Year			
(1) Low Through 1979	0.23	0.20	0.22
(2) 1980 Through 1989	0.02	0.11	0.10
(3) 1990 Through High	*	0.31	0.25
Publication Form			
(1) Journal	*	0.25	*
(2) Dissertation	*	0.10	*
Journal Type			
(2) Specialty	*	0.25	*
(3) NA	*	0.10	*
Source			
(1) CINAHL	*	0.89	*
(2) ERIC	*	0.11	*
(3) MEDLINE	*	0.11	*
(4) PsychLit	*	EMPTY	*
(5) REF List	*	0.18	*
(6) DAI	*	0.10	*
Author			
(1) 1	*	0.13	*
(2) 2	*	0.16	*
(3) 3	*	0.38	*
(4) 4	*	0.17	*
(5) 5	*	0.13	*
Study Field			
(1) Nursing	EMPTY	0.25	*
(2) Sociology	0.51	0.16	*
(3) Medicine	EMPTY	0.06	*
(4) Psychology	0.15	0.22	*
(5) Education	0.10	0.06	*
(6) Public Health	EMPTY	EMPTY	*
Research Type			
(1) Independent research	*	0.12	0.32
(2) Funded research	*	0.13	0.18
(3) Dissertation	*	0.15	0.14
(4) Unknown	*	0.58	0.39

Variables/Clusters	Occupational Expectations	Parental Relationship	Peer Relationship
<b>Funding</b>			
(1) Unknown	0.23	-0.22	*
(2) None	EMPTY	0.00	*
(3) Other	0.17	1.65	*
(4) Federal	EMPTY	0.14	*
(5) Foundation	0.22	0.11	*
<b>Design</b>			
(1) Descriptive	0.51	0.16	*
(2) Correlational	0.14	0.18	*
<b>Sampling Method</b>			
(1) Matched	*	0.21	EMPTY
(2) Random and matched	*	0.08	0.24
(3) Convenience	*	0.19	0.26
<b>Quality of Study</b>			
(1) Low through 1.99	0.21	0.30	*
(2) 2 through 2.49	EMPTY	0.30	*
(3) 2.5 through 3	0.19	0.17	*
<b>Setting</b>			
(1) Hospital	EMPTY	0.28	*
(2) Clinic	0.22	0.29	*
(3) School/Community	EMPTY	0.14	*
(4) Other	0.10	0.12	*
(5) Long Term Facility	EMPTY	0.19	*
(6) University	0.21	0.14	*
(7) Unknown	EMPTY	EMPTY	*
<b>Nursing Theory</b>			
(1) Yes	*	*	*
(2) No	*	*	*
<b>Other/Non Nursing Theory</b>			
(1) Yes	*	0.20	*
(2) No	*	0.15	*
<b>Standard Instrument</b>			
(1) Standard Instrument	*	*	*
(2) Nonstandard	*	*	*



Variables/Clusters	Occupational Expectations	Parental Relationship	Peer Relationship
<hr/> Statistic Used			
(1) Frequency, means, percentage, variance	0.21	0.12	*
(2) Chi-square, Fisher's Exact, McNemar	EMPTY	0.63	*
(3) ANOVA, $\underline{t}$	0.17	0.10	*
(4) ANCOVA	EMPTY	-0.08	*
(5) Multivariate corr, $\underline{r^2}$ , etc.	EMPTY	EMPTY	*
(6) Other	EMPTY	EMPTY	*
<hr/> Observation Type			
(1) Chi-square	0.21	0.26	*
(2) $\underline{Z}$ value	EMPTY	-0.13	*
(3) $\underline{t}$ value	0.17	0.18	*
(4) $\underline{F}$ value	EMPTY	0.05	*
(5) Other	EMPTY	0.19	*

Variables/Clusters	Father Relationship	Sexual Activity	Mother Relationship
Publication Year			
(1) Low Through 1979	*	*	*
(2) 1980 Through 1989	*	*	*
(3) 1990 Through High	*	*	*
Publication Form			
(1) Journal	*	*	*
(2) Dissertation	*	*	*
Journal Type			
(2) Specialty	*	*	*
(3) NA	*	*	*
Source			
(1) CINAHL	*	*	0.00
(2) ERIC	*	*	0.03
(3) MEDLINE	*	*	0.08
(4) PsychLit	*	*	EMPTY
(5) REF List	*	*	0.18
(6) DAI	*	*	0.08
Author			
(1) 1	*	*	0.11
(2) 2	*	*	0.09
(3) 3	*	*	0.10
(4) 4	*	*	0.16
(5) 5	*	*	0.00
Study Field			
(1) Nursing	0.30	*	*
(2) Sociology	0.17	*	*
(3) Medicine	EMPTY	*	*
(4) Psychology	0.09	*	*
(5) Education	0.13	*	*
(6) Public Health	EMPTY	*	*
Research Type			
(1) Independent research	0.09	*	0.13
(2) Funded research	0.16	*	0.10
(3) Dissertation	0.16	*	0.09
(4) Unknown	0.02	*	0.04

Variables/Clusters	Father Relationship	Sexual Activity	Mother Relationship
Funding			
(1) Unknown	*	0.10	*
(2) None	*	0.23	*
(3) Other	*	0.18	*
(4) Federal	*	*	*
(5) Foundation	*	*	*
Design			
(1) Descriptive	*	*	*
(2) Correlational	*	*	*
Sampling Method			
(1) Matched	0.26	*	0.01
(2) Random and matched	0.13	*	EMPTY
(3) Convenience	0.11	*	0.11
Quality of Study			
(1) Low through 1.99	0.43	*	*
(2) 2 through 2.49	0.12	*	*
(3) 2.5 through 3	0.20	*	*
Setting			
(1) Hospital	0.32	*	0.31
(2) Clinic	0.07	*	0.07
(3) School/Community	0.08	*	EMPTY
(4) Other	0.15	*	0.09
(5) Long Term Facility	EMPTY	*	0.02
(6) University	0.08	*	EMPTY
(7) Unknown	EMPTY	*	EMPTY
Nursing Theory			
(1) Yes	*	*	*
(2) No	*	*	*
Other/Non Nursing Theory			
(1) Yes	0.10	*	0.10
(2) No	0.15	*	0.10
Standard Instrument			
(1) Standard Instrument	*	*	*
(2) Nonstandard	*	*	*

Variables/Clusters	Father Relationship	Sexual Activity	Mother Relationship
<hr/> Statistic Used <hr/>			
(1) Frequency, means, percentage, variance	0.10	*	*
(2) Chi-square, Fisher's Exact, McNemar	0.32	*	*
(3) ANOVA, $\underline{t}$	0.12	*	*
(4) ANCOVA	-0.10	*	*
(5) Multivariate corr, $\underline{r^2}$ , etc.	EMPTY	*	*
(6) Other	EMPTY	*	*
<hr/> Observation Type <hr/>			
(1) Chi-square	0.00	*	0.16
(2) $\underline{Z}$ value	-0.56	*	-0.44
(3) $\underline{t}$ value	-0.07	*	0.16
(4) $\underline{F}$ value	0.08	*	-0.01
(5) Other	EMPTY	*	EMPTY

Note. The variables found to be significant at the  $p < 0.05$  level and the magnitude of effect associated with each level of the various demographic characteristics are presented in the table. The variables that were not found to be significant at the  $p < 0.05$  level are indicated with an asterisk; places where no variables were observed are indicated as EMPTY.

Demographic or Sample Characteristics - Moderator Variables.

Study subject demographic characteristics have previously been defined as identifiable attributes of study subjects, such as age, ethnic background, educational level, and socioeconomic class. The thirteen variables considered demographic or study subject sample characteristics included control group sample size, pregnant group sample size, total sample size, control group age, control group ethnicity, control group marital status, control group income, control group educational status, pregnant group age, pregnant group ethnicity, pregnant group marital status, pregnant group income, and pregnant group educational status. As with the study characteristics, no discernible pattern of demographic variables as moderator variables was observed across the 27 clusters analyzed.

The variables found to be significant at the  $p < 0.05$  level and the magnitude of effect associated with each level of the various demographic characteristics are presented in Table 4.11.

TABLE 4.11

Qt/Scheffe Analysis - Demographic Variables -  
Mean  $Z_r$  Associated with Variable Levels.

Variables/Clusters	Academic Performance	Parental Communication	Family Dynamics
CG Sample Size			
(1) Low through 99	*	0.33	0.18
(2) 100 through 299	*	0.06	0.26
(3) 300 through High	*	EMPTY	0.10
PG Sample Size			
(1) Low through 99	*	*	0.16
(2) 100 through 299	*	*	0.21
(3) 300 through High	*	*	EMPTY
Sample Size Total			
(1) Low through 99	*	*	*
(2) 100 through 299	*	*	*
(3) 300 through High	*	*	*
CG Age			
(1) Low through 15.99	*	*	0.25
(2) 16 through High	*	*	0.14
CG Ethnic			
(1) White	0.47	1.09	*
(2) Black	0.03	0.32	*
(3) Other/Unknown	EMPTY	EMPTY	*
(4) Mixed group	0.00	0.03	*
CG Marital Status			
(1) Single/Never Married	*	0.31	0.24
(2) Mixed group	*	0.22	-0.29
(3) Other/Unknown	*	EMPTY	0.17
CG Family Income			
(1) Low	0.01	*	*
(2) Middle	0.25	*	*
(3) Unknown	0.14	*	*
CG Ed Status			
(1) 6th to 9th grade	*	*	*
(2) 10th to 12th Grade	*	*	*
(3) Mixed group	*	*	*

Variables/Clusters	Academic Performance	Parental Communication	Family Dynamics
(4) High School Graduate	*	*	*
(5) Some College/Technical	*	*	*
PG Age			
(1) Low through 15.99	*	*	*
(2) 16 through High	*	*	*
PG Ethnic			
(1) White	0.52	1.09	*
(2) Black	0.03	0.32	*
(3) Other/Unknown	EMPTY	EMPTY	*
(4) Mixed group	0.03	0.03	*
PG Marital Status			
(1) Single/Never Married	*	0.31	*
(2) Mixed group	*	0.22	*
(3) Other	*	EMPTY	*
PG Family Income			
(1) Low	0.01	*	*
(2) Middle	0.25	*	*
(3) Unknown	0.14	*	*
PG Ed Status			
(1) 6th to 9th grade	*	0.21	0.05
(2) 10th to 12th Grade	*	0.51	0.27
(3) Mixed group	*	0.17	0.14
(4) High School Graduate	*	EMPTY	EMPTY
(5) Some College/Technical	*	EMPTY	EMPTY

Variables/Clusters	Religious Activity	Contraception Use	Father In Home
CG Sample Size			
(1) Low through 99	0.19	0.13	*
(2) 100 through 299	0.14	0.11	*
(3) 300 through High	0.09	EMPTY	*
PG Sample Size			
(1) Low through 99	0.17	0.11	-0.03
(2) 100 through 299	0.17	0.17	-0.23
(3) 300 through High	EMPTY	EMPTY	EMPTY
Sample Size Total			
(1) Low through 99	*	*	*
(2) 100 through 299	*	*	*
(3) 300 through High	*	*	*
CG Age			
(1) Low through 15.99	*	0.27	*
(2) 16 through High	*	0.03	*
CG Ethnic			
(1) White	EMPTY	*	*
(2) Black	0.35	*	*
(3) Other/Unknown	0.17	*	*
(4) Mixed group	0.11	*	*
CG Marital Status			
(1) Single/Never Married	*	0.26	-0.11
(2) Mixed group	*	0.66	-0.29
(3) Other/Unknown	*	-0.61	0.56
CG Family Income			
(1) Low	*	*	-0.98
(2) Middle	*	*	0.00
(3) Unknown	*	*	0.11
CG Ed Status			
(1) 6th to 9th grade	*	0.31	-0.20
(2) 10th to 12th Grade	*	0.22	0.00
(3) Mixed group	*	-0.15	-0.02
(4) High School Graduate	*	EMPTY	EMPTY
(5) Some College/Technical	*	EMPTY	EMPTY



Variables/Clusters	Religious Activity	Contraception Use	Father In Home
PG Age			
(1) Low through 15.99	*	0.22	*
(2) 16 through High	*	0.10	*
PG Ethnic			
(1) White	EMPTY	*	*
(2) Black	0.35	*	*
(3) Other/Unknown	0.17	*	*
(4) Mixed group	0.11	*	*
PG Marital Status			
(1) Single/Never Married	*	0.26	-0.11
(2) Mixed group	*	0.66	-0.29
(3) Other	*	-0.61	0.56
PG Family Income			
(1) Low	*	*	-0.98
(2) Middle	*	*	0.00
(3) Unknown	*	*	0.11
PG Ed Status			
(1) 6th to 9th grade	*	0.51	-0.13
(2) 10th to 12th Grade	*	0.20	0.00
(3) Mixed group	*	-0.15	-0.02
(4) High School Graduate	*	EMPTY	EMPTY
(5) Some College/Technical	*	EMPTY	EMPTY

Variables/Clusters	Dating Relationship	Social Responsibility	Self- Esteem
CG Sample Size			
(1) Low through 99	*	0.13	0.20
(2) 100 through 299	*	0.34	0.10
(3) 300 through High	*	EMPTY	0.04
PG Sample Size			
(1) Low through 99	-0.11	*	0.20
(2) 100 through 299	0.19	*	0.06
(3) 300 through High	EMPTY	*	EMPTY
Sample Size Total			
(1) Low through 99	*	*	0.19
(2) 100 through 299	*	*	0.21
(3) 300 through High	*	*	0.03
CG Age			
(1) Low through 15.99	*	*	0.12
(2) 16 through High	*	*	0.20
CG Ethnicity			
(1) White	*	0.56	0.51
(2) Black	*	0.13	0.25
(3) Other/Unknown	*	EMPTY	0.47
(4) Mixed group	*	0.09	0.08
CG Marital Status			
(1) Single/Never Married	0.02	*	0.19
(2) Mixed group	-0.43	*	0.22
(3) Other/Unknown	-0.51	*	0.04
CG Family Income			
(1) Low	*	*	0.11
(2) Middle	*	*	0.44
(3) Unknown	*	*	0.18
CG Ed Status			
(1) 6th to 9th grade	-0.24	*	*
(2) 10th to 12th Grade	0.14	*	*
(3) Mixed group	-0.26	*	*
(4) High School Graduate	EMPTY	*	*
(5) Some College/Technical	EMPTY	*	*

Variables/Clusters	Dating Relationship	Social Responsibility	Self- Esteem
PG Age			
(1) Low through 15.99	*	*	0.12
(2) 16 through High	*	*	0.19
PG Ethnicity			
(1) White	-0.13	*	0.51
(2) Black	-0.39	*	0.25
(3) Other/Unknown	EMPTY	*	0.47
(4) Mixed group	-0.02	*	0.08
PG Marital Status			
(1) Single/Never Married	*	*	0.19
(2) Mixed group	*	*	0.22
(3) Other	*	*	0.04
PG Family Income			
(1) Low	*	*	0.11
(2) Middle	*	*	0.44
(3) Unknown	*	*	0.18
PG Ed Status			
(1) 6th to 9th grade	*	*	0.07
(2) 10th to 12th Grade	*	*	0.21
(3) Mixed group	*	*	0.15
(4) High School Graduate	*	*	EMPTY
(5) Some College/Technical	*	*	EMPTY

Variables/Clusters	Dependency	Educational Expectations	Ego Strength
CG Sample Size			
(1) Low through 99	0.18	*	*
(2) 100 through 299	EMPTY	*	*
(3) 300 through High	0.07	*	*
PG Sample Size			
(1) Low through 99	*	*	0.07
(2) 100 through 299	*	*	0.07
(3) 300 through High	*	*	EMPTY
Sample Size Total			
(1) Low through 99	0.18	-0.16	*
(2) 100 through 299	EMPTY	0.34	*
(3) 300 through High	0.07	0.13	*
CG Age			
(1) Low through 15.99	0.02	0.24	*
(2) 16 through High	0.19	0.17	*
CG Ethnicity			
(1) White	0.05	*	*
(2) Black	EMPTY	*	*
(3) Other/Unknown	0.02	*	*
(4) Mixed group	0.47	*	*
CG Marital Status			
(1) Single/Never Married	0.18	0.16	*
(2) Mixed group	EMPTY	EMPTY	*
(3) Other/Unknown	0.07	0.36	*
CG Family Income			
(1) Low	0.18	*	*
(2) Middle	0.05	*	*
(3) Unknown	EMPTY	*	*
CG Ed Status			
(1) 6th to 9th grade	*	*	*
(2) 10th to 12th Grade	*	*	*
(3) Mixed group	*	*	*
(4) High School Graduate	*	*	*
(5) Some College/Technical	*	*	*

Variables/Clusters	Dependency	Educational Expectations	Ego Strength
PG Age			
(1) Low through 15.99	*	*	*
(2) 16 through High	*	*	*
PG Ethnicity			
(1) White	0.05	*	*
(2) Black	EMPTY	*	*
(3) Other/Unknown	EMPTY	*	*
(4) Mixed group	0.18	*	*
PG Marital Status			
(1) Single/Never Married	0.18	0.10	0.11
(2) Mixed group	EMPTY	0.58	0.03
(3) Other	0.07	0.36	-0.04
PG Family Income			
(1) Low	0.18	*	*
(2) Middle	0.05	*	*
(3) Unknown	EMPTY	*	*
PG Ed Status			
(1) 6th to 9th grade	*	*	0.17
(2) 10th to 12th Grade	*	*	0.09
(3) Mixed group	*	*	-0.05
(4) High School Graduate	*	*	0.23
(5) Some College/Technical	*	*	EMPTY

Variables/Clusters	Family Dynamics	Future Orientation	School Grades
CG Sample Size			
(1) Low through 99	0.10	-0.03	0.32
(2) 100 through 299	0.00	0.33	0.04
(3) 300 through High	0.08	0.09	EMPTY
PG Sample Size			
(1) Low through 99	0.08	0.00	*
(2) 100 through 299	0.02	0.32	*
(3) 300 through High	EMPTY	EMPTY	*
Sample Size Total			
(1) Low through 99	*	-0.33	*
(2) 100 through 299	*	0.23	*
(3) 300 through High	*	0.08	*
CG Age			
(1) Low through 15.99	0.07	0.19	*
(2) 16 through High	0.08	0.06	*
CG Ethnicity			
(1) White	0.27	0.17	*
(2) Black	0.17	0.20	*
(3) Other/Unknown	EMPTY	EMPTY	*
(4) Mixed group	0.01	0.04	*
CG Marital Status			
(1) Single/Never Married	0.13	0.19	0.32
(2) Mixed group	-0.11	0.04	EMPTY
(3) Other/Unknown	-0.04	-0.44	0.04
CG Family Income			
(1) Low	0.01	-0.01	*
(2) Middle	0.23	0.22	*
(3) Unknown	0.02	0.17	*
CG Ed Status			
(1) 6th to 9th grade	*	0.18	*
(2) 10th to 12th Grade	*	0.18	*
(3) Mixed group	*	-0.13	*
(4) High School Graduate	*	EMPTY	*
(5) Some College/Technical	*	EMPTY	*

Variables/Clusters	Family Dynamics	Future Orientation	School Grades
PG Age			
(1) Low through 15.99	-0.01	0.21	*
(2) 16 through High	0.10	0.06	*
PG Ethnicity			
(1) White	0.27	0.19	0.19
(2) Black	0.17	0.20	0.04
(3) Other/Unknown	EMPTY	EMPTY	EMPTY
(4) Mixed group	0.01	0.05	0.34
PG Marital Status			
(1) Single/Never Married	0.14	0.16	0.30
(2) Mixed group	-0.11	0.24	0.43
(3) Other	-0.04	-0.44	0.04
PG Family Income			
(1) Low	0.03	-0.01	*
(2) Middle	0.20	0.22	*
(3) Unknown	0.02	0.17	*
PG Ed Status			
(1) 6th to 9th grade	*	0.20	*
(2) 10th to 12th Grade	*	0.18	*
(3) Mixed group	*	-0.07	*
(4) High School Graduate	*	EMPTY	*
(5) Some College/Technical	*	EMPTY	*

Variables/Clusters	Living Arrangements	Self- Concept	Sibling Relationship
CG Sample Size			
(1) Low through 99	-0.03	0.21	*
(2) 100 through 299	0.17	0.08	*
(3) 300 through High	0.01	0.03	*
PG Sample Size			
(1) Low through 99	0.00	0.18	0.11
(2) 100 through 299	0.20	0.16	0.07
(3) 300 through High	EMPTY	*	EMPTY
Sample Size Total			
(1) Low through 99	-0.14	0.18	0.13
(2) 100 through 299	0.08	0.19	0.07
(3) 300 through High	-0.03	0.14	0.10
CG Age			
(1) Low through 15.99	0.10	0.12	*
(2) 16 through High	-0.03	0.20	*
CG Ethnicity			
(1) White	-0.05	0.45	*
(2) Black	0.14	0.21	*
(3) Other/Unknown	EMPTY	0.31	*
(4) Mixed group	0.01	0.08	*
CG Marital Status			
(1) Single/Never Married	0.09	0.19	*
(2) Mixed group	0.16	0.17	*
(3) Other/Unknown	-0.47	0.12	*
CG Family Income			
(1) Low	-0.03	0.12	0.11
(2) Middle	0.10	0.35	0.11
(3) Unknown	0.12	0.21	0.11
CG Ed Status			
(1) 6th to 9th grade	-0.16	0.12	*
(2) 10th to 12th Grade	0.12	0.14	*
(3) Mixed group	-0.08	0.13	*
(4) High School Graduate	EMPTY	1.47	*
(5) Some College/Technical	EMPTY	EMPTY	*



Variables/Clusters	Living Arrangements	Self- Concept	Sibling Relationship
PG Age			
(1) Low through 15.99	0.05	0.09	0.04
(2) 16 through High	0.01	0.20	0.12
PG Ethnicity			
(1) White	-0.05	0.45	*
(2) Black	0.14	0.21	*
(3) Other/Unknown	EMPTY	EMPTY	*
(4) Mixed group	0.01	0.11	*
PG Marital Status			
(1) Single/Never Married	0.09	0.18	*
(2) Mixed group	0.16	0.24	*
(3) Other	-0.47	0.12	*
PG Family Income			
(1) Low	-0.03	0.11	*
(2) Middle	0.10	0.35	*
(3) Unknown	0.12	0.21	*
PG Ed Status			
(1) 6th to 9th grade	-0.16	0.11	0.00
(2) 10th to 12th Grade	0.12	0.21	0.09
(3) Mixed group	-0.08	0.16	0.18
(4) High School Graduate	EMPTY	EMPTY	EMPTY
(5) Some College/Technical	EMPTY	EMPTY	EMPTY

Variables/Clusters	Locus of Control	Role Identity	Menstruation Onset
CG Sample Size			
(1) Low through 99	*	*	0.02
(2) 100 through 299	*	*	0.06
(3) 300 through High	*	*	EMPTY
PG Sample Size			
(1) Low through 99	*	*	0.02
(2) 100 through 299	*	*	0.06
(3) 300 through High	*	*	EMPTY
Sample Size Total			
(1) Low through 99	0.05	*	*
(2) 100 through 299	0.02	*	*
(3) 300 through High	EMPTY	*	*
CG Age			
(1) Low through 15.99	0.00	*	*
(2) 16 through High	0.06	*	*
CG Ethnicity			
(1) White	-0.04	*	*
(2) Black	-0.09	*	*
(3) Other/Unknown	EMPTY	*	*
(4) Mixed group	0.07	*	*
CG Marital Status			
(1) Single/Never Married	*	*	0.06
(2) Mixed group	*	*	EMPTY
(3) Other/Unknown	*	*	0.06
CG Family Income			
(1) Low	*	*	*
(2) Middle	*	*	*
(3) Unknown	*	*	*
CG Ed Status			
(1) 6th to 9th grade	*	*	*
(2) 10th to 12th Grade	*	*	*
(3) Mixed group	*	*	*
(4) High School Graduate	*	*	*
(5) Some College/Technical	*	*	*

Variables/Clusters	Locus of Control	Role Identity	Menstruation Onset
PG Age			
(1) Low through 15.99	0.05	0.08	*
(2) 16 through High	0.03	0.69	*
PG Ethnicity			
(1) White	-0.04	*	*
(2) Black	-0.09	*	*
(3) Other/Unknown	EMPTY	*	*
(4) Mixed group	0.07	*	*
PG Marital Status			
(1) Single/Never Married	*	*	0.06
(2) Mixed group	*	*	EMPTY
(3) Other	*	*	0.06
PG Family Income			
(1) Low	*	*	*
(2) Middle	*	*	*
(3) Unknown	*	*	*
PG Ed Status			
(1) 6th to 9th grade	*	*	*
(2) 10th to 12th Grade	*	*	*
(3) Mixed group	*	*	*
(4) High School Graduate	*	*	*
(5) Some College/Technical	*	*	*

Variables/Clusters	Occupational Expectations	Parental Relationship	Peer Relationship
CG Sample Size			
(1) Low through 99	*	0.20	*
(2) 100 through 299	*	0.15	*
(3) 300 through High	*	0.19	*
PG Sample Size			
(1) Low through 99	0.14	0.18	*
(2) 100 through 299	0.51	0.20	*
(3) 300 through High	EMPTY	EMPTY	*
Sample Size Total			
(1) Low through 99	*	0.13	*
(2) 100 through 299	*	0.31	*
(3) 300 through High	*	0.20	*
CG Age			
(1) Low through 15.99	0.21	0.15	*
(2) 16 through High	0.20	0.20	*
CG Ethnicity			
(1) White	*	0.44	*
(2) Black	*	0.24	*
(3) Other/Unknown	*	EMPTY	*
(4) Mixed group	*	0.11	*
CG Marital Status			
(1) Single/Never Married	*	0.21	*
(2) Mixed group	*	0.28	*
(3) Other/Unknown	*	-0.12	*
CG Family Income			
(1) Low	0.20	0.12	*
(2) Middle	0.21	0.29	*
(3) Unknown	*	0.18	*
CG Ed Status			
(1) 6th to 9th grade	*	0.19	*
(2) 10th to 12th Grade	*	0.10	*
(3) Mixed group	*	0.11	*
(4) High School Graduate	*	EMPTY	*
(5) Some College/Technical	*	EMPTY	*

Variables/Clusters	Occupational Expectations	Parental Relationship	Peer Relationship
PG Age			
(1) Low through 15.99	0.19	0.16	*
(2) 16 through High	0.20	0.19	*
PG Ethnicity			
(1) White	*	0.44	*
(2) Black	*	0.24	*
(3) Other/Unknown	*	EMPTY	*
(4) Mixed group	*	0.11	*
PG Marital Status			
(1) Single/Never Married	0.14	0.21	0.26
(2) Mixed group	0.51	0.28	0.12
(3) Other	EMPTY	-0.12	0.40
PG Family Income			
(1) Low	0.20	0.12	*
(2) Middle	0.21	0.29	*
(3) Unknown	EMPTY	0.18	*
PG Ed Status			
(1) 6th to 9th grade	*	0.17	*
(2) 10th to 12th Grade	*	0.24	*
(3) Mixed group	*	0.11	*
(4) High School Graduate	*	EMPTY	*
(5) Some College/Technical	*	EMPTY	*

Variables/Clusters	Father Relationship	Sexual Activity	Mother Relationship
<hr/>			
CG Sample Size			
(1) Low through 99	0.11	*	*
(2) 100 through 299	0.17	*	*
(3) 300 through High	EMPTY	*	*
PG Sample Size			
(1) Low through 99	0.11	0.14	0.09
(2) 100 through 299	0.23	0.06	0.18
(3) 300 through High	EMPTY	EMPTY	EMPTY
Sample Size Total			
(1) Low through 99	0.08	*	0.06
(2) 100 through 299	0.22	*	0.13
(3) 300 through High	0.08	*	0.10
CG Age			
(1) Low through 15.99	0.16	*	0.13
(2) 16 through High	0.08	*	0.09
CG Ethnicity			
(1) White	0.18	*	*
(2) Black	0.26	*	*
(3) Other/Unknown	EMPTY	*	*
(4) Mixed group	0.08	*	*
CG Marital Status			
(1) Single/Never Married	0.14	0.17	0.12
(2) Mixed group	0.32	0.00	0.31
(3) Other/Unknown	-0.24	*	-0.24
CG Family Income			
(1) Low	*	*	*
(2) Middle	*	*	*
(3) Unknown	*	*	*
CG Ed Status			
(1) 6th to 9th grade	*	*	*
(2) 10th to 12th Grade	*	*	*
(3) Mixed group	*	*	*
(4) High School Graduate	*	*	*
(5) Some College/Technical	*	*	*

Variables/Clusters	Father Relationship	Sexual Activity	Mother Relationship
PG Age			
(1) Low through 15.99	0.18	*	0.15
(2) 16 through High	0.09	*	0.09
PG Ethnicity			
(1) White	0.18	*	*
(2) Black	0.26	*	*
(3) Other/Unknown	EMPTY	*	*
(4) Mixed group	0.08	*	*
PG Marital Status			
(1) Single/Never Married	0.14	*	0.12
(2) Mixed group	0.32	*	0.31
(3) Other	-0.24	*	-0.24
PG Family Income			
(1) Low	*	*	*
(2) Middle	*	*	*
(3) Unknown	*	*	*
PG Ed Status			
(1) 6th to 9th grade	*	*	*
(2) 10th to 12th Grade	*	*	*
(3) Mixed group	*	*	*
(4) High School Graduate	*	*	*
(5) Some College/Technical	*	*	*

Note. The variables found to be significant at the  $p < 0.05$  level and the magnitude of effect associated with each level of the various demographic characteristics are presented in the table. The variables that were not found to be significant at the  $p < 0.05$  level are indicated with an asterisk; places where no variables were observed are indicated as EMPTY.

### Summary of Findings

In summary, 68 studies which address various psychosocial aspects of adolescent pregnancy were selected for inclusion in this study. These 68 studies represent 12,106 subjects, i.e., 8,225 subjects in nonpregnant control groups and 3,881 pregnant teens. The mean subject age is around 16.5 years and no statistical difference for age between groups was found.

Variables from the 68 studies were categorized into 31 clusters; there is an average of 15 studies and 2,509 subjects in a cluster. Each cluster was subjected to an extensive analysis the first steps included determination of an effect size ( $z_r$ ). The resulting weighted effect sizes ranged from a low of  $z_r = 0.01$  exhibited by the Peer Relationship cluster analysis to a high of  $z_r = 0.45$  indicating an identification with traditional female roles in the Role Identity cluster analysis.

Methods (95% Confidence Interval, Stouffer Analysis, Fail-safe  $N$  ( $N_{fs}$ ), BESD analysis,  $Q$  statistic and Homogeneity analysis) were applied to the effect sizes to determine a level of confidence in the results. These methods suggest that in thirteen clusters (Anxiety, Parental Communication, Father in Home, Dating Relationship, Dependency, Depression, Ego Strength, Sexual Knowledge,



Locus of Control, Menstruation Onset, Peer Relationship, Pregnant Role Model, and Mother Relationship) the null hypothesis that there is no difference between pregnant and nonpregnant adolescent groups relative to the given cluster variable may not be rejected. In the remaining eighteen clusters (Academic Performance, Parenting Beliefs, Religious Activity, Contraception Use, Educational Expectations, Family Dynamics, Future Orientation, School Grades, Living Arrangements, Role Identity, Occupational Expectations, Parental Relationship, Father Relationship, Sexual Activity, Sibling Relationship, Self-Concept, Self-Esteem, and Social Responsibility) the results suggest the null hypothesis may be rejected indicating a significant difference was observed between pregnant and nonpregnant adolescent groups relative to the given cluster variable.

Moderator analysis using ANOVA and post-hoc statistics or Qt analysis revealed that each cluster had at least one variable acts as a moderator. All variables considered, except Nursing Theory and Standard Instrument, act as a moderator in one or more clusters. No pattern of variables was discovered to act as moderators, i.e., where it was found to act as a moderator the effect size associated with participant (pregnant or nonpregnant) age was not consistent nor did it increase or decrease across the clusters.

Additionally, no grouping of clusters were found to have similar moderators, i.e., the relationship clusters did not consistently exhibit family income, ethnicity, or educational status of study participants as moderators. Further discussion of moderators and the implications are included in the following chapter.

## Chapter 5

### SUMMARY OF THE STUDY

In determining what can be said with confidence about adolescent pregnancy this study focused on the psychosocial factors that influence adolescent pregnancy expressed in studies presented in the scientific literature.

Determination of psychosocial factors influence on adolescent pregnancy was accomplished through meta-analysis and the comparison of effect size in research studies (published and unpublished) performed in the United States from 1964 through 1994. Study subject demographic characteristics and study attributes were likewise analyzed to determine if they had a moderating effect on the magnitude of the relationship between adolescent pregnancy and the psychosocial factors presented in studies.

The broad study question was: In research from 1964 through 1994, what are the relative effect sizes of psychosocial factors influencing adolescent pregnancy, and do study subject demographic attributes or study characteristics moderate these effects? This study question was operationalized and meta-analysis techniques were applied to answer the following three questions:

1. What is the magnitude of the effect sizes of psychosocial factors associated with adolescent pregnancy?
2. Which study characteristics function as moderator variables to the observed psychosocial variable effect sizes?
3. Which study subject demographic characteristics function as moderator variables to the observed psychosocial variable effect sizes?

The integrative research review which responded to the study questions included 68 studies which met study inclusion criteria. The 68 studies represented 12,106 subjects including 3,881 pregnant teens. Based on a broad literature review commonly occurring conceptually, similar dependent variables found in the 68 studies were grouped into 31 clusters. Each cluster of variables was subjected to a comprehensive analysis using a variety of meta-analytic techniques. The techniques applied to each cluster included determination of frequency, mean and standard deviation of study and sample characteristics, Weighted Effect Size ( $\underline{z_r}$ ), 95% Confidence Interval, Stouffer Analysis, Fail-safe  $\underline{N}$  ( $\underline{N_{fs}}$ ), BESD analysis,  $\underline{Q}$  statistic and Homogeneity analysis, and moderator analysis using ANOVA and post-hoc statistics or  $\underline{Q_t}$  analysis.

To address the first research question and to provide a degree of assurance in the answer, sample size Weighted Effect Sizes, 95% Confidence Interval, Stouffer Analysis, Fail-safe  $N$ , and  $Q$  statistic and Homogeneity were determined. Weighted Effect Sizes provided a determination of the magnitude of the effect sizes of psychosocial factors associated with adolescent pregnancy. The other indicators provided a measure of confidence in the Weighted Effect Sizes. Weighted Effect Sizes ranged from a low of  $z_r = 0.01$  exhibited by relationship with peers as indicated by the Peer Relationship cluster analysis to a high of  $z_r = 0.45$  indicating an identification with traditional female roles in the Role Identity cluster analysis.

When considered with the Weighted Effect Sizes, the binomial effect size display (BESD) was used to illustrate the practical importance of the correlation coefficient (see Table 4.6) and as a means of interpreting the data. The BESD provides a ratio per 100 incidence of occurrence of the variable under consideration similar to a percentage. For example, when interpreted using the BESD the Academic Performance cluster effect size of  $z_r = 0.11$  indicates a greater incidence of academic performance for the Control Group 56/100 as compared with the Pregnant Group at 45/100.

The BESD was only considered a means of illustrating the observed relationships. Conclusions drawn from the illustration were used with consideration of the methods limitations.

The remaining four methods, 95% Confidence Interval, Stouffer Analysis, Fail-safe  $N$  ( $N_{fs}$ ),  $Q$  statistic and Homogeneity analysis have implications for hypothesis testing. The null hypothesis could not be rejected for five clusters (Dating Relationship, Ego Strength, Locus of Control, Menstruation Onset, and Peer Relationship) based on the 95%CI results. The Stouffer method confirmed the results for these five clusters and could not reject the null hypothesis for four additional clusters (Anxiety, Parental Communication, Dependency, and Sexual Knowledge). The Fail-safe  $N$  criteria supported the retention of the null hypothesis for all but one previously cited cluster (Dependency) and supported rejection of the null hypothesis and further investigation of three additional clusters (Father in Home, Pregnant Role Model, and Mother Relationship). Homogeneity analysis, the most stringent criteria applied to the analysis of the clusters, indicated that the variance in effect sizes found in three previously cited clusters (Anxiety, Sexual Knowledge, and Pregnant Role

Model) and one additional cluster (Depression) were not significantly different from that expected by sampling error. The four clusters that failed homogeneity analysis were not analyzed further. Table 5.1 summarizes hypothesis testing results.

TABLE 5.1

Variable Cluster and Null Hypothesis Results by Applied  
Meta-Analytic Technique.

Cluster	95%CI	<u>Z<sub>st</sub></u>	<u>N<sub>fs</sub></u>	HA/ <u>Q<sub>t</sub></u>	BESD
Academic Performance					Control
Anxiety		NR	NR	NR	Pregnant
Parental Communication		NR	NR		Control
Parenting Beliefs					Pregnant
Religious Activity					Control
Contraception Use					Control
Father in Home			NR		Control
Dating Relationship	NR	NR	NR		Pregnant
Dependency		NR			Pregnant
Depression				NR	Pregnant
Educational Expectations					Control
Ego Strength	NR	NR	NR		Control
Family Dynamics					Control
Future Orientation					Control
School Grades					Control
Sexual Knowledge		NR	NR	NR	Control
Living Arrangements					Control
Locus of Control	NR	NR	NR		Control
Role Identity					Pregnant
Menstruation Onset	NR	NR	NR		Pregnant
Occupational Expectations					Control



Cluster	95%CI	<u>Z<sub>st</sub></u>	<u>N<sub>fs</sub></u>	HA/ <u>Q<sub>t</sub></u>	BESD
Parental Relationship					Control
Peer Relationship	NR	NR	NR		Control
Pregnant Role Model			NR	NR	Pregnant
Father Relationship					Control
Mother Relationship			NR		Control
Sexual Activity					Pregnant
Sibling Relationship					Control
Self-Concept					Control
Self-Esteem					Control
Social Responsibility					Control

Note. NR indicates the Null Hypothesis was not rejected for the variable using the technique indicated by the column. In the BESD column, Control and Pregnant indicates support for the Control Group or Pregnant Group, respectively, by the BESD technique.

The following two examples provide a perspective or reference for interpreting the results of the various meta-analyses. The cluster of variables labeled anxiety (Anxiety) represent a meta-analysis of 8 studies, 15 variables, 352 control subjects, 412 pregnant subjects and 764 total subjects. Anxiety has a weighted effect size  $\underline{z_r} = 0.12$ , with standard deviation of 0.123,  $\underline{z_{st}} = 0.85$  and  $\underline{z_{st}} p < .021$ . The Anxiety meta-analysis failed Stouffer, Fail-safe  $\underline{N}$ , and homogeneity analysis. Because the cluster failed homogeneity analysis no further testing was performed.

The cluster of variables labeled school grades (School Grades) represent a meta-analysis of 8 studies, 10 variables (all expressed as GPA), 476 control subjects, 542 pregnant subjects and 1018 total subjects. School Grades has a weighted effect size  $\underline{z_r} = 0.24$ , with standard deviation of 0.13,  $\underline{z_{st}} = 5.0$  and  $\underline{z_{st}} p < .004$ . The School Grades meta-analysis successfully navigated hypothesis testing and supported rejection of the null hypothesis that there is no difference between pregnant and nonpregnant adolescent groups. School Grades results favor the control group, indicating that control group members are more likely to exhibit better school grades than pregnant group members.

### Summary

In summary, in eighteen clusters (Academic Performance, Parenting Beliefs, Religious Activity, Contraception Use, Educational Expectations, Family Dynamics, Future Orientation, School Grades, Living Arrangements, Role Identity, Occupational Expectations, Parental Relationship, Father Relationship, Sexual Activity, Sibling Relationship, Self-Concept, Self-Esteem, and Social Responsibility) the null hypothesis was rejected indicating a significant difference was observed between pregnant and nonpregnant adolescent groups relative to the given cluster variable. There is no significant difference between pregnant and nonpregnant adolescents in thirteen clusters: Anxiety, Parental Communication, Father in Home, Dating Relationship, Dependency, Depression, Ego Strength, Sexual Knowledge, Locus of Control, Menstruation Onset, Peer Relationship, Pregnant Role Model, and Mother Relationship. Rejection of the null hypothesis provides a measure of confidence in the results; therefore, the first research question can be answered. The magnitude of the effect sizes of psychosocial factors associated with adolescent pregnancy are: Academic Performance,  $\underline{z}_r = 0.11$ ; Parenting Beliefs,  $\underline{z}_r = 0.15$ ; Religious Activity,  $\underline{z}_r = 0.12$ ; Contraception Use,  $\underline{z}_r = 0.16$ ;

Educational Expectations,  $\underline{z_r} = 0.21$ ; Family Dynamics,  $\underline{z_r} = 0.07$ ; Future Orientation,  $\underline{z_r} = 0.15$ ; School Grades,  $\underline{z_r} = 0.24$ ; Living Arrangements,  $\underline{z_r} = 0.09$ ; Role Identity,  $\underline{z_r} = 0.45$ ; Occupational Expectations,  $\underline{z_r} = 0.18$ ; Parental Relationship,  $\underline{z_r} = 0.14$ ; Father Relationship,  $\underline{z_r} = 0.13$ ; Sexual Activity,  $\underline{z_r} = 0.14$ ; Sibling Relationship,  $\underline{z_r} = 0.10$ ; Self-Concept,  $\underline{z_r} = 0.12$ ; Self-Esteem,  $\underline{z_r} = 0.11$ ; and Social Responsibility,  $\underline{z_r} = 0.09$ .

Moderator Analysis. Using meta-analytic techniques, variable clusters were analyzed to answer the research questions:

Which study characteristics function as moderator variables to the observed psychosocial variable effect sizes? and,

Which study subject demographic characteristics function as moderator variables to the observed psychosocial variable effect sizes?

The twenty seven clusters that underwent meta-analysis were tested for moderator variables. The clusters which failed homogeneity analysis and failed to reject the null hypothesis (i.e., Anxiety, Sexual Knowledge, Depression, and Pregnant Role Model) were not analyzed further. During the

meta-analysis of each cluster, seventeen study characteristics and thirteen study subject demographic variables were analyzed as potential moderator variables. Moderator variables are "variables that are associated with effect magnitude" (Cooper and Hedges, 1994, p. 24). It is important to note that in this context moderator variables may be but are not considered intervening, extraneous or confounding variables.

ANOVA and the post-hoc Cochran's  $Q$  statistic were used to determine if effect sizes for study characteristics or demographic variables were homogenous. When effect sizes associated with a study characteristic or demographic variable were found to be homogeneous, ANOVA and the post-hoc Scheffe procedure were employed for assessment of the levels of the variable as a potential source of variance. When effect sizes associated with a study characteristic or demographic variable were found to be heterogeneous, the assumptions associated with ANOVA could not be met. Therefore,  $Q_t$  analysis was used to assess the levels of the study characteristics or demographic variables as sources of variance.

Study characteristics were previously defined as identifiable attributes of a study, such as setting,

reliability and validity information, quality, and theoretical approach. The seventeen variables analyzed as study characteristics include: publication year, publication form, journal type, source, number of authors, study form, research type, funding, design, sampling method, quality of study, setting, nursing theory, non-nursing theory, standard instrument, statistic used, and observation type.

The results of the analysis of levels of the variable publication year was typical of an assessment of study characteristics as moderators. Publication year was found to act as a moderator in 14 clusters reviewed. Publication year was subsequently analyzed using three sub-categories: 1964 through 1979, 1980 through 1989, and 1990 through 1994. When one or more of these sub-categories of the variable were found to be significantly different from the others the sub-category was determined to be a moderator. Though highest effect does not imply a sub-category as a moderator, it is helpful to consider which sub-category of the variable has the higher effect size. Consideration of higher effect size is only one approach to interpretation of the results. Higher effect sizes can be observed in the early years, 1964 through 1979, for the clusters Academic Performance, Dependency, Role Identity, and Occupational Expectations; in

the middle years, 1980 through 1989, for the clusters Locus of Control, Menstruation Onset, and Social Responsibility; and in recent years, 1990 through 1994, for clusters Parental Communication, Future Orientation, Living Arrangements, Parental Relationship, Peer Relationship, Self-Concept, and Self-Esteem. Higher effect sizes represent a greater magnitude of the variable represented by the cluster; this means the researcher found the variable to have a stronger effect on being pregnant or not pregnant, during the time period specified.

Interpretation of results of the cluster variables relationship with publication year must be considered in light of history, values, and social events of the time period under consideration. As an example, consider the higher effect sizes in the early years for the clusters Academic Performance, Dependency, Role Identity, and Occupational Expectations which may reflect the values of the late 1960s and the decade of the 1970s. Though this period is considered a time of social change and upheaval, it was rooted in core values of earlier years such as traditional female roles, female dependency, academic performance and a confident occupational outlook. These core family values are reflected by the adolescent research

subjects and through the observed variables within the clusters resulting in higher magnitude of effects.

For further interpretation of the differences in effect size relative to publication year and cluster variable, it may be of value to reanalyze publication year in smaller groupings of years, possibly down to the individual year. Variations in effect may reflect changes in social policy, social values, economic conditions, or shifts in family life (such as the rise of two income families). A social scientist or historian may be able to provide other theoretical explanations or implications for variations in effect over the years.

Sub-category analysis of publication form and journal type were also typical examples of moderator analysis. Publication form and journal type were found to act as a moderator in 11 of the meta-analyses. Publication form sub-category "journal" and journal type sub-category "specialty" were found to have higher effect sizes in 9 of the analyses (Academic Performance, Parental Communication, Dependency, Future Orientation, Living Arrangements, Parental Relationship, Self-Concept, and Self-Esteem). These topics are commonly presented in the literature and represent topics the general public believe to influence adolescent



pregnancy. Their frequency in the literature is not surprising and may represent a predilection to research and published topics of scientific as well as public interest; popularity of these topics may also contribute to the publication of "significant results." Publication form subcategory "dissertation" was significantly higher than "journal" in only two clusters beliefs about parenting (Parenting Beliefs) and social acceptance (Social Responsibility). The variables included in these two meta-analyses frequently tended to be of more academic rather than popular interest. Other implications of this result are not readily apparent and are left to future research.

Study subject demographic characteristics have previously been defined as identifiable attributes such as age, ethnic background, educational level, and socioeconomic class. The thirteen variables analyzed as demographic or study subject sample characteristics include: control group sample size, pregnant group sample size, total sample size, control group age, control group ethnic, control group marital status, control group income, control group educational status, pregnant group age, pregnant group ethnic, pregnant group marital status, pregnant group income, and pregnant group educational status. The

moderating effects of demographic or study subject sample characteristics may be different for each meta-analysis and should be considered carefully and in light of current theories of adolescent behavior. Adolescent age and ethnicity are good examples.

Adolescent age as considered in the comparison group age and pregnant group age variables were analyzed for each using cluster on two sub-categories: Low through 15.99 (years) and 16 (years) through High. Comparison group age was found to function as a moderator in 14 clusters, while pregnant group age was a moderator in 13 clusters. Analysis of the sub-categories of comparison group age for the highest effect size found that the Low through 15.99 (years) category occurred 8 times and the 16 (years) through High sub-category occurred 6 times. Analysis of the sub-categories of pregnant group age for the highest effect size found that the Low through 15.99 (years) sub-category occurred 6 times and the 16 (years) through High sub-category occurred 7 times. The implications of these results are unclear; however, when analyzed or compared for a particular meta-analysis more specific conclusions may be drawn.

If the moderating effects of age are considered for a specific meta-analysis with consideration of theories of adolescent behavior, more certain conclusions may be drawn. Comparison group age was found to be a moderator for the Parenting Beliefs cluster; however, pregnant group age was not found to be a moderator. The Low through 15.99 (years) sub-category had an effect size of  $\underline{z_r} = 0.25$  while the 16 (years) through High sub-category had an effect size of  $\underline{z_r} = 0.14$ ; these values were found to be significantly different at the  $p < 0.05$  level. These results may indicate that younger adolescents have a more positive belief about parenting; it may also indicate that as adolescents age, their values change and other considerations become more important. Further research is clearly indicated.

Ethnicity was considered both for the comparison and pregnant group. The variables comparison group ethnicity and pregnant group ethnicity were divided into five sub-categories White, Black, Hispanic, Mixed group, and Other. Ethnicity was found to function as a moderator for the comparison group in 12 clusters and for the pregnant group in 14 clusters (see table 4.10 or Appendix G). For example, in the Academic Performance cluster, Qt/Scheffe analysis of the comparison group ethnicity sub-categories found effect

sizes to range from  $\underline{z}_r = 0.47$  White,  $\underline{z}_r = 0.03$  Black, to  $\underline{z}_r = 0.00$  for the Mixed Group; while, pregnant group ethnicity sub-categories were similar with effect sizes ranging from  $\underline{z}_r = 0.52$  White,  $\underline{z}_r = 0.03$  Black, to  $\underline{z}_r = 0.03$  for the Mixed Group. The Other/Unknown category was empty for both pregnant and comparison groups. The results indicate that ethnically white subjects regardless of pregnancy status have high academic performance, with pregnant subjects having a slightly but non-significant higher academic performance than the comparison group. Black and mixed group subjects have no difference between academic results for control or pregnant groups. Statistically significant lower academic performance was exhibited between Black and Mixed group sub-categories as compared with the White sub-category in both control and pregnant groupings.

Interpretation of the moderators for each cluster analysis should be carried out with consideration of current theories of adolescent behavior and social interaction. The goal of this study is to identify potential moderators, determine the associated size of the effect magnitude, and present the association for discussion and theoretical considerations. This goal was achieved and the results

presented in Table 4.9, Table, 4.10 and in detail in appendix G answer the second and third study questions: Which study characteristics function as moderator variables to the observed psychosocial variable effect sizes? and Which study subject demographic characteristics function as moderator variables to the observed psychosocial variable effect sizes?

Confirmation of the variables as moderators and development of the theoretical implications were not in the scope of this research analysis and have been left to future research.

### Conclusions

Thirty-one variables that are often linked with adolescent pregnancy were identified in this integrated research review. The magnitude and consistency of the relationships between each of these variables and adolescent pregnancy were described using effect size estimates expressed as a Pearson's  $r$  correlation coefficient. While correlations derived from empirical research are only estimates of true population relationships, the correlation produced by a meta-analysis can be regarded as a more accurate estimate than those determined by individual studies, i.e., the combined sample is more representative of the population than the individual samples. The combined samples used in this analysis represented 68 studies and included 8,225 nonpregnant and 3,881 pregnant adolescents from many types of settings. While this large and diversified sample was a strength, it also introduced variation in the estimates.

The results of this integrated review indicated that adolescent pregnancy is most strongly related to an identification with traditional female roles, positive beliefs about parenting, and sexual activity. A greater incidence of higher anxiety, depression, dependency needs,

and a pregnant teenage relative, friend or mother were moderately related to adolescent pregnancy. Early onset of menses and more active dating or a relationship with a boyfriend are also weakly correlated with adolescent pregnancy. The results of this study confirmed the frequency of inclusion of these variables in research projects and supported the intuitive significance of the variables for persons working with the population. While not scientific, inclusion of intuitive variables infer that findings are consistent with common knowledge and observations.

After hypothesis testing and homogeneity analysis, the variables that remained were those with the strongest correlations. The cluster variables associated with the pregnant adolescents included Role Identification ( $\underline{z}_r = 0.45$ ), Parenting Beliefs ( $\underline{z}_r = 0.15$ ), and Sexual Activity ( $\underline{z}_r = 0.14$ ). The cluster variables most strongly correlated with the nonpregnant control group were Academic Performance ( $\underline{z}_r = 0.11$ ), Religious Activity ( $\underline{z}_r = 0.12$ ), Contraception Use ( $\underline{z}_r = 0.16$ ), Educational Expectations ( $\underline{z}_r = 0.21$ ), Family Dynamics ( $\underline{z}_r = 0.07$ ), Future Orientation ( $\underline{z}_r = 0.15$ ), School Grades ( $\underline{z}_r = 0.24$ ), Living Arrangements ( $\underline{z}_r = 0.09$ ), Occupational Expectations ( $\underline{z}_r = 0.18$ ), Parental

Relationship ( $\underline{z}_r = 0.14$ ), Father Relationship ( $\underline{z}_r = 0.13$ ), Sibling Relationship, ( $\underline{z}_r = 0.10$ ), Self-Concept, ( $\underline{z}_r = 0.12$ ), Self-Esteem ( $\underline{z}_r = 0.11$ ), and Social Responsibility ( $\underline{z}_r = 0.09$ ).

Limitations of the Present Study. The results of this integrated review provide a quantitative summary of the literature on adolescent pregnancy. While these statistics are concise ways to summarize a body of work and are easy to communicate, they are limited in three ways. These limitations, as suggested by Lewin (1996) include: only the studies that used certain quantitative methods could be included, summary statistics are only as valid as the original data, and meta-analytic techniques are without precision and measure different things. The following paragraphs address each of these limitations as they apply to the present study.

First, the fact that only the studies that used quantitative methods could be included is clearly a limiting factor for the study. Additionally, only studies that provided sufficient data to calculate an effect size were included in the analysis. When studies did not provide sufficient data, but met other inclusion criteria, attempts



were made to collect the missing data; these methods are detailed in the methods chapter. Inclusion criteria principally limited the incorporation of studies based on the requirement of a control or comparison group in the study design. Among the 290 research reports identified from the literature search that dealt with some psychosocial aspects of adolescent pregnancy, there were high quality quantitative and qualitative studies not included in the analysis; however, most were excluded because they lacked a control or comparison group of subjects.

The second limitation that summary statistics are only as valid as the original data will likely always be a problem in integrated reviews. It is difficult to identify all the weaknesses in the original research. When it is identified, it is often not within the meta-analyst's ability to correct study weaknesses. Weaknesses in the original research were not corrected; however, application of the quality of study analysis and subsequent moderator analysis of study quality as a variable was an attempt to control for original research weaknesses. The quality of study analysis is one means to express the confidence in the merit of the study for inclusion in a meta-analysis. Integrated review does overcome the limitation of small non-

representative samples and, to some extent, may balance other biases by pooling individual studies.

Finally, the summary statistics used in meta-analytic techniques have been considered limited and criticized for the following reasons: integrating non-comparable research, synthesizing results from poorly designed studies, data selection procedures which over represent published sources, the use of multiple dependent measures from one study, and the inappropriate use of conventional statistics (Lewin, 1996; Hanson, 1988, p. 123). The following paragraphs compare and contrast the present study to these criticisms.

Meta-analysis has been criticized for integrating non-comparable research. This criticism is a large component of what has been referred to as the "apples vs. oranges problem". Critics of meta-analysis have maintained that logical conclusions should not be drawn from comparing studies which involve different procedures and dependent variables. In fact, these procedures have been referred to as exercises in "meta-silliness" (Eysenck, 1978). Others have indicated that the only studies which require integration are those that are dissimilar (Glass, 1977) perhaps require conversion to a common metric (Light and Smith, 1971). The present study amassed and grouped data

from studies based on common themes presented in the literature, then applied methods from Cooper and Hedges's (1994) handbook, Cooper's (1989) manual, and Rosenthal's (1991) text to convert raw statistical data into unbiased estimates of effect. These effects were subjected to homogeneity analysis and judged for appropriateness of integration and synthesis. Homogeneity analysis can be considered analogous to individual differences among subjects within a given study. The study clusters Anxiety, Sexual Knowledge, Pregnant Role Model, and Depression were not analyzed further because they did not meet the critical values for homogeneity analysis even though all four are frequently considered important elements in adolescent pregnancy (Barth, 1983; Gottschalk, et al., 1964; Holden, et al., 1993; Kane, 1973; Lineberger, 1989; Lucchetti, 1980; Pattillo, 1993; Silk, 1979). The use of many different measures most likely contributed to variance within the analyses. While further study would be helpful here, heterogeneity is not uncommon in meta-analysis or integrated review of descriptive research (Blegen, 1993). Meta-analyses that used samples homogenous with respect to measures showed more homogenous results (Fried, 1991). Another criticism leveled against meta-analysis has involved

the rendering of un-interpretable results due to data synthesis from studies regardless of their design quality. An analysis of design quality has been consistently recommended by influential meta-analysts (Glass, et. al., 1981; Cooper, 1989; Cooper and Hedges, 1994). The present study rated the quality of each study included and examined the relationship between design quality and effect size for each cluster (i.e., moderator analysis). The mean study quality was found to be 2.21 with a standard deviation of 0.395 and mode of 2.50. The mean and mode indicated primarily moderate to high quality of study level ratings.

The moderator analysis of the quality of study variable considered three sub-categories: Low through 1.99, 2 through 2.49, and 2.5 through 3. Quality of study was found to be a moderator in 8 studies. In these eight studies the highest effect size was found in the lowest quality of study sub-category in four clusters, Future Orientation, Living Arrangements, Occupational Expectations, and Father Relationship. The Parental Relationship cluster had the same effect size for both the lowest and the middle quality of study sub-category. The middle quality of study sub-category had the highest effect sizes in four clusters, Parental Communication, Parental Relationship, Self-Concept,

and Self-Esteem. And the highest quality of study sub-category was not found to have the highest effect size in any of the eight clusters where quality of study was found to be a moderator. All effect sizes were found to be significantly different ( $p < 0.05$ ) from one another in five clusters: Parental Communication, Parental Relationship, Father Relationship, Self-Concept, and Self-Esteem. No effect sizes were found to be significantly different in the Occupational Expectations cluster. In the Future Orientation cluster, high and medium quality studies were found to be significantly different from one another; the other two combinations high and low and medium and low were not significantly different. And finally in the Occupational Expectations cluster, the low vs. medium quality of study sub-categories effect sizes were not significantly different, but the two other combinations of low vs. high and medium vs. high were significantly different ( $p < 0.05$ ). The implications of these results are not clear; a second look at all studies included in these analyses may be justified. It is important to note that quality of study was not a moderator in the nineteen other clusters.

Meta-analysis has been criticized for data selection procedures which over represent published sources, resulting in Type I errors of inference (Kramer and Andrews, 1982). This publication bias could have resulted in an over estimation of the average treatment effect and unwarranted conclusions based upon an unrepresentative sample. This is what Rosenthal (1991) calls the "file drawer problem". Meta-analysts have responded to this potential bias by use of thorough data search techniques and statistically calculating the "Fail-safe  $\underline{N}$ " to evaluate the potential bias. The present study used modern search methods including searching electronic databases and publication of requests on academic bulletin boards within the most commonly used electronic computer networks. The application of the Fail-safe  $\underline{N}$  allowed estimation of the file drawer problem and was performed for each cluster of variables considered. Fail-safe  $\underline{N}$  data were generally high (see results chapter for detailed information); therefore, sampling techniques produced results the researcher considered adequate. The threats to external validity of this study were minimal.

Meta-analysis has been criticized for the use of multiple results from the same study which could bias the

results and make them appear more reliable. This study used average effect sizes computed for like variables from the same study as suggested by Casey and Berman (1985) and Sibley (1986) using techniques suggested by Hedges and Okin (1985). This approach limited representation of each study within a cluster meta-analysis to once; this limitation prevented dependence within the data set and over representation of the effects of any single study.

The application of conventional statistical techniques to meta-analytic methods has been criticized (Hedges and Olkin, 1985). These criticisms involve the acceptance of inferences from designs which were not experimental and failed to evaluate the underlying assumptions of the parametric statistics applied. The present study applied traditionally accepted meta-analytic methodology. This methodology is not experimental in nature and does not involve random sampling or assignment. No statistical method was used that required these conditions; only those methods suggested and commonly used in meta-analysis were included. The BESD was used with data that was not experimental; it was used as illustrated by Cooper and Hedges (1994, p. 243) and it was only used as a means of illustration of the differences between the groups observed.

Care was and should be exercised in the application,  
interpretation or conclusions drawn from the use of the BESD  
in this manner.



### Recommendations for Further Study

Implications for Future Research. The result of this integrated review should be useful to those attempting to build better theories of adolescent pregnancy. The phenomenon of adolescent pregnancy is very complex and no single factor stands out as the major explanatory variable. The variables included relate to adolescent pregnancy directly and to each other. Further analyses are necessary to go beyond the estimates of direct effects of single variables to estimates of the net effects of each variable on adolescent pregnancy, controlling for the effects of other variables. For example, while beliefs about parental roles was an important variable, causes of this identification may be interrelated with the adolescents' identification with traditional female roles. Both of these variables had significant effect sizes favoring the pregnant group of adolescents. The results of this analysis may help to determine the variables that could be usefully included in multivariable models, such as those suggested by Santelli and Beilenson (1992) and Sheaff and Talashek (1995).

Both the Santelli and Beilenson (1992) model and the Nursing Model for Teen Pregnancy suggested by Sheaff and Talashek (1995) contend that both cultural and biological

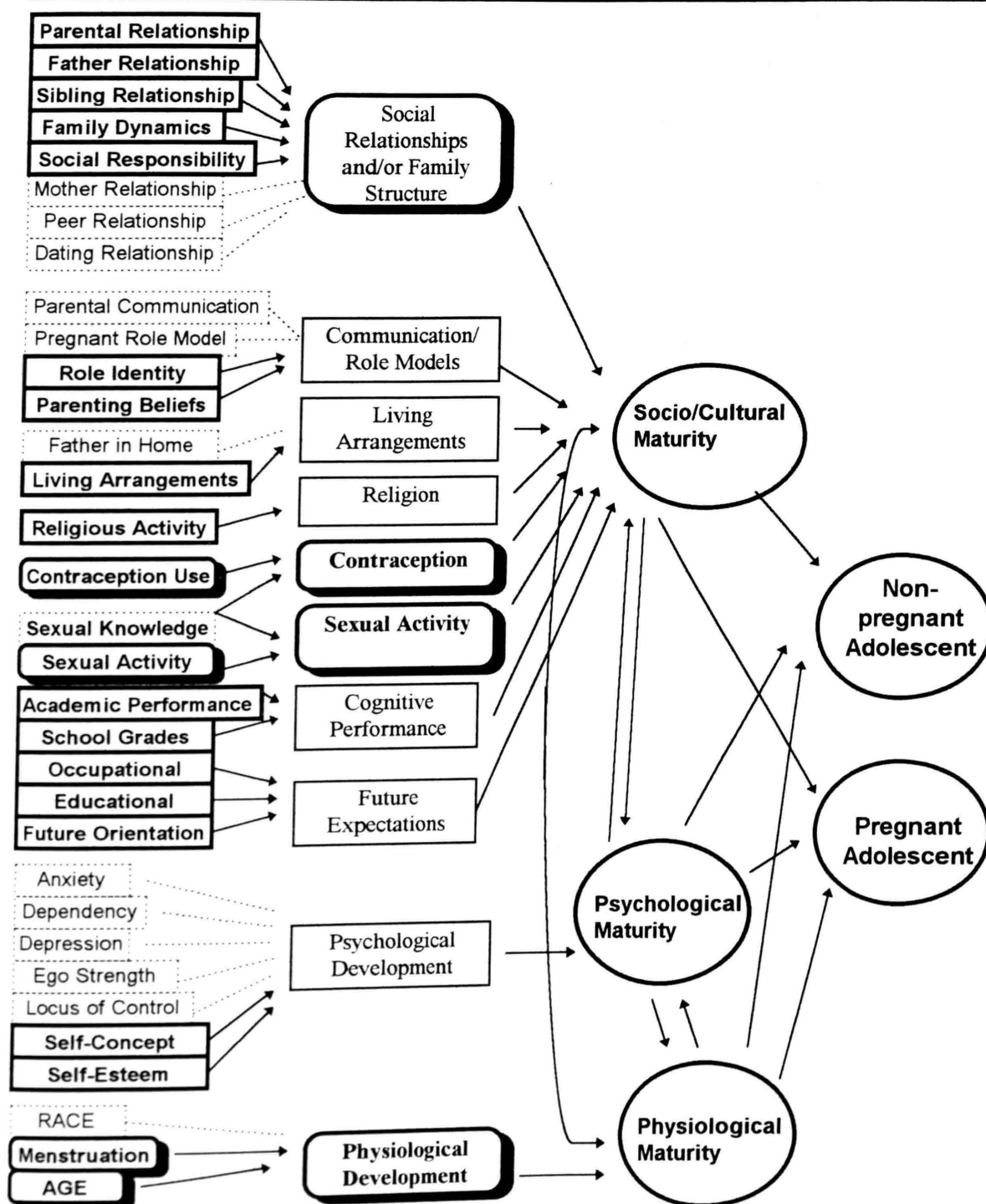
factors have an great influence on adolescent fertility. The Nursing Model for Teen Pregnancy is based on a nursing concept of people as biopsychosocial holistic beings. "The model is grounded in the developmental theories of Erikson and Piaget and hypothesizes that developmental maturity is related to teen pregnancy. Maturity is conceptualized in three areas: physical, psychological and cognitive" (Sheaff and Talashek, 1995, p. 34-35).

The Nursing Model for Teen Pregnancy consists of control variables, conceptual variables and the dependent variable adolescent pregnancy. The Nursing Model for Teen Pregnancy suggested the control variables as antecedents to pregnancy. These antecedents include demographic and sociocultural variables. The demographic variables are age and race. The sociocultural variables include family variables of family structure, substance abuse, and mother's age at first birth, and individual variables of religion, gang membership, physical abuse, sexual abuse (incest, rape), voluntary sexual activity, contraception, and previous pregnancy. These antecedents in the model are suggested to have a direct influence on the dependent variable as well as an indirect influence through the operational variables.

The operational measurement variables reflect the three areas of maturity: physical, psychological and cognitive. The physical maturity variables were age at menarche and gynecological age. The psychological maturity variable was age-appropriate development based on a Psychologist's evaluation. Cognitive maturity variables were school progress, grade in school, reading sub-category, cognitive potential, and intelligence quotient. In the model each of the maturity variables were related directly to adolescent pregnancy. Psychological and cognitive maturity were influenced by both antecedent groups of variables.

Following Sheaff and Talashek's example, the following model is a presentation of the clusters observed in the research synthesis as collections of operational measurement variables. The clusters are defined and presented elsewhere and will not be repeated here; see Appendix D for description of the observed variables included in each cluster. The resulting path diagram is the Elemental Model of Teen Pregnancy (EMTP) and is a portrayal of the essential elements represented by the studies gathered in this research synthesis that play a meaningful role in adolescent pregnancy (see Figure 5.1).

FIGURE 5.1 The Elemental Model of Teen Pregnancy (EMTP)



Within the EMTP some paths or linkages are stronger than others. The strength can be described by consideration of the effect size, while consideration of the BESD illustrates the tendency of support of the linkages or variables. The variables begin to interact to produce a wide variety of combinations that both inhibit or promote sexual activity and adolescent pregnancy. In Sheaff and Talashek's (1995) study, the basic characteristics that promote adolescent pregnancy were that pregnant teens had slightly higher chronological and gynecological age, histories of abuse or rape, and more voluntary sexual activity than their nonpregnant peers. Okonofua (1995) found that teens were at risk for pregnancy if they were from households of low socioeconomic status, completed formal basic education early, had little opportunity for continuing vocational or professional training, had sexual relations with older men, and if they had poor or inappropriate knowledge of contraception.

The two later studies cited above and those included in this study reflect variations of elements as presented in both Sheaff and Talashek's model and the EMTP. The goal of any model is to identify common elements or paths among the numerous possible elements or paths. The most basic version

of the EMTP is illustrated in Figure 5.1 by the heavily outlined variables. These fundamental variables include onset of menses; physical maturity (capacity for sexual activity and pregnancy); sexual activity; and non-use, failure of, or improper use of contraception. The remaining indispensable element to promote adolescent pregnancy, even in the extreme cases of rape or abuse, is a social environment that promotes or at least does not prevent sexual activity. Other variations of the EMTP obviously occur; those represented by the significant findings in this study are illustrated in Figure 5.1 by highlighted and solid figure.

This research synthesis and the series of meta-analyses contained within it provide a sketch of the existing research and have begun to illuminate areas that need further attention. Research synthesis attempts to close the research loop. The findings presented in this research synthesis confirm the importance of commonly studied characteristics and support a multidimensional model for study of adolescent pregnancy. A multidimensional model and multivariable analysis are necessary for the next step in the continuing analysis of adolescent pregnancy.

Future research can be guided by meta-analysis reviews which identify methodologies that have succeeded or failed. Aside from the infrequent use of comparison groups, the absence of a longitudinal approach is the most glaring deficit in the research on adolescent pregnancy. Several studies (Jessor and Jessor, 1975; Kovacs, Krol, and Voti, 1994; and Vernon, Green, and Frothingham, 1983) have utilized longitudinal designs. These studies used a design that contain specific inclusion criteria for subjects, an application of batteries of instruments to a group of nonpregnant subjects, and subsequent comparison of pre-pregnant results of both nonpregnant and pregnant subjects after pregnancies occur. This design addresses the problem of subjects' attitudes, values or perceptual changes after the pregnancy. There is a strong implication in the literature that psychological variables associated with pre-pregnancy may not be the same as those concurrent with pregnancy or post-pregnancy.

Most of the studies in the literature and most of the studies included in this review were conducted after the adolescent was pregnant. The typical study design was selection of a pregnant group of teens, followed by matching of the pregnant group with a nonpregnant control group.

This simple study design, with or without a comparison group does not determine pre-pregnancy differences or issues. A study, preferably multiple-site and longitudinal, as suggested previously would improve the available data on adolescent pregnancy.

Implications of Results for Practice. The results of this analysis should also be useful to health care practitioners, counselors, teacher, parents, and program administrators as they search for methods to deal with and/or prevent adolescent pregnancy. Based on the current study, methods to handle the variables associated with the pregnant teens (i.e., traditional female Role Identity, Parenting Beliefs, and Sexual Activity) and to promote the variables most strongly correlated with the nonpregnant control group (i.e., Academic Performance, Religious Activity, Contraception Use, Educational Expectations, Family Dynamics, Future Orientation, School Grades, Living Arrangements, Occupational Expectations, Parental Relationship, Father Relationship, Sibling Relationship, Self-Concept, Self-Esteem, and Social Responsibility) are the most urgent and maybe the most effective.



Marion Edelman (1988) president of the Children's Defense Fund summed up many of the strategies suggested throughout the literature. Edelman's central theme was "enhancing basic skills and life options" which translated into providing education and counseling (p. 498). Education programs focused on basic academics, sexuality, and health coupled with counseling programs focused on supporting work preparation and avenues for personal growth and success. These approaches seem to be good beginning strategies for addressing the issues and have been suggested by others (Batten, 1995; Flick, 1986; and Norr, 1988).

Further work is needed to determine the actual impact of adolescent pregnancy and interventions that affect more than one variable. Lerner, Entwistle, and Hauser (1994) emphasize that social policies and programs aimed at prevention are essential and that these must be multidisciplinary and collaborative efforts. Multivariable, developmental, contextual models are essential to the understanding of adolescent behavior. Further, adolescent behavioral/developmental models and the policies and programs which come from them must be developed from a collaboration among science, service and community.

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## Appendix A

### Formulas

## Formulas

Effect Size Estimates. Original data from the studies were used to calculate an  $\underline{r}$  as an effect size estimate. The equations used for these calculations are suggested by Rosenthal (1991, pp. 17-20) and are reproduced here for the readers reference.

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When original data obtainable were means and standard deviation the following formulas presented by Cooper (1989, p. 101) and Rosenthal (1991, pp. 19-20) were used.

$$\underline{d} = \frac{|\text{mean } \underline{X_c} - \text{mean } \underline{X_e}|}{\underline{sd_c}}$$

$$\underline{r} = \underline{d} / \sqrt{\underline{d}^2 + 1/\underline{pq}} \quad (1)$$

Where equation terms are defined as:

mean  $\underline{X_c}$  = mean score of the control group,

mean  $\underline{X_e}$  = mean score of the experimental group,

$\underline{sd_c}$  = standard deviation of the control group,

$\underline{d}$  = effect size estimate d-index,

$\underline{p}$  = proportion of the total population in the first of the two groups being compared,

$\underline{q}$  = the proportion of the total population that is in the second of the two groups being compared,

When  $\underline{p}$  and  $\underline{q}$  are equal, or when they can be viewed as equal in principle,  $1/\underline{pq}$  is simplified to 4 (Cooper, 1989, p. 101; Rosenthal, 1991, p. 20).

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When original data obtained were  $\underline{p}$  values and/or  $\underline{Z}$  scores the following formula was used;  $\underline{p}$  values were converted to its equivalent  $\underline{Z}$  score.

$$\underline{r} = \sqrt{\underline{Z}^2 / \underline{N}} \quad (2)$$

Where equation terms are defined as:

$\underline{Z}$  = standard normal deviate  $\underline{Z}$  score,

$\underline{N}$  = the total number of subjects.

(Rosenthal, 1991, p. 19; Cooper & Hedges, 1994, p 239).

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When original data obtained was chi-square ( $\chi^2$ ) values the following formula was used.

$$\underline{r} = \sqrt{\chi^2 / \underline{n}} \quad (3)$$

Where equation terms are defined as:

$\chi^2$  = provided chi-square value

$\underline{n}$  = the total number of subjects.

(Cooper, 1989, p. 104; Cooper & Hedges, 1994, p 239).

When original data obtained was  $\underline{t}$  values the formula presented by Cooper (1989, p. 104) and Rosenthal (1991, pp. 19) was used.

$$\underline{r} = \sqrt{\underline{t}^2 / (\underline{t}^2 + \underline{df})} \quad (4)$$

&

$$\underline{df} = \underline{n}_1 + \underline{n}_2 - 2$$

Where equation terms are defined as:

$\underline{t}$  = provided  $\underline{t}$  values,

$\underline{n}_1$  = subjects group 1,

$\underline{n}_2$  = subjects group 2.

---

When original data obtained were  $\underline{F}$  values the formula presented by Rosenthal (1991, pp. 19) was used.

$$\underline{r} = \sqrt{\frac{\underline{F}(1, -)}{\underline{F}(1, -) + \underline{df}_{\text{error}}}} \quad (5)$$

Where equation terms are defined as:

$\underline{F}(1, -)$  indicates any  $\underline{F}$  value with  $\underline{df} = 1$  in the numerator,

$$\underline{df}_{\text{error}} = \underline{n}_1 + \underline{n}_2 - 2.$$


---

Fisher's  $z_r$ . According to Rosenthal (1991, p. 21) "as the population value of  $\underline{r}$  gets further and further from zero the distribution of  $\underline{r}$ 's sampled from that population become more skewed" Therefore, a transformation derived by Fisher (Fisher's  $\underline{z_r}$ ) and suggested by Rosenthal (1991) was used to normalize the distribution. Formulas 6, 7, and 8, were used for effect size adjustment for the  $\underline{r}$  distribution. The Fisher's  $\underline{z_r}$  is a transformation of  $\underline{r}$  that is normally distributed and makes the variance independent of the unknown true value of the correlation (Rosenthal, 1991, p. 21).

Fisher's  $\underline{z_r}$

$$\underline{z_r} = 0.5 \{ \text{Log}_e \left[ \frac{(1 + \underline{r})}{(1 - \underline{r})} \right] \} \quad (6)$$

Then, correct the bias in the Fisher's  $\underline{z_r}$  distribution,

$$\underline{eb} = \underline{r} / [2 (\underline{N} - 1)] \quad (7)$$

And finally correct the Fisher's  $\underline{z_r}$  value,

$$\text{Corrected } \underline{z_r} = \underline{z_r} - \underline{eb} \quad (8)$$

(Rosenthal, 1991, p. 21-22; Cooper & Hedges, 1994, p 237, 240).

Where equation terms are defined as:

$\text{Log}_e$  = natural logarithm function,

$\underline{r}$  = the effect size expressed as an  $\underline{r}$  value,

$\underline{eb}$  = the estimated bias in the  $\underline{z_r}$  distribution.

Within-Study-Pooled  $\underline{z_{rj}}$ . When studies presented several separate statistical analyses for components of a single dependent variable, the effect sizes were combined. After  $\underline{r}$  values were calculated,  $\underline{z}$  transformations for the component variables were pooled to create a single  $\underline{z_r}$  for each of the dependent variables for that given study. The

formula and process for pooling within study results using Fisher's  $\underline{z}$  are provided below.

Step 1. Using previously presented formulas compute the effect size  $\underline{r}$  and Fisher's  $\underline{z_r}$  for each component variable within the study being combined.

Step 2. Apply the following formula for a within-study component variable pooled  $\underline{z_{rj}}$ .

$$\text{pooled } \underline{z_{rj}} = (\sum \underline{z_{rj}}) / \underline{K} \quad (9)$$

Where equation terms are defined as:

$\underline{z_{rj}}$  = the Fisher's  $\underline{z_r}$  to any  $\underline{r_j}$ ,

$\underline{K}$  = the number<sup>a</sup> of component variables being combined.

(Hedges and Okin, 1985, p. 220-221)

---

Note. <sup>a</sup>If the number of component variables differed a weighted mean  $\underline{z_{rj}}$  was calculated.

#### Average Weighted Effect Size and Confidence Interval.

The average weighted effect size and confidence intervals were calculated to test the relationship between each dependent variable cluster and the independent variable. If



the value of  $\underline{r} = 0$  is not in the confidence interval, the null hypothesis that there is no relation between the dependent variable category and independent variable was rejected.

The formulas for the average weighted (df as weight) effect size and confidence interval as suggested by Cooper (1989, pp. 109-110) are presented below.

$$\underline{z}_w = \frac{\sum (\underline{n}_j - 3) \underline{z}_j}{\sum (\underline{n}_j - 3)} \quad (10)$$

Where equation terms are defined as:

$\underline{z}_w$  = the average weighted effect size,

$\underline{z}_j$  = the standard normal deviate for any one study  $j$ ,

$\underline{n} - 3$  = the weight for any one study  $j$  (other desired weights, such as estimated quality, may be used).

(Cooper, 1989, p. 109).

The confidence interval is calculated using the following formula:

$$\underline{CI}_{z.95\%} = \underline{z}_w \pm \frac{1.96}{\sqrt{\sum (\underline{n}_j - 3)}} \quad (11)$$

Where equation terms are defined as:

$CI_{z.95\%}$  = The 95% confidence interval,

$z_w$  = the average weighted effect size,

$n_i$  = the number of sampling units to any  $r$  on which it is based, i.e., the sample total  $N$  value.

(Cooper, 1989, p. 110).

Stouffer Method ( $z_{st}$ ) Combined Probability Associated With Study Results. The Stouffer Method of combining results was used as a means to estimate a probability that "describes the combined likelihood that the series of results included in the analysis could have been generated by chance if the null hypothesis were true for every study" (Cooper, 1989, p. 95). This probability is the probability associated with the cumulative set of individual probabilities for each study result. The probability is discovered when the  $z_{st}$  score derived from the Stouffer Method is referred to a table of standard normal deviates.

The Stouffer Method for combining studies as described by Cooper (1979, p. 134; 1989, pp. 94 - 95) is presented below.

The probability associated with study results is obtained and converted to the Z score associated with each probability

$$\underline{Z}_{st} = \frac{\sum \underline{Z}_{si}}{\sqrt{(K)}} \quad (12)$$

Where equation terms are defined as:

Z<sub>st</sub> = the standard normal deviate for the cluster,

Z<sub>si</sub> = the standard normal deviate for each *i*<sup>th</sup> study included in the cluster,

K = the total number of studies included.

(Cooper, 1989, p. 94).

#### Fail-safe N ( $N_{fs.05}$ ) Robustness of Literature Review.

The fail-safe N addresses the "file drawer problem" and assist the researcher (and ultimately the report reader) in the evaluation of the strength of a review against the felt completeness of the sampling procedure (Cooper, 1979, p. 135). The fail-safe N allows an answer to the question "How many studies totaling a null hypothesis confirmation would be needed to reverse the conclusion that a relationship exists?". The fail-safe N assumes a summed null relation in

undiscovered studies and it estimates the number of additional studies needed to increase the meta-analysis probability to above 0.05. Fail-safe  $\underline{N}$  calculations are provided below.

The probability associated with study results

$$\underline{N}_{fs.05} = \left[ \frac{\sum \underline{z}_{si}}{1.645} \right]^2 - \underline{K} \quad (13)$$

Where equation terms are defined as:

$\underline{N}_{fs.05}$  = the number of additional studies needed to increase the meta-analysis probability to above 0.05,

$\underline{z}_{si}$  = the standard normal deviate as calculated for the Stouffer analysis for each study included,

$\underline{K}$  = the total number of studies included.

1.645 represents the standard normal deviate associated with  $p < 0.05$  (one tail). (Cooper, 1989, p. 97).

---

Homogeneity Analysis of Moderator Variables. If

conceptually linked variables were found in a minimum of three studies, a cluster was formed. After  $r$  values were calculated for each variable, homogeneity analysis as described by Cooper (1989) was performed for each cluster of dependent variables. Homogeneity analysis was conducted using a  $Q$  statistic that is distributed as chi-square.

According to Cooper (p. 115) the  $Q$  statistic tests whether the average effects of the groupings are homogeneous. If the  $Q$  statistic is significant it indicates that, given the sizes of the grouped samples, the range is too great to be explained by sampling error alone (Cooper, 1989, p. 115). Homogeneity analysis answers the question, "Is the variance in effect sizes significantly different from that expected by sampling error?" (Cooper, 1989, p. 114). If the answer is no, then the null hypothesis is supported: the studies are not considered enough alike (i.e., not necessarily addressing the same subject) for further analysis and analysis stops. If the answer is yes, the studies are considered enough alike (i.e., addressing the same subject) for further analysis for other potential sources of variance. If the  $Q$  statistic, distributed as

chi-square, is significant, the values compared are significantly homogeneous.

$$Q_t = \sum (\underline{n}_i - 3) \underline{z}_i^2 - \left[ \frac{[\sum (\underline{n}_i - 3) \underline{z}_i]^2}{\sum (\underline{n}_i - 3)} \right] \quad (14)$$

Distributed as chi-square, with  $\underline{K} - 1$  df.

Where equation terms are defined as:

$\underline{n}_i$  = the number of sampling units to any  $\underline{r}$  on which it is based,

$\underline{z}_i$  = the standard normal deviate for any one study,

$\underline{K}$  = the number of studies being combined.

(Cooper, 1989, p. 112, 115).

#### ANOVA, Cochran's C, Scheffe Analysis and $Q_t$ Analysis.

An ANOVA analysis was used to determine if study characteristics and demographic variables were correlated with the magnitude of the observed effect sizes for each cluster. The analysis of variance was conducted with the various levels of the study characteristics and demographic variables, followed by Cochran's  $\underline{C}$  to assess homogeneity of variance in the results (Winer, 1962). If results were

homogeneous, ANOVA results were interpreted and post hoc analysis was performed using Scheffe post hoc procedures.

If the Cochran's C analysis indicated the variance in the ANOVA results were heterogeneous, the ANOVA analysis was considered invalid and Q<sub>t</sub> analysis was performed on the various levels of the study characteristics and demographic variables.

ANOVA analysis, Cochran's C, Scheffe analysis, and/or qt analysis was accomplished using a standard statistical package (i.e., SPSS) and formulas previously described (i.e., qt statistic formula 12). Because the formulas for these procedures are standard and are readily available in common statistical packages like SPSS they were not reproduced here.

Appendix B  
Data Coding Form



## DATA CODING FORM

262

Study: \_\_\_\_\_  
\_\_\_\_\_

Study ID number: \_\_\_\_\_ Publication year: \_\_\_\_\_

### Methodological Characteristics

PUBFORM: (1) Journal (2) Dissertation (3) Report (4) Book

JOURNAL TYPE: (1) General (2) Speciality (3) NA

SOURCE: (1) CINAL, (2) ERIC, (3) Medline, (4) PsychLit, (5) SocLit  
(6) REF List (7) LIT Review (8) Dissertation (9) Other \_\_\_\_\_

Number of Authors: \_\_\_\_\_

FUNDING: (0) None/Don't Know (1) Company (2) Federal (3) Foundation  
(4) Professional Organization (5) Voluntary (6) Other \_\_\_\_\_

DESIGN: (1) Descriptive (2) Correlational (3) Experimental  
(4) More than one

SAMPLING.METHOD: (1) Random sample (2) Randomized Groups  
(3) Matched subjects (4) Random sample and randomized groups  
(5) Matched subjects and randomized groups  
(6) Random sample and matched subjects (7) Convenience

SAMPLE.SIZE.TOTAL: \_\_\_\_\_ QUALITY.STUDY: \_\_\_\_\_

### Substantive Characteristics

CONTROL GROUP MEAN AGE: \_\_\_\_\_

CONTROL SOC (1) White (2) Black (3) Hispanic  
(4) Asian, Pacific Islander (5) American Indian, Native Alaskan  
(6) Mixed (7) Other/ \_\_\_\_\_

CONTROL MARSTAT (1) Single (Never Married) (2) Married (3) Widowed  
(4) Divorced (5) Mixed (6) Other/ \_\_\_\_\_

CONTROL FAMINCOM (1) 0000 - 9,999 (2) 10,000 - 12,999  
(3) 13,000 - 14,999 (4) 15,000 - 19,999 (5) 20,000 - 24,999  
(6) 25,000 - 34,999 (7) 35,000 - 49,999 (8) 50,000+/  
(9) Unknown (10) Low (11) Middle (12) Upper

CONTROL EDU: (1) Less than 6th Grade (2) 6 to 9th Grade  
(3) 10 to 12th Grade (4) High school graduates  
(5) College graduates (6) Mixed/Unknown

PREGNANT GROUP MEAN AGE: \_\_\_\_\_

PREGNANT SOC (1) White (2) Black (3) Hispanic  
(4) Asian, Pacific Islander (5) American Indian, Native Alaskan  
(6) Mixed (7) Other/ \_\_\_\_\_

**PREGNANT MARSTAT** (1) Single (Never Married) (2) Married (3) Widowed  
(4) Divorced (5) Mixed (6) Other/ \_\_\_\_\_

**PREGNANT FAMINCOM** (1) 0000 - 9,999 (2) 10,000 - 12,999  
(3) 13,000 - 14,999 (4) 15,000 - 19,999 (5) 20,000 - 24,999  
(6) 25,000 - 34,999 (7) 35,000 - 49,999 (8) 50,000+/  
(9) Unknown (10) Low (11) Middle (12) Upper

**PREGNANT EDU:** (1) Less than 6th Grade (2) 6 to 9th Grade  
(3) 10 to 12th Grade (4) High school graduates (5) College graduates  
(6) Mixed/Unknown

**SETTING:** (1) Hospital (2) Clinic (3) Home (4) Hospice  
(5) Long-term facility (6) University (7) Unknown  
(8) Other \_\_\_\_\_

**NTHEORY:** (0) No (1) Yes **NONTHEO:** (0) No (1) Yes

**Guiding Theory/Construct:** \_\_\_\_\_

**Research Topic:** \_\_\_\_\_

**Instrument:** \_\_\_\_\_

**Alpha Reported:** \_\_\_\_\_ **Standardized:** (0) No (1) Yes

**Number of Dependent Variables:** \_\_\_\_\_

#### Computational Values

**SAM.SIZE.EXP:** \_\_\_\_\_ **SAM.SIZE.CON:** \_\_\_\_\_  
**MEAN.EXP:** \_\_\_\_\_ **MEAN.CON:** \_\_\_\_\_  
**SDEXP:** \_\_\_\_\_ **SDCON:** \_\_\_\_\_  
**Pooled Variance Estimate:** \_\_\_\_\_

**STATU:** (1) Frequency, percentage, means, variance  
(2) Bivariate correlation  
(3) Chi-square, Fisher's Exact, McNemar  
(4) Mann-Whitney U, Sign, Wilcoxon matched pairs signed ranks,  
Kruskall Wallis, Kolmogorov-Smirnov  
(5) ANOVA, t  
(6) ANCOVA  
(7) Multivariate correlation ( $r^2$ , etc.)  
(8) MANOVA (repeated measures, time series)  
(9) Factor analysis  
(10) Path analysis  
(11) LISREL

**Observed Value Type:** (1) Chi-Square (2) Z-Value  
(3) t-Value (4) F-Value (5) Other \_\_\_\_\_

**Value:** \_\_\_\_\_ **PVAL:** \_\_\_\_\_

**r:** \_\_\_\_\_ **Fisher's z** \_\_\_\_\_

**POWER:** \_\_\_\_\_

**CODING FORM - GLOSSARY****I. LIST OF TERMS****Section I. Methodological Characteristics**

Study Identification Number (STUDYNO)  
Publication Year (PUBYR)  
Publication Form (PUBF)  
Journal Type (JOURTYP)  
Source Derivation (SOURCE)  
Number Of Authors (NOAUTH)  
Study Field (STUDYFLD)  
Funding For Study (FUNDING)  
Types Of Research Design (DESIGN)  
Sampling Method (METHOD)  
Sample Size: Total (SAMSIZT)  
Quality Of Study Rating (QUALSTD)

**Section II. Substantive Characteristics**

Comparison Group Mean Age (COMPAGE)  
Comparison Group Ethic (COMPETH)  
Comparison Group Marital Status (COMPMAR)  
Comparison Group Family Income (COMPFAM\$)  
Comparison Group Educational Status (COMPEDU)  
Pregnant Group Mean Age (PREGAGE)  
Pregnant Group Ethic (PREGETH)  
Pregnant Group Marital Status (PREGMAR)  
Pregnant Group Family Income (PREGFAM\$)  
Pregnant Group Educational Status (PREGEDU)  
Setting (SETTING)  
Nursing Theory (NTHEORY)  
Non-Nursing Theory (NONTHEO)  
Concept/Construct (CONCEPT)  
Topic (TOPIC)

Instrument Used (INSTRUM)  
Reported Instrument Alpha (INALPHA)  
Standardized Instrument (INSTAND)  
Number Of Dependent Variables (NODVS)

### **Section III. Computational Values**

Sample Size: Comparison Group (COMPSMSZ)  
Mean Value: Comparison Group (COMPMEAN)  
Standard Deviation: Comparison Group (COMPSD)  
Sample Size: Pregnant Group (PREGSMSZ)  
Mean Value: Pregnant Group (PREGMEAN)  
Standard Deviation: Pregnant Group (PREGSD)  
Pooled Variance Estimate (PVAR)  
Statistical Test Used (STATU)  
Observed Value Type (OBVALTYP)  
Observed Value: Ma Variable (OBVAL)

### **Section IV. Effect Size Values: Selected Outcomes**

P-Value (PVAL)  
Z Value (ZVAL)  
R = Correlation E.S. (R)  
Fishers Z (FISHERZ)  
Power Value (POWER)

## II. VARIABLE DEFINITIONS / CODING

### STUDY IDENTIFICATION NUMBER

Definition: The number assigned to the study as it is included in the data set.

Indicators: NONE

Abbreviation: STUDYNO

Coding: Coding begins with 1001 for the first study and continues to the last study included (ex, 1001, 1002, ... 1099).

### PUBLICATION YEAR

Definition: Year specified in the primary source as the date of publication.

Indicators: Note the year of the journal of publication or publication of the report or dissertation.

Abbreviation: PUBYR

Coding: 19xx

### PUBLICATION FORM

Definition: The document variety where the published research report occurs.

Indicators: Identify from source, or consider the document title and where the report appears.

Abbreviation: PUBF

Coding:

- (1) Journal
- (2) Dissertation
- (3) Report
- (4) Book / Book Chapter
- (5) NA i.e. NOT published/

### JOURNAL TYPE

Definition: The nature of the journal, general has a broad appeal within a field of study; a specialty would have a very narrow audience.

Indicators: Identify from source, or consider the document title and where the report appears.

Abbreviation: JOURTYP

Coding:

- (1) General
- (2) Specialty
- (3) NA/

## ARCHIVAL SOURCE

Definition: Index, computer, and additional sources to identify a list of journals and/or dissertations.

Indicators: Identify from the source of the reference.

Abbreviation: SOURCE

Coding:

- (1) CINAL
- (2) ERIC
- (3) MEDLINE
- (4) PsychLit
- (5) SocLit
- (6) STTI
- (7) REF List/ LIT Review
- (8) Dissertation Abstracts
- (9) Computer bulletin board
- (10) Other/

## NUMBER OF AUTHORS

Definition: Actual number of authors contributing to the research project as indicated on the article or report.

Indicators:

Abbreviation: NOAUTH

Coding: Number of authors listed on the article or report.

## STUDY FIELD

Definition: The professional field of study as a source the research as indicated within the text of the article or the background of the primary author.

Indicators: Primary author's current field of study/profession.

Abbreviation: STUDYFLD

Coding:

- (1) Nursing
- (2) Sociology
- (3) Medicine
- (4) Psychology
- (5) Political Science/Government
- (6) Education
- (7) Public Health
- (8) Other/

## RESEARCH TYPE

Definition: The nature of the research project.

Indicators: An indication in source or the project report.

Abbreviation: RESTYPE

Coding:

- (1) Independent research project
- (2) Funded research project
- (3) Dissertation
- (4) Other/

## (5) Unknown

## FUNDING FOR STUDY

Definition: Indication in source that study was supported totally or in part by some agency or group.

Indicators: "funded by"; grant #; "supported by"

Abbreviation: FUNDING

Coding:

- (1) UNKNOWN
- (2) NONE
- (3) Company
- (4) Federal
- (5) Foundation
- (6) Professional Organization
- (7) Voluntary
- (8) Other/

## TYPES OF RESEARCH DESIGN

Definition: Plan, structure, and strategy of the investigator to obtain answers to research questions and control variance (Kerlinger, 1973, p.300).

Indicators:

Abbreviation: DESIGN

Coding:

- (1) Descriptive
- (2) Experimental
- (3) More than one/

## SAMPLING METHOD

Definition: Process by which subjects were chosen for participation in the study.

Indicators: use of terms.

Abbreviation: SAMPMTHD

Coding:

- (1) Random sample
- (2) Randomized Groups
- (3) Matched
- (4) Random and randomized
- (5) Matched and randomized
- (6) Random and matched
- (7) Convenience/

## SAMPLE SIZE TOTAL

Definition: Total number of subjects in the study, i.e. the sum total of the comparison and pregnant groups.

Indicators: number in text or tables.

Abbreviation: SAMSIZT

Coding: numerical value provided in the research report.

## QUALITY OF STUDY RATING

Definition: Mean computed rating on the "Quality of Study

Instrument." The instrument contains 4 elements and 22 items identified as critical components to be included in reports of research. The maximum score is 66 and minimum score is 0.

Indicators: Score derived from the instrument.

Abbreviation: QUALSTD

Coding: Numerical score 0 to 66.

#### COMPARISON GROUP

Definition: The comparison group is a group of females clearly identified as participating in the study other than the primary group of pregnant adolescents that are the focus of the study. The comparison group will all be female and might also have characteristics such as ????? a previous set of pregnant adolescents, a group of non-pregnant adolescents or a group of pregnant or non-pregnant adults.

Indicators: identification in text or tables.

#### COMPARISON GROUP MEAN AGE

Definition: Average chronological age ascribed to comparison group subjects in the research report. Source include numerical values, age range, or age categories given.

Indicators:

Abbreviation: COMPAGE

Coding: numerical value provided.

If recodeing is necessary this variable may be recoded to age categories.

1. Adolescents
2. Adults

#### COMPARISON GROUP ETHNIC

Definition: Ethnic group ascribed to comparison group subjects in the research report.

Indicators: specification in the report.

Abbreviation: COMPETH

Coding:

- (1) White
- (2) Black
- (3) Hispanic
- (4) Asian, Pacific Islander
- (5) American Indian, Native Alaskan
- (6) Mixed group
- (7) Other/

#### COMPARISON GROUP MARITAL STATUS

Definition: Marital status ascribed to comparison group subjects in the research report.

Indicators: specification in the report.

Abbreviation: COMPMAR



## Coding:

- (1) Single (Never Married)
- (2) Married
- (3) Widowed
- (4) Divorced
- (5) Mixed group
- (6) Other/

## COMPARISON GROUP FAMILY INCOME

Definition: Family income ascribed to comparison group subjects in the research report.

Indicators: description fitting a category or specification within the report.

Abbreviation: COMPFAM\$

## Coding:

- (1) Low
- (2) Middle
- (3) Upper
- (4) 0000 - 14,999
- (5) 15,000 - 29,999
- (3) 30,000 - 44,999
- (7) 45,000+
- (8) Unknown/

## COMPARISON GROUP EDUCATIONAL STATUS

Definition: Educational level attained at the time of the study that best describes comparison group subjects in the research report.

Indicators: description fitting a category or specification within the report.

Abbreviation: COMPEDU

## Coding:

- (1) Less than 6th Grade
- (2) 6th to 9th grade
- (3) 10th to 12th Grade
- (4) High school graduates
- (5) Some College or Technical school
- (6) College graduates or more
- (7) Mixed group
- (8) Unknown/

## PREGNANT GROUP

Definition: The pregnant group is a group of pregnant adolescent females clearly identified as participating in the study as the focus of the study. Adolescence is considered between 13 and 19 years of age based consistent with the custom of the U.S. Department of Health and Human Services, National Center for Health Statistics' reporting

of natality statistics.

Indicators: identification in text or tables.

#### PREGNANT GROUP MEAN AGE

Definition: Average chronological age ascribed to pregnant group subjects in the research report. Source include numerical values, age range, or age categories given.

Indicators:

Abbreviation: PREGAGE

Coding: numerical value provided.

If recodeing is necessary this variable may be recoded to age categories.

1. Adolescents
2. Adults

#### PREGNANT GROUP ETHNIC

Definition: Ethnic group ascribed to pregnant group subjects in the research report.

Indicators: specification in the report.

Abbreviation: PREGETH

Coding:

- (1) White
- (2) Black
- (3) Hispanic
- (4) Asian, Pacific Islander
- (5) American Indian, Native Alaskan
- (6) Mixed group
- (7) Other/

#### PREGNANT GROUP MARITAL STATUS

Definition: Marital status ascribed to pregnant group subjects in the research report.

Indicators: specification in the report.

Abbreviation: PREGMAR

Coding:

- (1) Single (Never Married)
- (2) Married
- (3) Widowed
- (4) Divorced
- (5) Mixed group
- (6) Other/

#### PREGNANT GROUP FAMILY INCOME

Definition: Family income ascribed to pregnant group subjects in the research report.

Indicators: description fitting a category or specification within the report.

Abbreviation: PREGFAM\$

Coding:

- (1) Low
- (2) Middle
- (3) Upper
- (4) 0000 - 14,999
- (5) 15,000 - 29,999
- (3) 30,000 - 44,999
- (7) 45,000+
- (8) Unknown/

#### PREGNANT GROUP EDUCATIONAL STATUS

Definition: Educational level attained at the time of the study that best describes pregnant group subjects in the research report.

Indicators: description fitting a category or specification within the report.

Indicators:

Abbreviation: PREGEDU

Coding:

- (1) Less than 6th Grade
- (2) 6th to 9th grade
- (3) 10th to 12th Grade
- (4) High school graduates
- (5) Some College or Technical school
- (6) College graduates or more
- (7) Mixed group
- (8) Unknown

#### SETTING

Definition: The location in which the study was reported to have been conducted.

Indicators: specification in the report.

Abbreviation: SETTING

Coding:

- (1) Hospital
- (2) Clinic
- (3) Home
- (4) Hospice
- (5) Long-term facility
- (6) University
- (7) Unknown
- (8) Other/

#### NURSING THEORY

Definition: Identification of nursing theory as conceptual basis for the study.

Indicators: names of theorist, bibliographic reference.

Abbreviation: NTHEORY

Coding:

- (0) No
- (1) Yes/

### NON-NURSING THEORY

Definition: Identification of a theory other than nursing as the conceptual basis for the study.

Indicators: names of theorist, bibliographic references.

Abbreviation: NONTHEO

Coding:

(0) No

(1) Yes/

### CONCEPT/CONSTRUCT

Definition: Identification of a theory or concept as the basis for the study.

Indicators: names of theorist, use of concept language, bibliographic references.

Abbreviation: CONCEPT

Coding: Written in on coding form, categories will be created from a list generated from the coding forms, then the topics will be coded.

### TOPIC

Definition: Subject matter addressed in the research report.

Indicators: title, definition of terms, abstract.

Abbreviation: TOPIC

Coding: Written in on coding form, categories will be created from a list generated from the coding forms, then the topics will be coded.

### INSTRUMENT USED

Definition: The research tool used to address the research topic and collect the data of interest.

Indicators: Instrument name, description and reliability and validity information.

Abbreviation: INSTRUM

Coding: Written in on coding form, categories will be created from a list generated from the coding forms, then the instruments will be coded.

### REPORTED INSTRUMENT ALPHA

Definition: The reported reliability, Chronbachs alpha of the instrument used to address the research topic.

Indicators: reliability data, alpha =.

Abbreviation: INALPHA

Coding: Numerical value provided in the research report.

### STANDARDIZED INSTRUMENT

Definition:

Indicators: Description of the instrument.

Abbreviation: INSTAND

## Coding:

- (0) No
- (1) Yes/

## NUMBER OF DEPENDENT VARIABLES

Definition: The number of dependent variables the study presents under consideration.

Indicators: description of purpose, research questions or hypotheses, instruments used, data from tables.

Abbreviation: NODVS

Coding: Numerical value of DVs described and reported in the research.

## SAMPLE SIZE: COMPARISON GROUP

Definition: Number of individuals in the comparison group.

Indicators: Report text, tables, or abstract.

Abbreviation: COMPSMSZ

Coding: Numerical value provided in the research report.

## MEAN VALUE: COMPARISON GROUP

Definition: The mean (average) score/value of the comparison group on the instrument that measures the topic of interest.

Indicators: Report text, tables, or abstract.

Abbreviation: COMPMEAN

Coding: Numerical value provided in the research report.

## STANDARD DEVIATION: COMPARISON GROUP

Definition: The statistical standard deviation from the mean score/value for the comparison group.

Indicators: Report text, tables, or abstract.

Abbreviation: COMPSD

Coding: Numerical value provided in the research report.

## SAMPLE SIZE: PREGNANT GROUP

Definition: Number of individuals in the pregnant group.

Indicators: Report text, tables, or abstract.

Abbreviation: PREGSMSZ

Coding: Numerical value provided in the research report.

## MEAN VALUE: PREGNANT GROUP

Definition: The mean (average) score/value of the pregnant group on the instrument that measures the topic of interest.

Indicators: Report text, tables, or abstract.

Abbreviation: PREGMEAN

Coding: Numerical value provided in the research report.

## STANDARD DEVIATION: PREGNANT GROUP

Definition: The statistical standard deviation from the mean score/value for the comparison group.

Indicators: Report text, tables, or abstract.

Abbreviation: PREGSD

Coding: Numerical value provided in the research report.

## POOLED VARIANCE ESTIMATE

Definition: Estimate of the population variance on the outcome variable, obtained when the sums of squared deviations from two or more sources are combined and this total is divided by the combined degrees of freedom of the sources. Assumes that sources variances are homogeneous.

Equation: See appendix Formulas.

Abbreviation: PVAR

Coding: Computed value.

## STATISTICAL TEST USED

Definition: Reported statistical test judged to measure the study question.

Indicators: Report text, tables, or abstract.

Abbreviation: STATU

Coding:

- (1) Frequency, percentage, means, variance
- (2) Bivariate correlation
- (3) Chi-square, Fisher's Exact, McNemar
- (4) Mann-Whitney U, Sign, Wilcoxon matched pairs  
signed ranks, Kruskal Wallis, Kolmogorov-Smirnov
- (5) ANOVA, t
- (6) ANCOVA
- (7) Multivariate correlation (r<sup>2</sup>, etc.)
- (8) MANOVA (repeated measures, time series)
- (9) Factor analysis
- (10) Path analysis
- (11) LISREL
- (12) Other/

## OBSERVED VALUE TYPE

Definition: Value type reported resulting from application of the statistical test used.

Indicators: Report text, tables, or abstract.

Abbreviation: OBVALTYP

Coding:

- (1) Chi-Square
- (2) Z-value
- (3) t-value
- (4) F-value
- (5) Other/

## OBSERVED VALUE: MA VARIABLE

Definition: Actual statistical value reported.

Indicators: Reported in text, tables, or abstract.

Abbreviation: OBVAL

Coding: Numerical value provided in the research report.

## P-VALUE

Definition: P value corresponding with the reported statistical value. The probability level reported in each study associated with the relevant hypothesis;

Indicators: Reported in text, tables, or abstract.

Abbreviation: PVAL

Coding: Numerical value provided in the research report.

## Z VALUE

Definition: The Z score associated with each probability level (P-VALUE) from a stand normal deviate table (Z score table).

Indicators: Calculated from P-VALUE

Abbreviation: ZVAL

Coding: Calculated value.

## r CORRELATION E.S.

Definition: The effect is the magnitude of a relationship or a difference between two groups on a given measure. The effect size may be expressed as a correlation ( $\underline{r}$ ) calculated and used to combine the results of studies and assess effectiveness of variables under study (Rosenthal, 1991).

Indicators: Reported in text, tables, or abstract as a correlation. Other values must be converted to an ( $\underline{r}$ ) value. See appendix Formulas.

Abbreviation: R

Coding: Numerical value provided in the research report or a computed value.

## FISHER'S Z

Definition: The Fisher's  $\underline{z}_r$  is a transformation of  $\underline{r}$  that

is normally distributed and makes the variance independent of the unknown true value of the correlation.

Abbreviation: FISHERZ

Equation: See appendix Formulas.

Abbreviation: FISHERZ

Coding: Computed value.

#### POWER VALUE

Definition: An a posteriori calculation of the probability that a statistical test of the null hypothesis in a completed study would have led to a rejection of that particular null hypothesis. Determination of power depends upon knowledge of three parameters: the significance criterion and directionality, the effect size (ES), and the sample size (Choen, 1988).

Indicators: alpha level; direction (one or two-tails); E.S. (d, r, or F); sample size n.

Abbreviation: POWER

Coding: Computed value.



## Appendix C

### Quality of Study Instrument & QSI Guide

# Quality of Study Instrument - Study Number: \_\_\_\_\_

279

	NA	Absent	Low	Med	High
<b>1.0 Introduction</b>					
1.1 Justification for Study	—	0	1	2	3
1.2 Conceptual framework	—	0	1	2	3
1.3 Statement of problem or purpose	—	0	1	2	3
1.4 Critical review of research	—	0	1	2	3
1.5 Methodological issues	—	0	1	2	3
1.6 Hypotheses or study questions stated	—	0	1	2	3
1.7 Operational definitions	—	0	1	2	3
n = _____	Subtotal _____				

<b>2.0 Methodology</b>					
2.1 Design described	—	0	1	2	3
2.2 Control of validity threats	—	0	1	2	3
2.3 Sufficient sample size	—	0	1	2	3
2.4 Representative sample	—	0	1	2	3
2.5 Data collection procedures described	—	0	1	2	3
2.6 Instrument validity described	—	0	1	2	3
2.7 Instrument reliability described	—	0	1	2	3
n = _____	Subtotal _____				

<b>3.0 Data analysis and results</b>					
3.1 Statistical treatment	—	0	1	2	3
3.2 Data presentation	—	0	1	2	3
3.3 Results related to problem and/or hypotheses	—	0	1	2	3
3.4 Findings are substantiated by methods used	—	0	1	2	3
n = _____	Subtotal _____				

<b>4.0 Conclusions/Recommendations</b>					
4.1 Discussion related to background and significance	—	0	1	2	3
4.2 Conclusions logically derived from findings/results	—	0	1	2	3
4.3 Recommendations consistent with findings	—	0	1	2	3
4.4 Alternate explanations advanced	—	0	1	2	3
n = _____	Subtotal _____				

Total n = \_\_\_\_\_ Total score \_\_\_\_\_ Mean \_\_\_\_\_

## QUALITY OF STUDY INSTRUMENT

### GUIDE SHEET

#### GENERAL INSTRUCTIONS:

Consider limitations within journal page limits. This form has been designed as a guide for use when coding the quality of each study.

NA, unless otherwise indicated, should only be used or employed when the research design does not require or support the item.

#### 1.0 INTRODUCTION

##### 1.1 Justification for study (in abstract or body of paper)

- 3 clear, sufficient elaboration.
- 2 identified, no elaboration.
- 1 mentioned, vague.
- 0 not given.

##### 1.2 Conceptual or theoretical framework

- 3 identified and described, summarized theoretical or conceptual framework.
- 2 identified and described, NO SUMMARY of theoretical or conceptual framework.
- 1 identified only, not described.
- 0 not identified.

##### 1.3 Statement of problem or purpose (in abstract or body)

- 3 introduced early, clearly stated, does not ramble  
If problem statement, includes phenomenon of concern and population to be studied.  
If purpose statement, includes goal, variables, population, and setting for study.
- 2 clearly stated, other criteria absent.
- 1 vague, rambles, fuzzy global statement, or inferred only.
- 0 not identifiable.

#### 1.4 Critical review of research

- 3 critical review of research included, summarized polar theories and research findings, gaps identified.
- 2 review of research included, NO SUMMARY of research findings or identification of research gaps.
- 1 general review of some literature included.
- 0 no review included.

#### 1.5 Methodological issues

- 3 methodology is clearly appropriate for hypotheses, subjects and situation.
- 2 methodology may not be clearly appropriate for some aspect of the study.
- 1 appropriateness of methodologies are questionable.
- 0 not appropriate.

#### 1.6 Hypotheses or study questions stated

- 3 all hypotheses or study questions stated clearly, expected relationships stated.
- 2 hypotheses or study questions stated.
- 1 inferred, partial, vague.
- 0 not identifiable.

#### 1.7 Operational definitions (listed or found within narrative)

- 3 all key terms identified, variables defined and methods for quantifying them described.
- 2 all key terms identified and variables defined.
- 1 included some but not all key terms.
- 0 not included.

## 2.0 METHODOLOGY

### 2.1 Design described

- 3 clear enough to replicate, includes a description of the research design, the setting used, procedures, description of sample, methods used to collect data (outlined in consecutive order), and data analysis procedures.
- 2 could be replicated with effort, some elements might need clarification with author for exact duplication.
- 1 vague description, missing some elements, confusing.
- 0 not described.

### 2.2 Control of validity threats (code NA except experimental study)

- 3 methods used to control for biases are evident.
- 2 sources of bias evident, methods implied.
- 1 sources of bias evident but method to control vague.
- 0 no attempt to control for validity threats evident.
- NA non-experimental study.

### 2.3 Sufficient sample size

- 3 in general greater than or equal to 30 (large enough not to violate statistical assumptions). Consider homogeneity of sample (heterogeneous generally need larger sample). Appropriate for type of study (e.g. pilot study) and for treatment of data.
- 2 greater than or equal to 30 (large enough not to violate statistical assumptions). However, it may not be appropriate for type of study (e.g. pilot study) and for treatment of data.
- 1 in general less than 30. Questionable number for type of study or treatment of data.
- 0 insufficient or insufficient data to determine.

## 2.4 Representative sample

- 3 used probability sampling - random sample.
- 2 used stratified or purpose sampling and strategy and rationale are clear.
- 1 used non-probability sampling - convenience sample.
- 0 insufficient data to determine.

## 2.5 Data collection procedures described

- 3 detail sufficient to replicate; procedure clear enough to determine if results can be repeated (the who, what, when & how).
- 2 detail sufficient to replicate with effort; some aspect of procedures would need to be clarified with author.
- 1 vague or partial description of procedure.
- 0 not described.

## 2.6 Instrument validity described (content, predictive, construct)

- 3 addresses all 3.
- 2 addresses 2.
- 1 addresses only 1.
- 0 not mentioned.
- NA qualitative study.

2.7 Instrument reliability described stability, (e.g. test-retest), equivalence, (e.g. two instruments or Interrater reliability), homogeneity, (e.g., split halves test).

- 3 addresses all 3.
- 2 addresses 2.
- 1 addresses only 1.
- 0 not mentioned.
- NA qualitative study.

### 3.0 DATA ANALYSIS AND RESULTS

#### 3.1 Statistical treatment

- 3 analytical procedures are appropriate for the design and appropriate to answer research questions (if no research question or hypothesis stated, then score this item = 1).
- 2 analytical procedures are appropriate for the design and appropriate to answer research questions, however, not all research questions or hypotheses are addressed.
- 1 confusing, limited, question appropriateness, no research question(s) or hypothesis per se.
- 0 not specified, or totally inappropriate for design or research questions or hypotheses.
- NA qualitative study.

#### 3.2 Data presentation

- 3 presented clearly, logically, accurately all statistics of interest included; (such as %s, t-tests, df, and p values).
- 2 presented clearly, logically, and accurately, however not all statistics of interest included; (such as %s, t-tests, df, and p values).
- 1 confusing, limited stats and/or inaccuracies (i.e., t-test, but no df).
- 0 inadequate / not presented.

#### 3.3 Results related to problem and/or hypotheses or research questions (relates to 1.5).

- 3 addresses problem, research question or hypothesis clearly & adequately (requires 3 on item 1.5 for this score). Exception: qualitative without problem, RQ or HO that clearly addresses purpose.
- 2 incompletely addresses problem, research question or hypothesis.
- 1 vague or partially addresses problem, RQ, HO (and/or purpose of qualitative studies without problem, RQ or HO).
- 0 results not presented in relation to problem or hypotheses.

### 3.4 Findings are substantiated by methods used

- 3 substantiated, findings supported by data.
- 2 substantiated with qualifications, findings and clearly linked to data.
- 1 partially substantiated/supported.
- 0 not substantiated.

## 4.0 CONCLUSIONS, RECOMMENDATIONS

### 4.1 Discussion related to background, significance, and conceptual framework

- 3 related to all 3; discussion of all the statistically significant results included.
- 2 related to 2; discussion of all the statistically significant results included..
- 1 related to 1.
- 0 not related.

### 4.2 Conclusions logically derived from findings/results

- 3 conclusions logically derived from findings and (must be) related to research questions or hypothesis.
- 2 conclusions indistinct; findings clearly related to research questions or hypothesis.
- 1 partial or vague, fuzzy, too general, logical but not related to research question or hypothesis.
- 0 no attempt to connect conclusions with findings/results or not included.

### 4.3 Recommendations consistent with findings

- 3 relationship between findings and recommendations clearly related to research question or hypothesis and applicability to scientific area of practice.
- 2 relationship between findings and recommendations clearly related to research question or hypothesis; applicability to scientific area of practice vague.
- 1 relationship unclear, illogical; may be clear and logical but not related to research question or hypothesis.
- 0 no recommendations included.



#### 4.4 Alternate explanations presented

- 3 if other conclusions can be drawn, author identifies them; if alternate explanations evident, author identifies them for journals, brief comments acceptable.
- 2 if other conclusions can be drawn, author briefly identifies them.
- 1 inferred or vague attempt.
- 0 not mentioned.

#### SCORING INSTRUCTIONS:

Each item is rated, giving a sum for each of the four categories. The overall sum of the four categories is divided by the number of items (22) resulting in an overall mean rating for the quality of study. The maximum score is 66 and the minimum score is 0.

3	High quality	>=	2.3 to 3.00
2	Medium quality	>=	1.3 to 2.29
1	Low quality	>=	1.2 to 0.01
0	Absent		0
NA	Not applicable		NA

This method of scoring comes from the technical report funded by the National Institutes of Health, National Center for Nursing Research, Academic Research Enhancement Award, Grant Number R15-NR02441, "An Integrative Review of Oncology Nursing Research," page 219, Mary Colette Smith, R.N., Ph.D., Principal Investigator.

#### ACKNOWLEDGEMENT:

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Appendix D

Cluster Variables

Study	Var		Ins			r	Zr	Mean			Total
No	No.	Variable	No.	Instrument	Alpha	Value	Value	Zr	CGN	PGN	N
1001	1	Family Strength	1	Family Strength Questionnaire	0.89	0.948	1.812		55	64	119
1001	2	Parental Communication	2	Parent/Adolescent Communication Scale (Olson)	0.91	0.93	1.653		55	64	119
1001	3	Family Adaptability	3	Family Adaption and Cohesion Evaluation Scale III	0.92	0.33	0.341		55	64	119
1001	4	Family Cohesion	3	Family Adaption and Cohesion Evaluation Scale III	0.92	0.902	1.479		55	64	119
1001	5	Self Esteem	4	Adolescent Self-Esteem Scale	0.89	0.9	1.47		55	64	119
1002	1	Identity Self - TSCS	2	Tennessee Self-Concept Scale	0.8	0.437	0.464		23	23	46
1002	2	Self Satisfaction - TSCS	2	Tennessee Self-Concept Scale	0.8	0.01	0.01		23	23	46
1002	3	Behavior Self - TSCS	2	Tennessee Self-Concept Scale	0.8	0.203	0.203		23	23	46
1002	4	Physical Self - TSCS	2	Tennessee Self-Concept Scale	0.8	0.153	0.153		23	23	46
1002	5	Moral/Ethical Self - TSCS	2	Tennessee Self-Concept Scale	0.8	0.308	0.315		23	23	46
1002	6	Family Self - TSCS	2	Tennessee Self-Concept Scale	0.8	0.221	0.223		23	23	46
1002	7	Personal Self - TSCS	2	Tennessee Self-Concept Scale	0.8	0.053	0.052		23	23	46
1002	8	Social Self - TSCS	2	Tennessee Self-Concept Scale	0.8	0.19	0.19		23	23	46
1002	9	Self criticism - TSCS	2	Tennessee Self-Concept Scale	0.8	0.084	0.083		23	23	46
1002	10	Self Perception TOTAL - TSCS	2	Tennessee Self-Concept Scale	0.8	0.194	0.194		23	23	46
1002	11	Number of brothers	1	ADI Demographics	NP	0.037	0.036	0.053	23	23	46
1002	12	Number of sisters	1	ADI Demographics	NP	0.07	0.069		23	23	46
1002	13	Birth Order	1	ADI Demographics	NP	0.178	0.178		23	23	46
1002	14	Living away from Home	1	ADI Demographics	NP	0.051	0.05		23	23	46
1002	15	At present, more than one sex partner	1	ADI Demographics	NP	0.088	0.087		23	23	46
1003	1	Socio-Economic Status	1	ADI	NP	0.289	0.296		82	43	125
1003	2	Sex typing of activities	1	ADI	0.83	0.174	0.175		82	43	125
1003	3	Educational expectations	1	ADI	NP	0.212	0.214		82	43	125
1003	4	Occupational Aspirations	1	ADI	0.84	0.168	0.169		82	43	125
1003	5	School Grades	1	ADI	NP	0.183	0.185		82	43	125
1003	6	School Dropouts	1	ADI	NP	0.212	0.214		82	43	125
1003	7	School performance	1	ADI	NP	0.183	0.185		82	43	125
1003	8	Sex Role Orientation	1	ADI	0.83	0.262	0.267		82	43	125
1003	9	Locus of Control	2	Rotter Internal/External Scale	0.38	0.094	0.094		82	43	125
1003	10	Self Esteem	1	ADI	NP	-0.014	-0.01		82	43	125
1004	1	Relationship with father	1	ADI	NP	0.253	0.255		12	26	38
1004	2	Relationship with Mother	1	ADI	NP	0	0		12	26	38
1005	1	Self Concept	1	Tennessee Self Concept Scale	NP	0.203	0.204		24	37	61
1005	3	Self Esteem	2	Rosenberg Self Esteem Scale	NP	0.444	0.471		Norms	37	37
1006	1	Locus of Control - School 1	1	Rotter Internal/External Scale	NP	0.164	0.165	0.168	136	28	164
1006	2	Locus of Control - School 2	1	Rotter Internal/External Scale	NP	0.171	0.172		136	28	164
1007	1	Self Esteem - Bagen Construct	1	ADI	NP	0.154	0.154		30	30	60
1007	2	Self Esteem - Coopersmith SEI	2	Coopersmith Self-Esteem Inventory	NP	0.1	0.098		15	15	30
1007	3	Locus of control	3	Norwick-Strickland Locus of Control Scale	NP	0.05	0.049		15	15	30
1008	1	Self Esteem	2	Rosenberg Self Esteem Scale	NP	0.05	0.05		59	69	128
1008	2	Locus of Control	3	Norwick-Strickland Locus of Control Scale	0.23	0.075	0.075		59	69	128
1008	3	Social Acceptance	4	Self Perception Inventory	NP	0.076	0.076		59	69	128
1008	4	School Competence	4	Self Perception Inventory	NP	0.009	0.009		59	69	128
1008	5	Behavioral Conduct	4	Self Perception Inventory	NP	0.02	0.02		59	69	128
1008	6	Global Self Worth	4	Self Perception Inventory	NP	0.225	0.228		59	69	128
1008	7	PSDM - Approach	5	Problem Solving and Decisions Making Inventory	0.61	0.151	0.151	0.278	59	69	128
1008	8	PSDM - Control	5	Problem Solving and Decisions Making Inventory	0.64	0.386	0.405		59	69	128

Study	Var		Ins			r	Zr	Mean			Total
No	No.	Variable	No.	Instrument	Alpha	Value	Value	Zr	CGN	PGN	N
1008	9	Social Support	6	Perceived Competence Scale	0.92	0.101	0.101		59	69	128
1008	10	Beliefs about Ease of Parenting	1	ADI	0.54	0.185	0.187		59	69	128
1008	11	Future Orientation	7	Futuristic Orientation Scale	NP	0.126	0.126		59	69	128
1008	12	Math GPA	1	ADI	NP	0.34	0.353	0.276	59	69	128
1008	13	English GPA	1	ADI	NP	0.317	0.327		59	69	128
1008	14	ITBS - Math Assessment	8	Iowa Test of Basic Skills	NP	0.156	0.156		59	69	128
1008	15	ITBS - Language Assessment	8	Iowa Test of Basic Skills	NP	0.145	0.145		59	69	128
1008	16	Percent of Failed Classes	1	ADI	NP	0.382	0.4		59	69	128
1008	17	Times sex before used protection	1	ADI	NP	0.294	0.301	0.288	28	69	97
1008	18	Percent of protected sex	1	ADI	NP	0.45	0.482		28	69	97
1008	19	Frequency sex in last year	1	ADI	NP	0.189	0.19		28	69	97
1008	20	Confidence in contraceptive	1	ADI	NP	0.177	0.178		28	69	97
1008	21	Daughter of teen mother	1	ADI	NP	0.08	0.08	0.188	58	69	127
1008	22	Sister of teen mother	1	ADI	NP	0.142	0.143		58	69	127
1008	23	Relative of teen mother	1	ADI	NP	0.306	0.315		58	69	127
1008	24	Friend of teen mother	1	ADI	NP	0.212	0.214		58	69	127
1009	1	Prenatal Attachment	1	Prenatal Attachment Tool	0.82	0.075	0.074		32	20	52
1009	2	Maternal-Infant Attachment	2	Maternal-Infant Adaption Scale	0.74	0.038	0.038		32	20	52
1010	1	Onset of Menstruation	1	ADI	NP	0.364	0.38		50	50	100
1010	2	Spelling - Individual performance	2	Wide Range Achievement Test	NP	0.675	0.817		50	50	100
1010	3	Math - Individual performance	2	Wide Range Achievement Test	NP	0.475	0.514		50	50	100
1010	4	Reading - Individual performance	2	Wide Range Achievement Test	NP	0.941	1.743		50	50	100
1010	5	Cannot Say Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.199	0.201		50	50	100
1010	6	Lie Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.083	0.083		50	50	100
1010	7	Confusion Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.362	0.377		50	50	100
1010	8	Corrective Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.083	0.083		50	50	100
1010	9	Hypochondriasis scale	3	Minnesota Multiphasic Personality Inventory	NP	0.421	0.447		50	50	100
1010	10	Depression Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.336	0.348		50	50	100
1010	11	Conversion Hysteria Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.287	0.294		50	50	100
1010	12	Psychopathic Deviate Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.489	0.533		50	50	100
1010	13	Masculinity/Femininity Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.078	0.078		50	50	100
1010	14	Paranoid Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.145	0.146		50	50	100
1010	15	Psychasthenia Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.053	0.053		50	50	100
1010	16	Schizophrenia Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.258	0.263		50	50	100
1010	17	Hypomania Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.174	0.175		50	50	100
1010	18	Social Introversion Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.17	0.171		50	50	100
1010	19	Conscious Anxiety Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.069	0.068		50	50	100
1010	20	Conscious Repression Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.265	0.27		50	50	100
1010	21	Ego Strength Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.537	0.597		50	50	100
1010	22	Low Back Pain Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.285	0.291		50	50	100
1010	23	Caudality Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.241	0.244		50	50	100
1010	24	Dependancy Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.089	0.089		50	50	100
1010	25	Dominance Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.393	0.414		50	50	100
1010	26	Social Responsibility Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.482	0.523		50	50	100
1010	27	Prejudice Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.37	0.386		50	50	100
1010	28	Social Status Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.341	0.354		50	50	100
1010	29	Control Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.03	0.03		50	50	100

Study	Var		Ins			r	Zr	Mean			Total
No	No.	Variable	No.	Instrument	Alpha	Value	Value	Zr	CGN	PGN	N
1010	30	Dissimulation Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.081	0.08		50	50	100
1011	1	Girls Education	1	ADI - Demo	NP	0.46	0.494		35	39	74
1011	2	Foster care	1	ADI - Demo	NP	0.43	0.457		35	39	74
1011	3	Abusive boyfriend	1	ADI - Demo	NP	0.41	0.433		35	39	74
1011	4	Home stability	1	ADI - Demo	NP	0.38	0.397		35	39	74
1011	5	Boyfriends education	1	ADI - Demo	NP	0.36	0.374		35	39	74
1011	6	Boyfriend/Sibling in jail	1	ADI - Demo	NP	0.32	0.329		35	39	74
1011	7	Self perception past Pos	2	Family Relations Inventory	NP	0.156	0.156	0.075	35	39	74
1011	8	Self perception past NEG	2	Family Relations Inventory	NP	0.006	0.006		35	39	74
1011	9	Self perception present Pos	2	Family Relations Inventory	NP	0.112	0.112		35	39	74
1011	10	Self perception present NEG	2	Family Relations Inventory	NP	0.028	0.028		35	39	74
1011	11	Perception of father past Pos	2	Family Relations Inventory	NP	0.331	0.342	0.385	35	39	74
1011	12	Perception of father past NEG	2	Family Relations Inventory	NP	0.485	0.526		35	39	74
1011	13	Perception of father present Pos	2	Family Relations Inventory	NP	0.284	0.291		35	39	74
1011	14	Perception of father present NEG	2	Family Relations Inventory	NP	0.367	0.382		35	39	74
1011	15	Perception of mother past Pos	2	Family Relations Inventory	NP	0.3	0.308	0.277	35	39	74
1011	16	Perception of mother past NEG	2	Family Relations Inventory	NP	0.215	0.216		35	39	74
1011	17	Perception of mother present Pos	2	Family Relations Inventory	NP	0.305	0.313		35	39	74
1011	18	Perception of mother present NEG	2	Family Relations Inventory	NP	0.265	0.27		35	39	74
1011	19	Perception of sister past Pos	2	Family Relations Inventory	NP	0.177	0.178	0.158	35	39	74
1011	20	Perception of sister past NEG	2	Family Relations Inventory	NP	0.074	0.074		35	39	74
1011	21	Perception of sister present Pos	2	Family Relations Inventory	NP	0.34	0.351		35	39	74
1011	22	Perception of sister present NEG	2	Family Relations Inventory	NP	0.029	0.029		35	39	74
1011	23	Perception of brother past Pos	2	Family Relations Inventory	NP	0.126	0.126	0.155	35	39	74
1011	24	Perception of brother past NEG	2	Family Relations Inventory	NP	0.249	0.253		35	39	74
1011	25	Perception of brother present Pos	2	Family Relations Inventory	NP	0.219	0.221		35	39	74
1011	26	Perception of brother present NEG	2	Family Relations Inventory	NP	0.022	0.022		35	39	74
1011	27	Ego development (LSCT)	3	Loevinger Sentence Completion Test	NP	0.278	0.283		34	33	67
1011	28	Autonomy vs dependence card 2 needs	4	Thematic Apperception Test	NP	0.265	0.269	0.228	28	31	59
1011	29	Autonomy vs dependence card 2 presses	4	Thematic Apperception Test	NP	0.236	0.238		28	31	59
1011	30	Autonomy vs dependence card 76F	4	Thematic Apperception Test	NP	0.183	0.183		28	31	59
1011	31	Autonomy vs dependence card 36F needs	4	Thematic Apperception Test	NP	0.236	0.238		28	31	59
1011	32	Autonomy vs dependence card 36F presses	4	Thematic Apperception Test	NP	0.21	0.211		28	31	59
1012	1	Anxiety - Trait	1	State-Trait Anxiety Inventory (Spielberger)	0.72	0.004	0.004		58	35	93
1012	2	Anxiety - State	1	State-Trait Anxiety Inventory (Spielberger)	0.86	0.016	0.016		58	35	93
1012	3	Self Confidence	2	Pharis Self-Confidence Scale	0.89	0.078	0.078		58	35	93
1013	1	Locus of Control	3	Locus of Control Scale for Children	NP	0.167	0.166		20	19	39
1013	2	Impulse Control	2	Offer Self-Image Questionnaire for Adolescents	NP	0.023	0.023	0.091	20	19	39
1013	3	Emotional Tone	2	Offer Self-Image Questionnaire for Adolescents	NP	0.049	0.049		20	19	39
1013	4	Body Image	2	Offer Self-Image Questionnaire for Adolescents	NP	0.15	0.149		20	19	39
1013	5	Social Relations	2	Offer Self-Image Questionnaire for Adolescents	NP	0.074	0.073		20	19	39
1013	6	Morals	2	Offer Self-Image Questionnaire for Adolescents	NP	0.161	0.16		20	19	39
1013	7	Sexual Attitudes	2	Offer Self-Image Questionnaire for Adolescents	NP	0.116	0.115		20	19	39
1013	8	Family Relations	2	Offer Self-Image Questionnaire for Adolescents	NP	0.026	0.026		20	19	39
1013	9	Mastery	2	Offer Self-Image Questionnaire for Adolescents	NP	0.093	0.092		20	19	39
1013	10	Vocational Goals	2	Offer Self-Image Questionnaire for Adolescents	NP	0.18	0.179		20	19	39
1013	11	Psycho-pathology	2	Offer Self-Image Questionnaire for Adolescents	NP	0.09	0.089		20	19	39

Study	Var		Ins			r	Zr	Mean			Total
No	No.	Variable	No.	Instrument	Alpha	Value	Value	Zr	CGN	PGN	N
1013	12	Superior Adjustment	2	Offer Self-Image Questionnaire for Adolescents	NP	0.044	0.044		20	19	39
1013	13	Total Siblings	1	ADI Demographics	NP	0.085	0.084		20	19	39
1013	14	Mothers Education	1	ADI Demographics	NP	0.211	0.211		20	19	39
1013	15	Mothers Age at first child	1	ADI Demographics	NP	0.002	0.002		20	19	39
1013	16	Years behind in school	1	ADI Demographics	NP	0.007	0.006		20	19	39
1014	1	Pregnant sister or friend	1	ADI Demographics	NP	0	0		23	23	46
1014	2	Move to a new home	1	ADI Demographics	NP	0.225	0.226		23	23	46
1014	3	Increased arguments	1	ADI Demographics	NP	0.043	0.043		23	23	46
1014	4	Change in parent's finances	1	ADI Demographics	NP	0.043	0.043		23	23	46
1014	5	Change in school	1	ADI Demographics	NP	0.3	0.306		23	23	46
1014	6	Baptism, confirmation of self or family member	1	ADI Demographics	NP	0.087	0.086		23	23	46
1014	7	Trouble with a sibling	1	ADI Demographics	NP	0.13	0.13		23	23	46
1014	8	Failed a class	1	ADI Demographics	NP	0.044	0.044		23	23	46
1014	9	Parent has a new job	1	ADI Demographics	NP	0	0		23	23	46
1014	10	Death of a close friend or relative	1	ADI Demographics	NP	0	0		23	23	46
1015	1	Number of children in family	1	ADI Demographics	NP	0.547	0.608		31	21	52
1015	2	Family income	1	ADI Demographics	NP	0.554	0.619		31	21	52
1015	3	Intimacy - Mother/daughter	2	Mother/Daughter Relationship Scale	0.91	0.064	0.063		31	21	52
1015	4	Attachment - Mother/daughter	2	Mother/Daughter Relationship Scale	0.91	0	0		31	21	52
1015	5	Strength of feelings - Mother/daughter	2	Mother/Daughter Relationship Scale	0.91	0.068	0.067		31	21	52
1016	1	P Scale - EPQ Scales	2	Eysenck Personality Questionnaire	NP	0.157	0.158		251	16	267
1016	2	E Scale - EPQ Scales	2	Eysenck Personality Questionnaire	NP	0.201	0.204		251	16	267
1016	3	N Scale - EPQ Scales	2	Eysenck Personality Questionnaire	NP	0.036	0.036		251	16	267
1016	4	L Scale - EPQ Scales	2	Eysenck Personality Questionnaire	NP	0.086	0.086		251	16	267
1016	5	Strongly Indicative - Sexual Activity	1	ADI	NP	0.656	0.785	0.593	251	16	267
1016	6	Moderately Indicative - Sexual Activity	1	ADI	NP	0.382	0.401		251	16	267
1016	7	Romantisium - Romantic Items	1	ADI	NP	0.374	0.392		251	16	267
1017	1	Overall level of irrational thinking - CASI	3	Child and Adolescent Scale of Irrationality	NP	0.374	0.388		16	25	41
1017	2	General irrationality - APBQ	1	ADI Adolescent Pregnancy Belief Questionnaire	NP	0.428	0.452		16	25	41
1017	3	Positive fertility - APBQ	1	ADI Adolescent Pregnancy Belief Questionnaire	NP	0.575	0.647		16	25	41
1017	4	Negative fertility - APBQ	1	ADI Adolescent Pregnancy Belief Questionnaire	NP	0.278	0.283		16	25	41
1017	5	Sexual Knowledge - APBQ	1	ADI Adolescent Pregnancy Belief Questionnaire	NP	0.203	0.203		16	25	41
1017	6	Number of years behind in school	1	ADI Adolescent Pregnancy Belief Questionnaire	NP	0.255	0.257		16	25	41
1017	7	Global measure of intelligence	2	Jr/Sr High School Personality Questionnaire	NP	0.226	0.227		16	25	41
1018	1	Self Criticism	2	Tennessee Self-Concept Scale	0.8	0.209	0.211		108	88	196
1018	2	Total Conflict	2	Tennessee Self-Concept Scale	0.8	0.08	0.08		108	88	196
1018	3	Total Self Concept	2	Tennessee Self-Concept Scale	0.8	0.068	0.068		108	88	196
1018	4	Dissatisfaction with family relationships	1	ADI	NP	0.101	0.101		108	88	196
1018	5	Father status	1	ADI	NP	0.11	0.11		108	88	196
1019	1	Onset of menarche less than age 12	1	ADI	NP	0.147	0.147		49	47	96
1019	2	Sexual Activity	1	ADI	NP	0.604	0.696		49	47	96
1020	1	Self Esteem	3	Coopersmith	NP	0.156	0.156		123	98	221
1020	2	Parental Care	2	Parental Bonding Instrument	NP	0.041	0.041		124	101	225
1020	3	Parental Control	2	Parental Bonding Instrument	NP	0.017	0.017		131	100	231
1020	4	Fathers in the Home.	1	ADI Demographic	NP	0.225	0.228		134	108	242
1021	1	Use of leisure time	1	ADI Questionnaire	NP	0.549	0.611		20	30	50
1021	2	Participates in Sports	1	ADI Questionnaire	NP	0.212	0.213		20	30	50



Study	Var		Ins			r	Zr	Mean			Total
No	No.	Variable	No.	Instrument	Alpha	Value	Value	Zr	CGN	PGN	N
1021	3	Has Hobbies	1	ADI Questionnaire	NP	0.695	0.85		20	30	50
1021	4	Person Adolescent feels closest to.	1	ADI Questionnaire	NP	0.53	0.585		20	30	50
1022	1	Residence with parents	1	ADI Questionnaire	NP	0.141	0.142		294	52	346
1022	2	Frequency of sex	1	ADI Questionnaire	NP	0.186	0.188		294	52	346
1022	3	Desire baby before age 20.	1	ADI Questionnaire	NP	0.253	0.259		294	52	346
1023	1	Conflict in the family	3	Family Environment Scale (FES)	0.75	0.084	0.084		193	82	275
1023	2	Control exercised by the parents	3	Family Environment Scale (FES)	0.67	0.046	0.046		193	82	275
1023	3	Teen is Adopted	2	ADI	NP	0.041	0.041		193	82	275
1023	4	Families include step-parents	2	ADI	NP	0.278	0.285		193	82	275
1023	5	Other Teenage mothers in immediate family	2	ADI	NP	0.348	0.363		193	82	275
1023	6	Deaths or serious illness in family	2	ADI	NP	0.042	0.042		193	82	275
1023	7	Held back in school	2	ADI	NP	0.259	0.264	0.349	193	82	275
1023	8	Suspended from School	2	ADI	NP	0.52	0.575		193	82	275
1023	9	School or Career plans	2	ADI	NP	0.206	0.208		193	82	275
1023	10	Families talk about sex with daughters	2	ADI	NP	0.063	0.063		193	82	275
1023	11	Families involved with ETOH, drugs, or Law	2	ADI	NP	0.095	0.095		193	82	275
1023	12	Daughter reports abuse.	2	ADI	NP	0.032	0.032		193	82	275
1023	13	Held back a grade in school	2	ADI	NP	0.148	0.149		193	82	275
1023	14	Suspended from school	2	ADI	NP	0.112	0.112		193	82	275
1023	15	Family involvement with ETOH, drugs, Law	2	ADI	NP	0.148	0.149		193	82	275
1023	16	Report of Abuse	2	ADI	NP	0.174	0.175		193	82	275
1023	17	Relationship with Father	2	ADI	NP	0.166	0.167		193	82	275
1023	18	Relationship with Peers	2	ADI	NP	0.166	0.167		193	82	275
1024	1	Adult male role model in the home	1	ADI	NP	0.018	0.017		32	19	51
1024	2	Self report GPA	1	ADI	NP	0.278	0.283		32	20	52
1024	3	Retained in school	1	ADI	NP	0.376	0.392		32	20	52
1024	4	Special Education	1	ADI	NP	0.336	0.346		32	20	52
1024	5	Educational Goals	1	ADI	NP	0.367	0.381		32	20	52
1024	6	Ranking of parents as a source of information about sex.	1	ADI	NP	0.045	0.045		32	20	52
1024	7	Perceived role of women	2	Attitudes Toward Women Scale for Adolescents	0.72	0.388	0.406		32	20	52
1024	8	Physical Self - TSCS	3	Tennessee Self-Concept Scale	NP	0.038	0.037		32	20	52
1024	9	Moral/Ethical Self - TSCS	3	Tennessee Self-Concept Scale	NP	0.003	0.003		32	20	52
1024	10	Personal Self - TSCS	3	Tennessee Self-Concept Scale	NP	0.087	0.086		32	20	52
1024	11	Social Self - TSCS	3	Tennessee Self-Concept Scale	NP	0.391	0.409		32	20	52
1024	12	Identity Self - TSCS	3	Tennessee Self-Concept Scale	NP	0.102	0.101		32	20	52
1024	13	Self Satisfaction - TSCS	3	Tennessee Self-Concept Scale	NP	0.059	0.059		32	20	52
1024	14	Behavior Self - TSCS	3	Tennessee Self-Concept Scale	NP	0.005	0.005		32	20	52
1024	15	Self criticism - TSCS	3	Tennessee Self-Concept Scale	NP	0.059	0.059		32	20	52
1024	16	Self Perception TOTAL - Tenn Self-concept scale	3	Tennessee Self-Concept Scale	NP	0.077	0.076		32	20	52
1024	17	Cohesion - Family Environment Scale	4	Family Environment Scale (FES)	NP	0.128	0.127		32	20	52
1024	18	Expressive - Family Environment Scale	4	Family Environment Scale (FES)	NP	0.213	0.214		32	20	52
1024	19	Conflict - Family Environment Scale	4	Family Environment Scale (FES)	NP	0.141	0.141		32	20	52
1024	20	Independence - Family Environment Scale	4	Family Environment Scale (FES)	NP	0.004	0.004		32	20	52
1024	21	Achievement - Family Environment Scale	4	Family Environment Scale (FES)	NP	0.096	0.095		32	20	52
1024	22	Inter Cult - Family Environment Scale	4	Family Environment Scale (FES)	NP	0.175	0.175		32	20	52
1024	23	Act Rec - Family Environment Scale	4	Family Environment Scale (FES)	NP	0.218	0.219		32	20	52
1024	24	Moral/religious - Family Environment Scale	4	Family Environment Scale (FES)	NP	0.165	0.165		32	20	52

Study	Var		Ins			r	Zr	Mean			Total
No	No.	Variable	No.	Instrument	Alpha	Value	Value	Zr	CGN	PGN	N
1024	25	Organizational - Family Environment Scale	4	Family Environment Scale (FES)	NP	0.035	0.034		32	20	52
1024	26	Control - Family Environment Scale	4	Family Environment Scale (FES)	NP	0.019	0.019		32	20	52
1025	1	Nurturance - Parental (IPBI)	5	Iowa Parental Behavior Inventory	NP	0.226	0.228	0.241	30	30	60
1025	2	Nurturance - Father (IPBI)	5	Iowa Parental Behavior Inventory	NP	0.241	0.244		30	30	60
1025	3	Nurturance - Mother (IPBI)	5	Iowa Parental Behavior Inventory	NP	0.248	0.251		30	30	60
1025	4	Control - Parental (IPBI)	5	Iowa Parental Behavior Inventory	NP	0.031	0.031	0.047	30	30	60
1025	5	Control - Father (IPBI)	5	Iowa Parental Behavior Inventory	NP	0.006	0.006		30	30	60
1025	6	Control - Mother (IPBI)	5	Iowa Parental Behavior Inventory	NP	0.103	0.102		30	30	60
1025	7	Communication - Parental (IPBI)	5	Iowa Parental Behavior Inventory	NP	0.325	0.335	0.323	30	30	60
1025	8	Communication - Father (IPBI)	5	Iowa Parental Behavior Inventory	NP	0.211	0.213		30	30	60
1025	9	Communication - Mother (IPBI)	5	Iowa Parental Behavior Inventory	NP	0.401	0.421		30	30	60
1025	10	Self Esteem - Rosenberg	2	Rosenberg Self Esteem Scale	NP	0.254	0.258		30	30	60
1025	11	Responsibility	3	Gordon Personal Profile for Responsibility	0.7	0.054	0.054	0.257	30	30	60
1025	12	Responsibility toward pregnancy	4	Positive Responsibility toward Pregnancy Question	0.33	0.433	0.46		30	30	60
1025	13	Presence of father in home	1	ADI	NP	0.424	0.449		30	30	60
1026	1	Social Support - friends	1	Perceived Social Support Instrument	0.88	0.565	0.636		35	35	70
1026	2	Social Support - family	1	Perceived Social Support Instrument	0.9	0.388	0.406		35	35	70
1026	3	Coping - Distancing	2	Ways of Coping Questionnaire	NP	0.254	0.258		35	35	70
1026	4	Self Esteem - Coopersmith	3	Coopersmith	NP	0.396	0.416		35	35	70
1026	5	Coping strategies - escape/avoidance	2	Ways of Coping Questionnaire	NP	0.308	0.316		35	35	70
1026	6	Locus of Control	4	Norwicki-Strickland Int/Ext LOC Scale (ADULT)	NP	0.669	0.805		35	35	70
1027	1	Self Concept - Tenn Self Concept Scale	1	Tennessee Self-Concept Scale	NP	0.286	0.291		15	37	52
1027	2	Locus of Control - Rotter's I/E Scale	2	Rotter Internal/External Scale	NP	0.424	0.448		15	37	52
1028	1	Self Esteem - Coopersmith	2	Coopersmith SEI	NP	0.032	0.032		858	95	953
1028	2	Mom's occupation	1	ADI	NP	0.096	0.096		858	95	953
1028	3	Number of sisters	1	ADI	NP	0.094	0.095		858	95	953
1028	4	Head of household - single parent vs intact family	1	ADI	NP	0.089	0.089		858	95	953
1028	5	Dating onset after 13	1	ADI	NP	0.104	0.105		858	95	953
1028	6	Closest friend/relative (most indicated boyfriend)	1	ADI	NP	0.09	0.091		858	95	953
1028	7	Expected vocation	1	ADI	NP	0.098	0.098		858	95	953
1028	8	Church attendance	1	ADI	NP	0.089	0.089		858	95	953
1028	9	Girl's Feelings toward unexpected pregnancy.	1	ADI	NP	0.09	0.091		858	95	953
1028	10	Family's Feelings toward unexpected pregnancy.	1	ADI	NP	0.112	0.113		858	95	953
1029	1	Schooling	1	ADI	NP	0.522	0.578		100	129	229
1029	2	Future Expectations	1	ADI	NP	0.485	0.529		100	129	229
1029	3	Work Aspirations	1	ADI	NP	0.47	0.509		100	129	229
1029	4	Number of Friends	1	ADI	NP	0.18	0.181		100	129	229
1029	5	Activities of friends	1	ADI	NP	0.287	0.295		100	129	229
1029	6	Acceptance of pregnancy by male friends	1	ADI	NP	0.243	0.248		100	129	229
1029	7	Religious Practice	1	ADI	NP	0.164	0.165		100	129	229
1030	1	Age at first coitus	1	ADI	NP	0.237	0.239		15	44	59
1030	2	Length of relationship with boyfriend	1	ADI	NP	0.338	0.349		15	44	59
1030	3	Recent Crisis	1	ADI	NP	0.13	0.129		15	44	59
1030	4	Previously used contraceptives	1	ADI	NP	0.312	0.32		15	44	59
1030	5	Planned future use of contraceptives	1	ADI	NP	0.225	0.227		15	44	59
1030	6	Person suggesting contraceptive use (self vs others).	1	ADI	NP	0.336	0.347		15	44	59
1030	7	Person suggesting avoidance of contraceptive (self vs others)	1	ADI	NP	0.054	0.054		15	44	59



Study	Var	Variable	Ins	Instrument	Alpha	r	Zr	Mean	CGN	PGN	Total
No	No.		No.		Value	Value	Value	Zr		N	
1030	8	Parents attitude toward daughter's sexual activity.	1	ADI	NP	0.281	0.286		15	44	59
1030	9	Mom's initial reaction	1	ADI	NP	0.112	0.111		15	44	59
1030	10	Father's initial reaction	1	ADI	NP	0.026	0.026		15	44	59
1030	11	Boyfriend happy with pregnancy.	1	ADI	NP	0.264	0.268		15	44	59
1030	12	Desire for pregnancy.	1	ADI	NP	0.322	0.331		15	44	59
1030	13	Wish to keep child.	1	ADI	NP	0.297	0.304		15	44	59
1030	14	Plan to marry boyfriend	1	ADI	NP	0.105	0.105		15	44	59
1030	15	Boyfriend in school	1	ADI	NP	0.01	0.01		15	44	59
1030	16	Boyfriend at work	1	ADI	NP	0.109	0.108		15	44	59
1030	17	Knowledge of contraception - sexual contacts for pregnancy	1	ADI	NP	0.086	0.085		15	44	59
1030	18	Knowledge of contraception - timing of menstrual cycle to	1	ADI	NP	0.056	0.056		15	44	59
1031	1	Personal Control - Something stops me from doing better.	1	ADI	NP	0.152	0.153	0.124	180	16	196
1031	2	Personal Control - Don't have a chance	1	ADI	NP	0.125	0.125		180	16	196
1031	3	Personal Control - Good luck is most important	1	ADI	NP	0.092	0.092		180	16	196
1031	4	Self-Esteem Feel useless	1	ADI	NP	0.047	0.047	0.039	180	16	196
1031	5	Self-Esteem No good at all.	1	ADI	NP	0.061	0.061		180	16	196
1031	6	Self-Esteem Do things as well as others.	1	ADI	NP	0.027	0.027		180	16	196
1031	7	Self-Esteem Would not change self.	1	ADI	NP	0.021	0.021		180	16	196
1031	8	Mood/outlook good	1	ADI	NP	0.004	0.004	0.032	180	16	196
1031	9	Mood/outlook happy	1	ADI	NP	0.007	0.007		180	16	196
1031	10	Mood/outlook Worry	1	ADI	NP	0.085	0.085		180	16	196
1031	11	Religiosity - x/mo church attendance.	1	ADI	NP	0.2	0.203	0.114	180	16	196
1031	12	Religiosity - important.	1	ADI	NP	0.026	0.026		180	16	196
1031	13	Often think about health (Self-report of health status).	1	ADI	NP	0.009	0.009	0.181	180	16	196
1031	14	Self-rating of health (Self-report of health status).	1	ADI	NP	0.069	0.069		180	16	196
1031	15	Self-rating of health relative to others (Self-report of health status).	1	ADI	NP	0.105	0.105		180	16	196
1031	16	Last visit to the doctor.	1	ADI	NP	0.289	0.297		180	16	196
1031	17	Wanted medical attention greater than one year.	1	ADI	NP	0.4	0.423		180	16	196
1032	1	Ambivalence about Ego Identity	1	Q Sort - Adjective List	NP	0.234	0.237		30	32	62
1032	2	Mother component in - Ego Identity	1	Q Sort - Adjective List	NP	0.345	0.357		30	32	62
1032	3	Identification as an adequate woman _ Ego Identity	1	Q Sort - Adjective List	NP	0.895	1.441		30	32	62
1032	4	Dependency Needs	2	Marlowe-Crowne Social Desirability Scale	NP	0.432	0.459		30	32	62
1033	1	Anxiety - State	1	State-Trait Anxiety Inventory	NP	0.501	0.545		8	43	51
1033	2	Anxiety - Trait	1	State-Trait Anxiety Inventory	NP	0.208	0.209		8	43	51
1033	3	L scale MMPI	2	Minnesota Multiphasic Personality Inventory	NP	0.177	0.178	0.344	15	44	59
1033	4	F scale MMPI	2	Minnesota Multiphasic Personality Inventory	NP	0.471	0.507		15	44	59
1033	5	K scale MMPI	2	Minnesota Multiphasic Personality Inventory	NP	0.26	0.264		15	44	59
1033	6	Hs scale MMPI	2	Minnesota Multiphasic Personality Inventory	NP	0.223	0.225		15	44	59
1033	7	D scale MMPI	2	Minnesota Multiphasic Personality Inventory	NP	0.098	0.097		15	44	59
1033	8	Hy scale MMPI	2	Minnesota Multiphasic Personality Inventory	NP	0.277	0.282		15	44	59
1033	9	Pd scale MMPI	2	Minnesota Multiphasic Personality Inventory	NP	0.65	0.769		15	44	59
1033	10	Mf scale MMPI	2	Minnesota Multiphasic Personality Inventory	NP	0.191	0.192		15	44	59
1033	11	Pa scale MMPI	2	Minnesota Multiphasic Personality Inventory	NP	0.367	0.382		15	44	59
1033	12	Pt scale MMPI	2	Minnesota Multiphasic Personality Inventory	NP	0.337	0.348		15	44	59
1033	13	Sc scale MMPI	2	Minnesota Multiphasic Personality Inventory	NP	0.552	0.617		15	44	59
1033	14	Ma scale MMPI	2	Minnesota Multiphasic Personality Inventory	NP	0.536	0.594		15	44	59
1033	15	Si scale MMPI	2	Minnesota Multiphasic Personality Inventory	NP	0.023	0.022		15	44	59



Study	Var		Ins									Total
No	No.	Variable	No.	Instrument	Alpha	r	Zr	Mean				
1039	8	Contraceptive use preceeding month	1	ADI Demographics	NP	0.179	0.181			86	103	189
1039	9	Sexual frequency preceeding month	1	ADI Demographics	NP	0.098	0.098			86	103	189
1039	10	Mother knows of contraceptive use.	1	ADI Demographics	NP	0.201	0.203			86	103	189
1039	11	Contraceptive attitude and knowledge score	1	ADI Demographics	NP	0.26	0.265			86	56	142
1040	1	Grades	1	ADI	NP	0.044	0.044			151	136	287
1040	2	Plan to go to college	1	ADI	NP	0.345	0.359			151	136	287
1040	3	Sister was a teenage mother	1	ADI	NP	0.07	0.07			151	136	287
1040	4	Friend was a teenage mother	1	ADI	NP	0.229	0.233			151	136	287
1040	5	Believe can't get pregnant with 1st sex.	1	ADI	NP	0.158	0.16	0.14		151	136	287
1040	6	Believe can't get pregnant without climax	1	ADI	NP	0.076	0.076			151	136	287
1040	7	Believe must have frequent sex for pregnancy	1	ADI	NP	0.21	0.213			151	136	287
1040	8	Do not know when most likely to get pregnant.	1	ADI	NP	0.112	0.113			151	136	287
1040	9	Mean number of methods of contraception known.	1	ADI	NP	0.218	0.222			151	136	287
1040	10	Age at first sex	1	ADI	NP	0.018	0.018			151	136	287
1040	11	Age at menarche	1	ADI	NP	0.058	0.058			151	136	287
1040	12	Mean number of siblings	1	ADI	NP	0.183	0.185			151	136	287
1041	1	School Attendance	1	ADI	NP	0.287	0.294			60	63	123
1041	2	Contentment - Pearlin & Schooler	2	Perlin and Schooler Questions (1978)	0.72	0.283	0.29			60	63	123
1041	3	Self Esteem - Rosenberg	3	Rosenberg Self Esteem Scale	NP	0.248	0.253			60	63	123
1041	4	Sense of Control/Responsibility - Perlin Mastery Scale	4	Perlin Mastery Scale	0.81	0.061	0.061			60	63	123
1041	5	Anxiety State/Trait Anxiety Inventory	5	State-Trait Anxiety Inventory	0.83	0.064	0.064			60	63	123
1041	6	Depression - Beck Depression Inventory	6	Beck Depression Inventory	NP	0.079	0.079			60	63	123
1041	7	Lonliness Scale- UCLA (short form) - Social support	7	Lonliness Scale UCLA (short form)	NP	0.305	0.314	0.171		60	63	123
1041	8	Social Support Inventory - Social support/help	8	Social Support Inventory	0.73	0.075	0.075			60	63	123
1041	9	Network Strenght - Strength of social network	8	Social Support Inventory	0.67	0.123	0.123			60	63	123
1041	10	Conflict with parents - frequency of conflicts with parents	8	Social Support Inventory	NP	0.203	0.205			60	63	123
1042	1	Knowledge of child development	1	Child Development Scores	NP	0.067	0.067			90	50	140
1042	2	Knowledge of Reproduction/Contraception	2	Human Reproduction Scores	NP	0.014	0.014			90	50	140
1042	3	Maternal Satisfaction	3	Maternal Attitude Scale	NP	0.147	0.147	0.082		50	90	140
1042	4	Encouragement of positive interaction	3	Maternal Attitude Scale	NP	0.013	0.013			50	90	140
1042	5	Maternal Anxiety	3	Maternal Attitude Scale	NP	0.086	0.086			50	90	140
1043	1	Defenselessness/Vulnerability	1	ADI	NP	0.07	0.07			328	82	410
1043	2	Guilt deflection	1	ADI	NP	0.063	0.063			328	82	410
1043	3	Perceived rejection by father	1	ADI	NP	0.081	0.081			328	82	410
1043	4	Perceived rejection by school	1	ADI	NP	0.072	0.072			328	82	410
1043	5	Perceived rejection by peers	1	ADI	NP	0.064	0.064			328	82	410
1043	6	Contranormative attitudes	1	ADI	NP	0.17	0.171			328	82	410
1043	7	Delinquent behavior	1	ADI	NP	0.063	0.063			328	82	410
1043	8	Violent behavior	1	ADI	NP	0.114	0.115			328	82	410
1043	9	Trouble with authorities	1	ADI	NP	0.156	0.157			328	82	410
1043	10	Perceived rejection for ascribed characteristics (SES, Rac	1	ADI	NP	0.128	0.129			328	82	410
1043	11	Awareness of deviant patterns	1	ADI	NP	0.12	0.121			328	82	410
1043	12	Inconsistency of parental rules	1	ADI	NP	0.058	0.058			328	82	410
1044	1	Broken Homes	1	ADI	NP	0.262	0.266	0.157		19	26	45
1044	2	Broken Homes	1	ADI	NP	0.048	0.048	---		36	50	86
1044	3	Father figure in the home.	1	ADI	NP	0.339	0.349	0.206		19	26	45
1044	4	Father figure in the home.	1	ADI	NP	0.063	0.063	---		36	50	86

Study	Var		Ins				r	Zr	Mean			Total
No	No.	Variable	No.	Instrument	Alpha	Value	Value	Zr	CGN	PGN	N	
1044	5	Mother employed outside the home	1	ADI	NP	0.169	0.168	0.195	19	26	45	
1044	6	Mother employed outside the home	1	ADI	NP	0.219	0.221	---	36	50	86	
1044	7	Death in close family or friends.	1	ADI	NP	0.154	0.154	0.161	19	26	45	
1044	8	Death in close family or friends.	1	ADI	NP	0.157	0.157	---	36	50	86	
1044	9	Illness in family, minor or serious.	1	ADI	NP	0.244	0.247	---	19	26	45	
1044	10	Illness in family, minor or serious.	1	ADI	NP	0.141	0.142	---	36	50	86	
1044	11	Three or more sisters	1	ADI	NP	0	0	---	19	26	45	
1044	12	Three or more sisters	1	ADI	NP	0.248	0.252	---	36	50	86	
1044	13	Older sister	1	ADI	NP	0.093	0.092	---	19	26	45	
1044	14	Older sister	1	ADI	NP	0.205	0.207	---	36	50	86	
1044	15	Pregnant sister	1	ADI	NP	0.18	0.18	---	19	26	45	
1044	16	Pregnant sister	1	ADI	NP	0.13	0.13	---	36	50	86	
1044	17	Room of her own.	1	ADI	NP	0.142	0.142	---	19	26	45	
1044	18	Room of her own.	1	ADI	NP	0.23	0.233	---	36	50	86	
1044	19	Corporal punishment.	1	ADI	NP	0.302	0.309	0.25	19	26	45	
1044	20	Corporal punishment.	1	ADI	NP	0.164	0.165	---	36	50	86	
1044	21	Denial of priveleges.	1	ADI	NP	0.349	0.36	---	19	26	45	
1044	22	Denial of priveleges.	1	ADI	NP	0.11	0.11	---	36	50	86	
1044	23	Both corporal punishment and denial of priveleges.	1	ADI	NP	0.349	0.36	---	19	26	45	
1044	24	Both corporal punishment and denial of priveleges.	1	ADI	NP	0.262	0.267	---	36	50	86	
1044	25	Subject considers punishment effective.	1	ADI	NP	0.312	0.319	---	19	26	45	
1044	26	Subject considers punishment effective.	1	ADI	NP	0.107	0.107	---	36	50	86	
1044	27	No religious preference.	1	ADI	NP	0.333	0.343	0.256	19	26	45	
1044	28	No religious preference.	1	ADI	NP	0.053	0.053	---	36	50	86	
1044	29	No religious preference and rarely attended church.	1	ADI	NP	0.464	0.497	---	19	26	45	
1044	30	No religious preference and rarely attended church.	1	ADI	NP	0.203	0.204	---	36	50	86	
1044	31	Regular preference and attended at least once per week.	1	ADI	NP	0.306	0.312	---	19	26	45	
1044	32	Regular preference and attended at least once per week.	1	ADI	NP	0.129	0.129	---	36	50	86	
1044	33	Dated two times per week or more.	1	ADI	NP	0.331	0.34	0.244	19	26	45	
1044	34	Dated two times per week or more.	1	ADI	NP	0.147	0.148	---	36	50	86	
1044	35	Knowledge of dating, marrage, and sex from school classe	1	ADI	NP	0.073	0.072	0.237	19	26	45	
1044	36	Knowledge of dating, marrage, and sex from school classe	1	ADI	NP	0.297	0.305	---	36	50	86	
1044	37	Knowledge of dating, marrage, and sex from books.	1	ADI	NP	0.225	0.226	---	19	26	45	
1044	38	Knowledge of dating, marrage, and sex from books.	1	ADI	NP	0.296	0.303	---	36	50	86	
1044	39	Knowledge of dating, marrage, and sex from sister.	1	ADI	NP	0.327	0.336	---	19	26	45	
1044	40	Knowledge of dating, marrage, and sex from sister.	1	ADI	NP	0.237	0.24	---	36	50	86	
1044	41	Knowledge of dating, marrage, and sex from somone else	1	ADI	NP	0.221	0.222	---	19	26	45	
1044	42	Knowledge of dating, marrage, and sex from somone else	1	ADI	NP	0.146	0.146	---	36	50	86	
1044	43	Knowledge of dating, marrage, and sex from confidant.	1	ADI	NP	0.357	0.37	---	19	26	45	
1044	44	Knowledge of dating, marrage, and sex from confidant.	1	ADI	NP	0.152	0.152	---	36	50	86	
1044	45	Mensturation at age 12 yrs or less.	1	ADI	NP	0.037	0.036	0.102	19	26	45	
1044	46	Mensturation at age 12 yrs or less.	1	ADI	NP	0.167	0.168	---	36	50	86	
1044	47	Mensturation makes her sick, scared or discusted.	1	ADI	NP	0.239	0.24	0.212	19	26	45	
1044	48	Mensturation makes her sick, scared or discusted.	1	ADI	NP	0.183	0.184	---	36	50	86	
1044	49	Negative feelings or discomfort with mensturation.	1	ADI	NP	0.229	0.231	0.202	19	26	45	
1044	50	Negative feelings or discomfort with mensturation.	1	ADI	NP	0.301	0.309	---	36	50	86	
1044	51	Eight or greater neurotic symptoms within the past year.	1	ADI	NP	0.239	0.241	---	19	26	45	



Study	Var		Ins			r	Zr	Mean			Total
No	No.	Variable	No.	Instrument	Alpha	Value	Value	Zr	CGN	PGN	N
1044	52	Eight or greater neurotic symptoms within the past year.	1	ADI	NP	0.154	0.154	---	36	50	86
1044	53	Four or greater depressive symptoms within the past year	1	ADI	NP	0.202	0.203	---	19	26	45
1044	54	Four or greater depressive symptoms within the past year	1	ADI	NP	0.199	0.2	---	36	50	86
1044	55	Psychosomatic symptoms within the past year.	1	ADI	NP	0.427	0.452	---	19	26	45
1044	56	Psychosomatic symptoms within the past year.	1	ADI	NP	0.226	0.228	---	36	50	86
1044	57	Loss of interest.	1	ADI	NP	0.049	0.049	---	19	26	45
1044	58	Loss of interest.	1	ADI	NP	0.355	0.369	---	36	50	86
1044	59	Loss of interest within the past year.	1	ADI	NP	0.169	0.168	---	19	26	45
1044	60	Loss of interest within the past year.	1	ADI	NP	0.181	0.182	---	36	50	86
1044	61	Ill at ease prior to the past year.	1	ADI	NP	0.076	0.075	---	19	26	45
1044	62	Ill at ease prior to the past year.	1	ADI	NP	0.248	0.252	---	36	50	86
1044	63	Ill at ease within the past year.	1	ADI	NP	0.037	0.036	---	19	26	45
1044	64	Ill at ease within the past year.	1	ADI	NP	0.277	0.283	---	36	50	86
1044	65	Excessive perspiration prior to the past year.	1	ADI	NP	0	0	---	19	26	45
1044	66	Excessive perspiration prior to the past year.	1	ADI	NP	0.265	0.269	---	36	50	86
1044	67	Excessive perspiration within the past year.	1	ADI	NP	0.037	0.036	---	19	26	45
1044	68	Excessive perspiration within the past year.	1	ADI	NP	0.192	0.193	---	36	50	86
1044	69	Cold hands/feet prior to the past year.	1	ADI	NP	0.322	0.33	---	19	26	45
1044	70	Cold hands/feet prior to the past year.	1	ADI	NP	0.103	0.103	---	36	50	86
1044	71	Cold hands/feet within the past year.	1	ADI	NP	0.373	0.387	---	19	26	45
1044	72	Cold hands/feet within the past year.	1	ADI	NP	0.043	0.043	---	36	50	86
1044	73	Dizzy spells within the past year.	1	ADI	NP	0.221	0.222	---	19	26	45
1044	74	Dizzy spells within the past year.	1	ADI	NP	0.141	0.141	---	36	50	86
1044	75	Crying spells within the past year.	1	ADI	NP	0.186	0.186	---	19	26	45
1044	76	Crying spells within the past year.	1	ADI	NP	0.312	0.321	---	36	50	86
1045	1	Two parent home	1	ADI	NP	0.234	0.237	---	36	31	67
1045	2	Broken home	1	ADI	NP	0.159	0.16	---	36	31	67
1045	3	Father absent home	1	ADI	NP	0.092	0.092	---	36	31	67
1045	4	Reconstituted home	1	ADI	NP	0.128	0.128	---	36	31	67
1045	5	Eldest Child	1	ADI	NP	0.234	0.236	---	36	31	67
1045	6	Middle Child	1	ADI	NP	0.319	0.328	---	36	31	67
1045	7	Youngest Child	1	ADI	NP	0.213	0.215	---	36	31	67
1045	8	Extended or non-family members in household	1	ADI	NP	0.043	0.043	---	36	31	67
1045	9	Grandmother in household	1	ADI	NP	0.019	0.019	---	36	31	67
1045	10	Cohesion - Relationship - FES	2	Family Environment Scale	NP	0.123	0.123	0.271	36	31	67
1045	11	Cohesion - Relationship - FES	2	Family Environment Scale	NP	0.175	0.175		36	31	67
1045	12	Expressiveness - Relationship - FES	2	Family Environment Scale	NP	0.325	0.335		36	31	67
1045	13	Expressiveness - Relationship - FES	2	Family Environment Scale	NP	0.035	0.035		36	31	67
1045	14	Conflict - Relationship - FES	2	Family Environment Scale	NP	0.892	1.423		36	31	67
1045	15	Conflict - Relationship - FES	2	Family Environment Scale	NP	0.892	1.423		36	31	67
1045	16	Independence - Personal Growth - FES	2	Family Environment Scale	NP	0.132	0.132		36	31	67
1045	17	Achievement - Personal Growth - FES	2	Family Environment Scale	NP	0.26	0.264		36	31	67
1045	17	Independence - Personal Growth - FES	2	Family Environment Scale	NP	0.226	0.228		36	31	67
1045	19	Achievement - Personal Growth - FES	2	Family Environment Scale	NP	0.152	0.152		36	31	67
1045	20	Intellectual Cultural - Personal Growth - FES	2	Family Environment Scale	NP	0.112	0.112		36	31	67
1045	21	Intellectual Cultural - Personal Growth - FES	2	Family Environment Scale	NP	0.12	0.119		36	31	67
1045	22	Active Recreational - Personal Growth - FES	2	Family Environment Scale	NP	0.125	0.125		36	31	67

Study	Var		Ins				r	Zr	Mean			Total
No	No.	Variable	No.	Instrument	Alpha	Value	Value	Zr	CGN	PGN	N	
1045	23	Active Recreational - Personal Growth - FES	2	Family Environment Scale	NP	0.024	0.024		36	31	67	
1045	24	Moral Religious - Personal Growth - FES	2	Family Environment Scale	NP	0.016	0.015		36	31	67	
1045	25	Moral Religious - Personal Growth - FES	2	Family Environment Scale	NP	0.048	0.048		36	31	67	
1045	26	Organization - System Maintenance - FES	2	Family Environment Scale	NP	0.155	0.155		36	31	67	
1045	27	Organization - System Maintenance - FES	2	Family Environment Scale	NP	0.165	0.165		36	31	67	
1045	28	Control - System Maintenance - FES	2	Family Environment Scale	NP	0.058	0.058		36	31	67	
1045	29	Control - System Maintenance - FES	2	Family Environment Scale	NP	0.306	0.314		36	31	67	
1045	30	Loving - Father - PCR	3	Parent-Child Relationship Scale	NP	0.464	0.499	0.132	36	31	67	
1045	31	Loving - Father - PCR	3	Parent-Child Relationship Scale	NP	0.054	0.054		36	31	67	
1045	32	Rejection - Father - PCR	3	Parent-Child Relationship Scale	NP	0.306	0.313		36	31	67	
1045	33	Rejection - Father - PCR	3	Parent-Child Relationship Scale	NP	0.078	0.077		36	31	67	
1045	34	Demanding - Father - PCR	3	Parent-Child Relationship Scale	NP	0.066	0.065		36	31	67	
1045	35	Demanding - Father - PCR	3	Parent-Child Relationship Scale	NP	0.089	0.089		36	31	67	
1045	36	Casualness - Father - PCR	3	Parent-Child Relationship Scale	NP	0.23	0.232		36	31	67	
1045	37	Casualness - Father - PCR	3	Parent-Child Relationship Scale	NP	0.017	0.017		36	31	67	
1045	38	Attention - Father - PCR	3	Parent-Child Relationship Scale	NP	0.349	0.361		36	31	67	
1045	39	Attention - Father - PCR	3	Parent-Child Relationship Scale	NP	0.101	0.101		36	31	67	
1045	40	Loving - Mother - PCR	3	Parent-Child Relationship Scale	NP	0.212	0.213		36	31	67	
1045	41	Loving - Mother - PCR	3	Parent-Child Relationship Scale	NP	0.013	0.013		36	31	67	
1045	42	Rejection - Mother - PCR	3	Parent-Child Relationship Scale	NP	0.026	0.026		36	31	67	
1045	43	Rejection - Mother - PCR	3	Parent-Child Relationship Scale	NP	0.052	0.051		36	31	67	
1045	44	Demanding - Mother - PCR	3	Parent-Child Relationship Scale	NP	0.015	0.015		36	31	67	
1045	45	Demanding - Mother - PCR	3	Parent-Child Relationship Scale	NP	0.149	0.149		36	31	67	
1045	46	Casualness - Mother - PCR	3	Parent-Child Relationship Scale	NP	0.125	0.125		36	31	67	
1045	47	Casualness - Mother - PCR	3	Parent-Child Relationship Scale	NP	0.071	0.07		36	31	67	
1045	48	Attention - Mother - PCR	3	Parent-Child Relationship Scale	NP	0.167	0.167		36	31	67	
1045	49	Attention - Mother - PCR	3	Parent-Child Relationship Scale	NP	0.011	0.011		36	31	67	
1045	50	Physical - TSCS	4	Tennessee Self-Concept Scale	NP	0.244	0.247	0.128	36	31	67	
1045	51	Physical - TSCS	4	Tennessee Self-Concept Scale	NP	0.126	0.125		36	31	67	
1045	52	Moral-Religious - TSCS	4	Tennessee Self-Concept Scale	NP	0.204	0.206		36	31	67	
1045	53	Moral-Religious - TSCS	4	Tennessee Self-Concept Scale	NP	0.147	0.147		36	31	67	
1045	54	Personal - TSCS	4	Tennessee Self-Concept Scale	NP	0.088	0.087		36	31	67	
1045	55	Personal - TSCS	4	Tennessee Self-Concept Scale	NP	0.007	0.007		36	31	67	
1045	56	Family - TSCS	4	Tennessee Self-Concept Scale	NP	0.089	0.088		36	31	67	
1045	57	Family - TSCS	4	Tennessee Self-Concept Scale	NP	0.064	0.064		36	31	67	
1045	58	Social - TSCS	4	Tennessee Self-Concept Scale	NP	0.24	0.243		36	31	67	
1045	59	Social - TSCS	4	Tennessee Self-Concept Scale	NP	0.117	0.117		36	31	67	
1045	60	Identity - TSCS	4	Tennessee Self-Concept Scale	NP	0.273	0.278		36	31	67	
1045	61	Identity - TSCS	4	Tennessee Self-Concept Scale	NP	0.075	0.074		36	31	67	
1045	62	Self-Esteem - TSCS	4	Tennessee Self-Concept Scale	NP	0.183	0.184		36	31	67	
1045	63	Self-Esteem - TSCS	4	Tennessee Self-Concept Scale	NP	0.059	0.059		36	31	67	
1045	64	Behavior - TSCS	4	Tennessee Self-Concept Scale	NP	0.086	0.086		36	31	67	
1045	65	Behavior - TSCS	4	Tennessee Self-Concept Scale	NP	0.03	0.029		36	31	67	
1045	66	Total - TSCS	4	Tennessee Self-Concept Scale	NP	0.14	0.14	0.096	36	31	67	
1045	67	Total - TSCS	4	Tennessee Self-Concept Scale	NP	0.053	0.053		36	31	67	
1045	68	Enmeshment - SFIS	5	Structural Family Interaction Scale	NP	0.091	0.091	0.236	36	31	67	
1045	69	Enmeshment - SFIS	5	Structural Family Interaction Scale	NP	0.221	0.223		36	31	67	

Study	Var	Variable	Ins	Instrument	Alpha	r	Zr	Mean	CGN	PGN	Total
No	No.		No.			Value	Value	Zr			N
1045	70	Disengagement - SFIS	5	Structural Family Interaction Scale	NP	0.062	0.061		36	31	67
1045	71	Disengagement - SFIS	5	Structural Family Interaction Scale	NP	0.07	0.069		36	31	67
1045	72	Neglect - SFIS	5	Structural Family Interaction Scale	NP	0.201	0.202		36	31	67
1045	73	Neglect - SFIS	5	Structural Family Interaction Scale	NP	0.069	0.068		36	31	67
1045	74	Mother Neglect - SFIS	5	Structural Family Interaction Scale	NP	0.05	0.05		36	31	67
1045	75	Mother Neglect - SFIS	5	Structural Family Interaction Scale	NP	0.226	0.228		36	31	67
1045	76	Father Neglect - SFIS	5	Structural Family Interaction Scale	NP	0.293	0.3		36	31	67
1045	77	Father Neglect - SFIS	5	Structural Family Interaction Scale	NP	0.13	0.13		36	31	67
1045	78	Overprotection - SFIS	5	Structural Family Interaction Scale	NP	0.138	0.138		36	31	67
1045	79	Overprotection - SFIS	5	Structural Family Interaction Scale	NP	0.144	0.144		36	31	67
1045	80	Mother Overprotection - SFIS	5	Structural Family Interaction Scale	NP	0.13	0.129		36	31	67
1045	81	Mother Overprotection - SFIS	5	Structural Family Interaction Scale	NP	0.06	0.059		36	31	67
1045	82	Father Overprotection - SFIS	5	Structural Family Interaction Scale	NP	0.105	0.104		36	31	67
1045	83	Father Overprotection - SFIS	5	Structural Family Interaction Scale	NP	0.257	0.261		36	31	67
1045	84	Rigidity - SFIS	5	Structural Family Interaction Scale	NP	0.118	0.117		36	31	67
1045	85	Rigidity - SFIS	5	Structural Family Interaction Scale	NP	0.429	0.456		36	31	67
1045	86	Flexibility - SFIS	5	Structural Family Interaction Scale	NP	0.282	0.287		36	31	67
1045	87	Flexibility - SFIS	5	Structural Family Interaction Scale	NP	0.359	0.373		36	31	67
1045	88	Parent/Child Conflict Avoidance - SFIS	5	Structural Family Interaction Scale	NP	0.076	0.076		36	31	67
1045	89	Parent/Child Conflict Avoidance - SFIS	5	Structural Family Interaction Scale	NP	0.329	0.34		36	31	67
1045	90	Mother/Child Conflict Avoidance - SFIS	5	Structural Family Interaction Scale	NP	0.332	0.342		36	31	67
1045	91	Mother/Child Conflict Avoidance - SFIS	5	Structural Family Interaction Scale	NP	0.218	0.22		36	31	67
1045	92	Father/Child Conflict Avoidance - SFIS	5	Structural Family Interaction Scale	NP	0.204	0.206		36	31	67
1045	93	Father/Child Conflict Avoidance - SFIS	5	Structural Family Interaction Scale	NP	0.39	0.409		36	31	67
1045	94	Parent Conflict Expression w/o Resolution - SFIS	5	Structural Family Interaction Scale	NP	0.285	0.291		36	31	67
1045	95	Parent Conflict Expression w/o Resolution - SFIS	5	Structural Family Interaction Scale	NP	0.051	0.051		36	31	67
1045	96	Mother Conflict Expression w/o Resolution - SFIS	5	Structural Family Interaction Scale	NP	0.247	0.251		36	31	67
1045	97	Mother Conflict Expression w/o Resolution - SFIS	5	Structural Family Interaction Scale	NP	0.057	0.057		36	31	67
1045	98	Father Conflict Expression w/o Resolution - SFIS	5	Structural Family Interaction Scale	NP	0.093	0.092		36	31	67
1045	99	Father Conflict Expression w/o Resolution - SFIS	5	Structural Family Interaction Scale	NP	0.001	0.001		36	31	67
1045	100	Parent/Conflict Resolution - SFIS	5	Structural Family Interaction Scale	NP	0.03	0.03		36	31	67
1045	101	Parent/Conflict Resolution - SFIS	5	Structural Family Interaction Scale	NP	0.412	0.435		36	31	67
1045	102	Mother/Child Conflict Resolution - SFIS	5	Structural Family Interaction Scale	NP	0.103	0.103		36	31	67
1045	103	Mother/Child Conflict Resolution - SFIS	5	Structural Family Interaction Scale	NP	0.299	0.306		36	31	67
1045	104	Father/Child Conflict Resolution - SFIS	5	Structural Family Interaction Scale	NP	0.244	0.247		36	31	67
1045	105	Father/Child Conflict Resolution - SFIS	5	Structural Family Interaction Scale	NP	0.317	0.326		36	31	67
1045	106	Parent Management - SFIS	5	Structural Family Interaction Scale	NP	0.726	0.914		36	31	67
1045	107	Parent Management - SFIS	5	Structural Family Interaction Scale	NP	0.408	0.431		36	31	67
1045	108	Triangulation - SFIS	5	Structural Family Interaction Scale	NP	0.41	0.432		36	31	67
1045	109	Triangulation - SFIS	5	Structural Family Interaction Scale	NP	0.289	0.296		36	31	67
1045	110	Parent/Child Coalition - SFIS	5	Structural Family Interaction Scale	NP	0.313	0.321		36	31	67
1045	111	Parent/Child Coalition - SFIS	5	Structural Family Interaction Scale	NP	0.622	0.724		36	31	67
1045	112	Detouring - SFIS	5	Structural Family Interaction Scale	NP	0.252	0.256		36	31	67
1045	113	Detouring - SFIS	5	Structural Family Interaction Scale	NP	0.186	0.186		36	31	67
1046	1	L scale MMPI GI vs GIII	1	Minnesota Multiphasic Personality Inventory	NP	0.04	0.04		21	2054	2075
1046	2	L scale MMPI GII vs GIII	1	Minnesota Multiphasic Personality Inventory	NP	0.034	0.034		14	2054	2068
1046	3	F scale MMPI GI vs GIII	1	Minnesota Multiphasic Personality Inventory	NP	0.116	0.117		21	2054	2075

Educational Expectations,  $\underline{z_r} = 0.21$ ; Family Dynamics,  $\underline{z_r} = 0.07$ ; Future Orientation,  $\underline{z_r} = 0.15$ ; School Grades,  $\underline{z_r} = 0.24$ ; Living Arrangements,  $\underline{z_r} = 0.09$ ; Role Identity,  $\underline{z_r} = 0.45$ ; Occupational Expectations,  $\underline{z_r} = 0.18$ ; Parental Relationship,  $\underline{z_r} = 0.14$ ; Father Relationship,  $\underline{z_r} = 0.13$ ; Sexual Activity,  $\underline{z_r} = 0.14$ ; Sibling Relationship,  $\underline{z_r} = 0.10$ ; Self-Concept,  $\underline{z_r} = 0.12$ ; Self-Esteem,  $\underline{z_r} = 0.11$ ; and Social Responsibility,  $\underline{z_r} = 0.09$ .

Moderator Analysis. Using meta-analytic techniques, variable clusters were analyzed to answer the research questions:

Which study characteristics function as moderator variables to the observed psychosocial variable effect sizes? and,

Which study subject demographic characteristics function as moderator variables to the observed psychosocial variable effect sizes?

The twenty seven clusters that underwent meta-analysis were tested for moderator variables. The clusters which failed homogeneity analysis and failed to reject the null hypothesis (i.e., Anxiety, Sexual Knowledge, Depression, and Pregnant Role Model) were not analyzed further. During the



meta-analysis of each cluster, seventeen study characteristics and thirteen study subject demographic variables were analyzed as potential moderator variables. Moderator variables are "variables that are associated with effect magnitude" (Cooper and Hedges, 1994, p. 24). It is important to note that in this context moderator variables may be but are not considered intervening, extraneous or confounding variables.

ANOVA and the post-hoc Cochran's  $Q$  statistic were used to determine if effect sizes for study characteristics or demographic variables were homogenous. When effect sizes associated with a study characteristic or demographic variable were found to be homogeneous, ANOVA and the post-hoc Scheffe procedure were employed for assessment of the levels of the variable as a potential source of variance. When effect sizes associated with a study characteristic or demographic variable were found to be heterogeneous, the assumptions associated with ANOVA could not be met. Therefore,  $Q_t$  analysis was used to assess the levels of the study characteristics or demographic variables as sources of variance.

Study characteristics were previously defined as identifiable attributes of a study, such as setting,

reliability and validity information, quality, and theoretical approach. The seventeen variables analyzed as study characteristics include: publication year, publication form, journal type, source, number of authors, study form, research type, funding, design, sampling method, quality of study, setting, nursing theory, non-nursing theory, standard instrument, statistic used, and observation type.

The results of the analysis of levels of the variable publication year was typical of an assessment of study characteristics as moderators. Publication year was found to act as a moderator in 14 clusters reviewed. Publication year was subsequently analyzed using three sub-categories: 1964 through 1979, 1980 through 1989, and 1990 through 1994. When one or more of these sub-categories of the variable were found to be significantly different from the others the sub-category was determined to be a moderator. Though highest effect does not imply a sub-category as a moderator, it is helpful to consider which sub-category of the variable has the higher effect size. Consideration of higher effect size is only one approach to interpretation of the results. Higher effect sizes can be observed in the early years, 1964 through 1979, for the clusters Academic Performance, Dependency, Role Identity, and Occupational Expectations; in

the middle years, 1980 through 1989, for the clusters Locus of Control, Menstruation Onset, and Social Responsibility; and in recent years, 1990 through 1994, for clusters Parental Communication, Future Orientation, Living Arrangements, Parental Relationship, Peer Relationship, Self-Concept, and Self-Esteem. Higher effect sizes represent a greater magnitude of the variable represented by the cluster; this means the researcher found the variable to have a stronger effect on being pregnant or not pregnant, during the time period specified.

Interpretation of results of the cluster variables relationship with publication year must be considered in light of history, values, and social events of the time period under consideration. As an example, consider the higher effect sizes in the early years for the clusters Academic Performance, Dependency, Role Identity, and Occupational Expectations which may reflect the values of the late 1960s and the decade of the 1970s. Though this period is considered a time of social change and upheaval, it was rooted in core values of earlier years such as traditional female roles, female dependency, academic performance and a confident occupational outlook. These core family values are reflected by the adolescent research

subjects and through the observed variables within the clusters resulting in higher magnitude of effects.

For further interpretation of the differences in effect size relative to publication year and cluster variable, it may be of value to reanalyze publication year in smaller groupings of years, possibly down to the individual year. Variations in effect may reflect changes in social policy, social values, economic conditions, or shifts in family life (such as the rise of two income families). A social scientist or historian may be able to provide other theoretical explanations or implications for variations in effect over the years.

Sub-category analysis of publication form and journal type were also typical examples of moderator analysis. Publication form and journal type were found to act as a moderator in 11 of the meta-analyses. Publication form sub-category "journal" and journal type sub-category "specialty" were found to have higher effect sizes in 9 of the analyses (Academic Performance, Parental Communication, Dependency, Future Orientation, Living Arrangements, Parental Relationship, Self-Concept, and Self-Esteem). These topics are commonly presented in the literature and represent topics the general public believe to influence adolescent

pregnancy. Their frequency in the literature is not surprising and may represent a predilection to research and published topics of scientific as well as public interest; popularity of these topics may also contribute to the publication of "significant results." Publication form subcategory "dissertation" was significantly higher than "journal" in only two clusters beliefs about parenting (Parenting Beliefs) and social acceptance (Social Responsibility). The variables included in these two meta-analyses frequently tended to be of more academic rather than popular interest. Other implications of this result are not readily apparent and are left to future research.

Study subject demographic characteristics have previously been defined as identifiable attributes such as age, ethnic background, educational level, and socioeconomic class. The thirteen variables analyzed as demographic or study subject sample characteristics include: control group sample size, pregnant group sample size, total sample size, control group age, control group ethnic, control group marital status, control group income, control group educational status, pregnant group age, pregnant group ethnic, pregnant group marital status, pregnant group income, and pregnant group educational status. The

moderating effects of demographic or study subject sample characteristics may be different for each meta-analysis and should be considered carefully and in light of current theories of adolescent behavior. Adolescent age and ethnicity are good examples.

Adolescent age as considered in the comparison group age and pregnant group age variables were analyzed for each using cluster on two sub-categories: Low through 15.99 (years) and 16 (years) through High. Comparison group age was found to function as a moderator in 14 clusters, while pregnant group age was a moderator in 13 clusters. Analysis of the sub-categories of comparison group age for the highest effect size found that the Low through 15.99 (years) category occurred 8 times and the 16 (years) through High sub-category occurred 6 times. Analysis of the sub-categories of pregnant group age for the highest effect size found that the Low through 15.99 (years) sub-category occurred 6 times and the 16 (years) through High sub-category occurred 7 times. The implications of these results are unclear; however, when analyzed or compared for a particular meta-analysis more specific conclusions may be drawn.

If the moderating effects of age are considered for a specific meta-analysis with consideration of theories of adolescent behavior, more certain conclusions may be drawn. Comparison group age was found to be a moderator for the Parenting Beliefs cluster; however, pregnant group age was not found to be a moderator. The Low through 15.99 (years) sub-category had an effect size of  $\underline{z_r} = 0.25$  while the 16 (years) through High sub-category had an effect size of  $\underline{z_r} = 0.14$ ; these values were found to be significantly different at the  $p < 0.05$  level. These results may indicate that younger adolescents have a more positive belief about parenting; it may also indicate that as adolescents age, their values change and other considerations become more important. Further research is clearly indicated.

Ethnicity was considered both for the comparison and pregnant group. The variables comparison group ethnicity and pregnant group ethnicity were divided into five sub-categories White, Black , Hispanic, Mixed group, and Other. Ethnicity was found to function as a moderator for the comparison group in 12 clusters and for the pregnant group in 14 clusters (see table 4.10 or Appendix G). For example, in the Academic Performance cluster, Qt/Scheffe analysis of the comparison group ethnicity sub-categories found effect

sizes to range from  $\underline{z}_r = 0.47$  White,  $\underline{z}_r = 0.03$  Black, to  $\underline{z}_r = 0.00$  for the Mixed Group; while, pregnant group ethnicity sub-categories were similar with effect sizes ranging from  $\underline{z}_r = 0.52$  White,  $\underline{z}_r = 0.03$  Black, to  $\underline{z}_r = 0.03$  for the Mixed Group. The Other/Unknown category was empty for both pregnant and comparison groups. The results indicate that ethnically white subjects regardless of pregnancy status have high academic performance, with pregnant subjects having a slightly but non-significant higher academic performance than the comparison group. Black and mixed group subjects have no difference between academic results for control or pregnant groups. Statistically significant lower academic performance was exhibited between Black and Mixed group sub-categories as compared with the White sub-category in both control and pregnant groupings.

Interpretation of the moderators for each cluster analysis should be carried out with consideration of current theories of adolescent behavior and social interaction. The goal of this study is to identify potential moderators, determine the associated size of the effect magnitude, and present the association for discussion and theoretical considerations. This goal was achieved and the results



presented in Table 4.9, Table, 4.10 and in detail in appendix G answer the second and third study questions: Which study characteristics function as moderator variables to the observed psychosocial variable effect sizes? and Which study subject demographic characteristics function as moderator variables to the observed psychosocial variable effect sizes?

Confirmation of the variables as moderators and development of the theoretical implications were not in the scope of this research analysis and have been left to future research.

### Conclusions

Thirty-one variables that are often linked with adolescent pregnancy were identified in this integrated research review. The magnitude and consistency of the relationships between each of these variables and adolescent pregnancy were described using effect size estimates expressed as a Pearson's  $r$  correlation coefficient. While correlations derived from empirical research are only estimates of true population relationships, the correlation produced by a meta-analysis can be regarded as a more accurate estimate than those determined by individual studies, i.e., the combined sample is more representative of the population than the individual samples. The combined samples used in this analysis represented 68 studies and included 8,225 nonpregnant and 3,881 pregnant adolescents from many types of settings. While this large and diversified sample was a strength, it also introduced variation in the estimates.

The results of this integrated review indicated that adolescent pregnancy is most strongly related to an identification with traditional female roles, positive beliefs about parenting, and sexual activity. A greater incidence of higher anxiety, depression, dependency needs,

and a pregnant teenage relative, friend or mother were moderately related to adolescent pregnancy. Early onset of menses and more active dating or a relationship with a boyfriend are also weakly correlated with adolescent pregnancy. The results of this study confirmed the frequency of inclusion of these variables in research projects and supported the intuitive significance of the variables for persons working with the population. While not scientific, inclusion of intuitive variables infer that findings are consistent with common knowledge and observations.

After hypothesis testing and homogeneity analysis, the variables that remained were those with the strongest correlations. The cluster variables associated with the pregnant adolescents included Role Identification ( $\underline{z}_r = 0.45$ ), Parenting Beliefs ( $\underline{z}_r = 0.15$ ), and Sexual Activity ( $\underline{z}_r = 0.14$ ). The cluster variables most strongly correlated with the nonpregnant control group were Academic Performance ( $\underline{z}_r = 0.11$ ), Religious Activity ( $\underline{z}_r = 0.12$ ), Contraception Use ( $\underline{z}_r = 0.16$ ), Educational Expectations ( $\underline{z}_r = 0.21$ ), Family Dynamics ( $\underline{z}_r = 0.07$ ), Future Orientation ( $\underline{z}_r = 0.15$ ), School Grades ( $\underline{z}_r = 0.24$ ), Living Arrangements ( $\underline{z}_r = 0.09$ ), Occupational Expectations ( $\underline{z}_r = 0.18$ ), Parental

Relationship ( $\underline{z}_r = 0.14$ ), Father Relationship ( $\underline{z}_r = 0.13$ ), Sibling Relationship, ( $\underline{z}_r = 0.10$ ), Self-Concept, ( $\underline{z}_r = 0.12$ ), Self-Esteem ( $\underline{z}_r = 0.11$ ), and Social Responsibility ( $\underline{z}_r = 0.09$ ).

Limitations of the Present Study. The results of this integrated review provide a quantitative summary of the literature on adolescent pregnancy. While these statistics are concise ways to summarize a body of work and are easy to communicate, they are limited in three ways. These limitations, as suggested by Lewin (1996) include: only the studies that used certain quantitative methods could be included, summary statistics are only as valid as the original data, and meta-analytic techniques are without precision and measure different things. The following paragraphs address each of these limitations as they apply to the present study.

First, the fact that only the studies that used quantitative methods could be included is clearly a limiting factor for the study. Additionally, only studies that provided sufficient data to calculate an effect size were included in the analysis. When studies did not provide sufficient data, but met other inclusion criteria, attempts

were made to collect the missing data; these methods are detailed in the methods chapter. Inclusion criteria principally limited the incorporation of studies based on the requirement of a control or comparison group in the study design. Among the 290 research reports identified from the literature search that dealt with some psychosocial aspects of adolescent pregnancy, there were high quality quantitative and qualitative studies not included in the analysis; however, most were excluded because they lacked a control or comparison group of subjects.

The second limitation that summary statistics are only as valid as the original data will likely always be a problem in integrated reviews. It is difficult to identify all the weaknesses in the original research. When it is identified, it is often not within the meta-analyst's ability to correct study weaknesses. Weaknesses in the original research were not corrected; however, application of the quality of study analysis and subsequent moderator analysis of study quality as a variable was an attempt to control for original research weaknesses. The quality of study analysis is one means to express the confidence in the merit of the study for inclusion in a meta-analysis. Integrated review does overcome the limitation of small non-

representative samples and, to some extent, may balance other biases by pooling individual studies.

Finally, the summary statistics used in meta-analytic techniques have been considered limited and criticized for the following reasons: integrating non-comparable research, synthesizing results from poorly designed studies, data selection procedures which over represent published sources, the use of multiple dependent measures from one study, and the inappropriate use of conventional statistics (Lewin, 1996; Hanson, 1988, p. 123). The following paragraphs compare and contrast the present study to these criticisms.

Meta-analysis has been criticized for integrating non-comparable research. This criticism is a large component of what has been referred to as the "apples vs. oranges problem". Critics of meta-analysis have maintained that logical conclusions should not be drawn from comparing studies which involve different procedures and dependent variables. In fact, these procedures have been referred to as exercises in "meta-silliness" (Eysenck, 1978). Others have indicated that the only studies which require integration are those that are dissimilar (Glass, 1977) perhaps require conversion to a common metric (Light and Smith, 1971). The present study amassed and grouped data

from studies based on common themes presented in the literature, then applied methods from Cooper and Hedges's (1994) handbook, Cooper's (1989) manual, and Rosenthal's (1991) text to convert raw statistical data into unbiased estimates of effect. These effects were subjected to homogeneity analysis and judged for appropriateness of integration and synthesis. Homogeneity analysis can be considered analogous to individual differences among subjects within a given study. The study clusters Anxiety, Sexual Knowledge, Pregnant Role Model, and Depression were not analyzed further because they did not meet the critical values for homogeneity analysis even though all four are frequently considered important elements in adolescent pregnancy (Barth, 1983; Gottschalk, et al., 1964; Holden, et al., 1993; Kane, 1973; Lineberger, 1989; Lucchetti, 1980; Pattillo, 1993; Silk, 1979). The use of many different measures most likely contributed to variance within the analyses. While further study would be helpful here, heterogeneity is not uncommon in meta-analysis or integrated review of descriptive research (Blegen, 1993). Meta-analyses that used samples homogenous with respect to measures showed more homogenous results (Fried, 1991). Another criticism leveled against meta-analysis has involved

the rendering of un-interpretable results due to data synthesis from studies regardless of their design quality. An analysis of design quality has been consistently recommended by influential meta-analysts (Glass, et. al., 1981; Cooper, 1989; Cooper and Hedges, 1994). The present study rated the quality of each study included and examined the relationship between design quality and effect size for each cluster (i.e., moderator analysis). The mean study quality was found to be 2.21 with a standard deviation of 0.395 and mode of 2.50. The mean and mode indicated primarily moderate to high quality of study level ratings.

The moderator analysis of the quality of study variable considered three sub-categories: Low through 1.99, 2 through 2.49, and 2.5 through 3. Quality of study was found to be a moderator in 8 studies. In these eight studies the highest effect size was found in the lowest quality of study sub-category in four clusters, Future Orientation, Living Arrangements, Occupational Expectations, and Father Relationship. The Parental Relationship cluster had the same effect size for both the lowest and the middle quality of study sub-category. The middle quality of study sub-category had the highest effect sizes in four clusters, Parental Communication, Parental Relationship, Self-Concept,



and Self-Esteem. And the highest quality of study sub-category was not found to have the highest effect size in any of the eight clusters where quality of study was found to be a moderator. All effect sizes were found to be significantly different ( $p < 0.05$ ) from one another in five clusters: Parental Communication, Parental Relationship, Father Relationship, Self-Concept, and Self-Esteem. No effect sizes were found to be significantly different in the Occupational Expectations cluster. In the Future Orientation cluster, high and medium quality studies were found to be significantly different from one another; the other two combinations high and low and medium and low were not significantly different. And finally in the Occupational Expectations cluster, the low vs. medium quality of study sub-categories effect sizes were not significantly different, but the two other combinations of low vs. high and medium vs. high were significantly different ( $p < 0.05$ ). The implications of these results are not clear; a second look at all studies included in these analyses may be justified. It is important to note that quality of study was not a moderator in the nineteen other clusters.

Meta-analysis has been criticized for data selection procedures which over represent published sources, resulting in Type I errors of inference (Kramer and Andrews, 1982). This publication bias could have resulted in an over estimation of the average treatment effect and unwarranted conclusions based upon an unrepresentative sample. This is what Rosenthal (1991) calls the "file drawer problem". Meta-analysts have responded to this potential bias by use of thorough data search techniques and statistically calculating the "Fail-safe  $\underline{N}$ " to evaluate the potential bias. The present study used modern search methods including searching electronic databases and publication of requests on academic bulletin boards within the most commonly used electronic computer networks. The application of the Fail-safe  $\underline{N}$  allowed estimation of the file drawer problem and was performed for each cluster of variables considered. Fail-safe  $\underline{N}$  data were generally high (see results chapter for detailed information); therefore, sampling techniques produced results the researcher considered adequate. The threats to external validity of this study were minimal.

Meta-analysis has been criticized for the use of multiple results from the same study which could bias the

results and make them appear more reliable. This study used average effect sizes computed for like variables from the same study as suggested by Casey and Berman (1985) and Sibley (1986) using techniques suggested by Hedges and Okin (1985). This approach limited representation of each study within a cluster meta-analysis to once; this limitation prevented dependence within the data set and over representation of the effects of any single study.

The application of conventional statistical techniques to meta-analytic methods has been criticized (Hedges and Olkin, 1985). These criticisms involve the acceptance of inferences from designs which were not experimental and failed to evaluate the underlying assumptions of the parametric statistics applied. The present study applied traditionally accepted meta-analytic methodology. This methodology is not experimental in nature and does not involve random sampling or assignment. No statistical method was used that required these conditions; only those methods suggested and commonly used in meta-analysis were included. The BESD was used with data that was not experimental; it was used as illustrated by Cooper and Hedges (1994, p. 243) and it was only used as a means of illustration of the differences between the groups observed.

Care was and should be exercised in the application,  
interpretation or conclusions drawn from the use of the BESD  
in this manner.

### Recommendations for Further Study

Implications for Future Research. The result of this integrated review should be useful to those attempting to build better theories of adolescent pregnancy. The phenomenon of adolescent pregnancy is very complex and no single factor stands out as the major explanatory variable. The variables included relate to adolescent pregnancy directly and to each other. Further analyses are necessary to go beyond the estimates of direct effects of single variables to estimates of the net effects of each variable on adolescent pregnancy, controlling for the effects of other variables. For example, while beliefs about parental roles was an important variable, causes of this identification may be interrelated with the adolescents' identification with traditional female roles. Both of these variables had significant effect sizes favoring the pregnant group of adolescents. The results of this analysis may help to determine the variables that could be usefully included in multivariable models, such as those suggested by Santelli and Beilenson (1992) and Sheaff and Talashek (1995).

Both the Santelli and Beilenson (1992) model and the Nursing Model for Teen Pregnancy suggested by Sheaff and Talashek (1995) contend that both cultural and biological

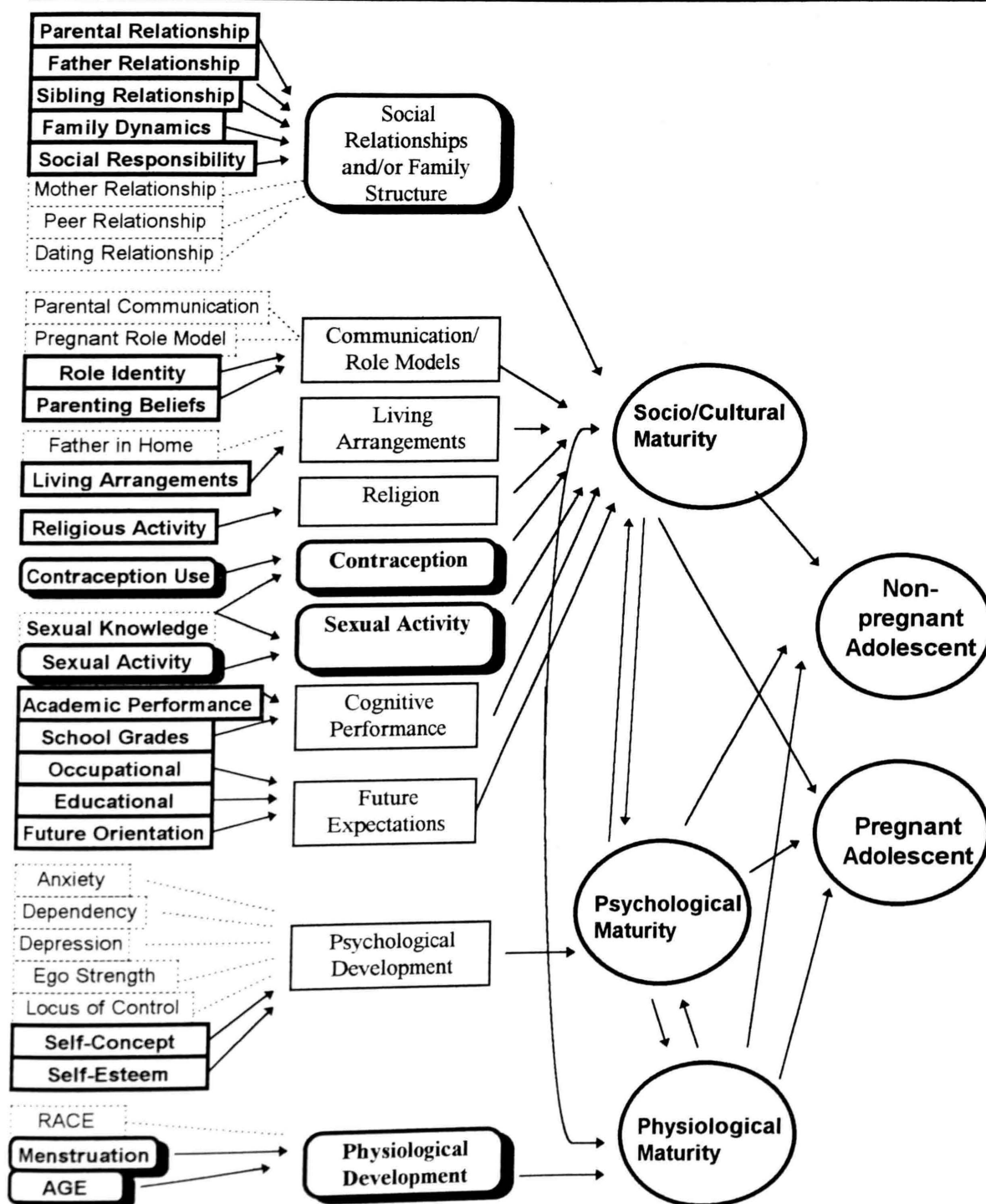
factors have an great influence on adolescent fertility. The Nursing Model for Teen Pregnancy is based on a nursing concept of people as biopsychosocial holistic beings. "The model is grounded in the developmental theories of Erikson and Piaget and hypothesizes that developmental maturity is related to teen pregnancy. Maturity is conceptualized in three areas: physical, psychological and cognitive" (Sheaff and Talashek, 1995, p. 34-35).

The Nursing Model for Teen Pregnancy consists of control variables, conceptual variables and the dependent variable adolescent pregnancy. The Nursing Model for Teen Pregnancy suggested the control variables as antecedents to pregnancy. These antecedents include demographic and sociocultural variables. The demographic variables are age and race. The sociocultural variables include family variables of family structure, substance abuse, and mother's age at first birth, and individual variables of religion, gang membership, physical abuse, sexual abuse (incest, rape), voluntary sexual activity, contraception, and previous pregnancy. These antecedents in the model are suggested to have a direct influence on the dependent variable as well as an indirect influence through the operational variables.

The operational measurement variables reflect the three areas of maturity: physical, psychological and cognitive. The physical maturity variables were age at menarche and gynecological age. The psychological maturity variable was age-appropriate development based on a Psychologist's evaluation. Cognitive maturity variables were school progress, grade in school, reading sub-category, cognitive potential, and intelligence quotient. In the model each of the maturity variables were related directly to adolescent pregnancy. Psychological and cognitive maturity were influenced by both antecedent groups of variables.

Following Sheaff and Talashek's example, the following model is a presentation of the clusters observed in the research synthesis as collections of operational measurement variables. The clusters are defined and presented elsewhere and will not be repeated here; see Appendix D for description of the observed variables included in each cluster. The resulting path diagram is the Elemental Model of Teen Pregnancy (EMTP) and is a portrayal of the essential elements represented by the studies gathered in this research synthesis that play a meaningful role in adolescent pregnancy (see Figure 5.1).

FIGURE 5.1 The Elemental Model of Teen Pregnancy (EMTP)





Within the EMTP some paths or linkages are stronger than others. The strength can be described by consideration of the effect size, while consideration of the BESD illustrates the tendency of support of the linkages or variables. The variables begin to interact to produce a wide variety of combinations that both inhibit or promote sexual activity and adolescent pregnancy. In Sheaff and Talashek's (1995) study, the basic characteristics that promote adolescent pregnancy were that pregnant teens had slightly higher chronological and gynecological age, histories of abuse or rape, and more voluntary sexual activity than their nonpregnant peers. Okonofua (1995) found that teens were at risk for pregnancy if they were from households of low socioeconomic status, completed formal basic education early, had little opportunity for continuing vocational or professional training, had sexual relations with older men, and if they had poor or inappropriate knowledge of contraception.

The two later studies cited above and those included in this study reflect variations of elements as presented in both Sheaff and Talashek's model and the EMTP. The goal of any model is to identify common elements or paths among the numerous possible elements or paths. The most basic version

of the EMTP is illustrated in Figure 5.1 by the heavily outlined variables. These fundamental variables include onset of menses; physical maturity (capacity for sexual activity and pregnancy); sexual activity; and non-use, failure of, or improper use of contraception. The remaining indispensable element to promote adolescent pregnancy, even in the extreme cases of rape or abuse, is a social environment that promotes or at least does not prevent sexual activity. Other variations of the EMTP obviously occur; those represented by the significant findings in this study are illustrated in Figure 5.1 by highlighted and solid figure.

This research synthesis and the series of meta-analyses contained within it provide a sketch of the existing research and have begun to illuminate areas that need further attention. Research synthesis attempts to close the research loop. The findings presented in this research synthesis confirm the importance of commonly studied characteristics and support a multidimensional model for study of adolescent pregnancy. A multidimensional model and multivariable analysis are necessary for the next step in the continuing analysis of adolescent pregnancy.

Future research can be guided by meta-analysis reviews which identify methodologies that have succeeded or failed. Aside from the infrequent use of comparison groups, the absence of a longitudinal approach is the most glaring deficit in the research on adolescent pregnancy. Several studies (Jessor and Jessor, 1975; Kovacs, Krol, and Voti, 1994; and Vernon, Green, and Frothingham, 1983) have utilized longitudinal designs. These studies used a design that contain specific inclusion criteria for subjects, an application of batteries of instruments to a group of nonpregnant subjects, and subsequent comparison of pre-pregnant results of both nonpregnant and pregnant subjects after pregnancies occur. This design addresses the problem of subjects' attitudes, values or perceptual changes after the pregnancy. There is a strong implication in the literature that psychological variables associated with pre-pregnancy may not be the same as those concurrent with pregnancy or post-pregnancy.

Most of the studies in the literature and most of the studies included in this review were conducted after the adolescent was pregnant. The typical study design was selection of a pregnant group of teens, followed by matching of the pregnant group with a nonpregnant control group.

This simple study design, with or without a comparison group does not determine pre-pregnancy differences or issues. A study, preferably multiple-site and longitudinal, as suggested previously would improve the available data on adolescent pregnancy.

Implications of Results for Practice. The results of this analysis should also be useful to health care practitioners, counselors, teacher, parents, and program administrators as they search for methods to deal with and/or prevent adolescent pregnancy. Based on the current study, methods to handle the variables associated with the pregnant teens (i.e., traditional female Role Identity, Parenting Beliefs, and Sexual Activity) and to promote the variables most strongly correlated with the nonpregnant control group (i.e., Academic Performance, Religious Activity, Contraception Use, Educational Expectations, Family Dynamics, Future Orientation, School Grades, Living Arrangements, Occupational Expectations, Parental Relationship, Father Relationship, Sibling Relationship, Self-Concept, Self-Esteem, and Social Responsibility) are the most urgent and maybe the most effective.

Marion Edelman (1988) president of the Children's Defense Fund summed up many of the strategies suggested throughout the literature. Edelman's central theme was "enhancing basic skills and life options" which translated into providing education and counseling (p. 498). Education programs focused on basic academics, sexuality, and health coupled with counseling programs focused on supporting work preparation and avenues for personal growth and success. These approaches seem to be good beginning strategies for addressing the issues and have been suggested by others (Batten, 1995; Flick, 1986; and Norr, 1988).

Further work is needed to determine the actual impact of adolescent pregnancy and interventions that affect more than one variable. Lerner, Entwistle, and Hauser (1994) emphasize that social policies and programs aimed at prevention are essential and that these must be multidisciplinary and collaborative efforts. Multivariable, developmental, contextual models are essential to the understanding of adolescent behavior. Further, adolescent behavioral/developmental models and the policies and programs which come from them must be developed from a collaboration among science, service and community.

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## Appendix A

### Formulas

## Formulas

Effect Size Estimates. Original data from the studies were used to calculate an  $\underline{r}$  as an effect size estimate. The equations used for these calculations are suggested by Rosenthal (1991, pp. 17-20) and are reproduced here for the readers reference.

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When original data obtainable were means and standard deviation the following formulas presented by Cooper (1989, p. 101) and Rosenthal (1991, pp. 19-20) were used.

$$\underline{d} = \frac{|\text{mean } \underline{X_c} - \text{mean } \underline{X_e}|}{\underline{sd_c}}$$

$$\underline{r} = \underline{d} / \sqrt{\underline{d}^2 + 1/\underline{pq}} \quad (1)$$

Where equation terms are defined as:

mean  $\underline{X_c}$  = mean score of the control group,

mean  $\underline{X_e}$  = mean score of the experimental group,

$\underline{sd_c}$  = standard deviation of the control group,

$\underline{d}$  = effect size estimate d-index,

$\underline{p}$  = proportion of the total population in the first of the two groups being compared,

$\underline{q}$  = the proportion of the total population that is in the second of the two groups being compared,

When  $\underline{p}$  and  $\underline{q}$  are equal, or when they can be viewed as equal in principle,  $1/\underline{pq}$  is simplified to 4 (Cooper, 1989, p. 101; Rosenthal, 1991, p. 20).

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When original data obtained were  $\underline{p}$  values and/or  $\underline{Z}$  scores the following formula was used;  $\underline{p}$  values were converted to its equivalent  $\underline{Z}$  score.

$$\underline{r} = \sqrt{\underline{Z}^2 / \underline{N}} \quad (2)$$

Where equation terms are defined as:

$\underline{Z}$  = standard normal deviate  $\underline{Z}$  score,

$\underline{N}$  = the total number of subjects.

(Rosenthal, 1991, p. 19; Cooper & Hedges, 1994, p 239).

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When original data obtained was chi-square ( $\chi^2$ ) values the following formula was used.

$$\underline{r} = \sqrt{\chi^2 / \underline{n}} \quad (3)$$

Where equation terms are defined as:

$\chi^2$  = provided chi-square value

$\underline{n}$  = the total number of subjects.

(Cooper, 1989, p. 104; Cooper & Hedges, 1994, p 239).

When original data obtained was  $\underline{t}$  values the formula presented by Cooper (1989, p. 104) and Rosenthal (1991, pp. 19) was used.

$$\underline{r} = \sqrt{\underline{t}^2 / (\underline{t}^2 + \underline{df})} \quad (4)$$

&

$$\underline{df} = \underline{n}_1 + \underline{n}_2 - 2$$

Where equation terms are defined as:

$\underline{t}$  = provided  $\underline{t}$  values,

$\underline{n}_1$  = subjects group 1,

$\underline{n}_2$  = subjects group 2.

---

When original data obtained were  $\underline{F}$  values the formula presented by Rosenthal (1991, pp. 19) was used.

$$\underline{r} = \sqrt{\frac{\underline{F}(1, -)}{\underline{F}(1, -) + \underline{df}_{\text{error}}}} \quad (5)$$

Where equation terms are defined as:

$\underline{F}(1, -)$  indicates any  $\underline{F}$  value with  $\underline{df} = 1$  in the numerator,

$$\underline{df}_{\text{error}} = \underline{n}_1 + \underline{n}_2 - 2.$$


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Fisher's  $z_r$ . According to Rosenthal (1991, p. 21) "as the population value of  $\underline{r}$  gets further and further from zero the distribution of  $\underline{r}$ 's sampled from that population become more skewed" Therefore, a transformation derived by Fisher (Fisher's  $\underline{z_r}$ ) and suggested by Rosenthal (1991) was used to normalize the distribution. Formulas 6, 7, and 8, were used for effect size adjustment for the  $\underline{r}$  distribution. The Fisher's  $\underline{z_r}$  is a transformation of  $\underline{r}$  that is normally distributed and makes the variance independent of the unknown true value of the correlation (Rosenthal, 1991, p. 21).

Fisher's  $\underline{z_r}$

$$\underline{z_r} = 0.5 \{ \text{Log}_e \left[ \frac{(1 + \underline{r})}{(1 - \underline{r})} \right] \} \quad (6)$$

Then, correct the bias in the Fisher's  $\underline{z_r}$  distribution,

$$\underline{eb} = \underline{r} / [2 (\underline{N} - 1)] \quad (7)$$

And finally correct the Fisher's  $\underline{z_r}$  value,

$$\text{Corrected } \underline{z_r} = \underline{z_r} - \underline{eb} \quad (8)$$

(Rosenthal, 1991, p. 21-22; Cooper & Hedges, 1994, p 237, 240).

Where equation terms are defined as:

$\text{Log}_e$  = natural logarithm function,

$\underline{r}$  = the effect size expressed as an  $\underline{r}$  value,

$\underline{eb}$  = the estimated bias in the  $\underline{z_r}$  distribution.

Within-Study-Pooled  $\underline{z_{rj}}$ . When studies presented several separate statistical analyses for components of a single dependent variable, the effect sizes were combined. After  $\underline{r}$  values were calculated,  $\underline{z}$  transformations for the component variables were pooled to create a single  $\underline{z_r}$  for each of the dependent variables for that given study. The

formula and process for pooling within study results using Fisher's  $\underline{z}$  are provided below.

Step 1. Using previously presented formulas compute the effect size  $\underline{r}$  and Fisher's  $\underline{z_r}$  for each component variable within the study being combined.

Step 2. Apply the following formula for a within-study component variable pooled  $\underline{z_{rj}}$ .

$$\text{pooled } \underline{z_{rj}} = (\sum \underline{z_{rj}}) / \underline{K} \quad (9)$$

Where equation terms are defined as:

$\underline{z_{rj}}$  = the Fisher's  $\underline{z_r}$  to any  $\underline{r_j}$ ,

$\underline{K}$  = the number<sup>a</sup> of component variables being combined.

(Hedges and Okin, 1985, p. 220-221)

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Note. <sup>a</sup>If the number of component variables differed a weighted mean  $\underline{z_{rj}}$  was calculated.

#### Average Weighted Effect Size and Confidence Interval.

The average weighted effect size and confidence intervals were calculated to test the relationship between each dependent variable cluster and the independent variable. If

the value of  $\underline{r} = 0$  is not in the confidence interval, the null hypothesis that there is no relation between the dependent variable category and independent variable was rejected.

The formulas for the average weighted (df as weight) effect size and confidence interval as suggested by Cooper (1989, pp. 109-110) are presented below.

$$\underline{z}_w = \frac{\sum (\underline{n}_j - 3) \underline{z}_j}{\sum (\underline{n}_j - 3)} \quad (10)$$

Where equation terms are defined as:

$\underline{z}_w$  = the average weighted effect size,

$\underline{z}_j$  = the standard normal deviate for any one study  $j$ ,

$\underline{n} - 3$  = the weight for any one study  $j$  (other desired weights, such as estimated quality, may be used).

(Cooper, 1989, p. 109).

The confidence interval is calculated using the following formula:

$$\underline{CI}_{z.95\%} = \underline{z}_w \pm \frac{1.96}{\sqrt{\sum (\underline{n}_j - 3)}} \quad (11)$$

Where equation terms are defined as:

$CI_{z.95\%}$  = The 95% confidence interval,

$z_w$  = the average weighted effect size,

$n_i$  = the number of sampling units to any  $r$  on which it is based, i.e., the sample total  $N$  value.

(Cooper, 1989, p. 110).

Stouffer Method ( $z_{st}$ ) Combined Probability Associated With Study Results. The Stouffer Method of combining results was used as a means to estimate a probability that "describes the combined likelihood that the series of results included in the analysis could have been generated by chance if the null hypothesis were true for every study" (Cooper, 1989, p. 95). This probability is the probability associated with the cumulative set of individual probabilities for each study result. The probability is discovered when the  $z_{st}$  score derived from the Stouffer Method is referred to a table of standard normal deviates.

The Stouffer Method for combining studies as described by Cooper (1979, p. 134; 1989, pp. 94 - 95) is presented below.

The probability associated with study results is obtained and converted to the Z score associated with each probability

$$\underline{Z}_{st} = \frac{\sum \underline{Z}_{si}}{\sqrt{(K)}} \quad (12)$$

Where equation terms are defined as:

Z<sub>st</sub> = the standard normal deviate for the cluster,

Z<sub>si</sub> = the standard normal deviate for each *i*<sup>th</sup> study included in the cluster,

K = the total number of studies included.

(Cooper, 1989, p. 94).

#### Fail-safe N ( $N_{fs.05}$ ) Robustness of Literature Review.

The fail-safe N addresses the "file drawer problem" and assist the researcher (and ultimately the report reader) in the evaluation of the strength of a review against the felt completeness of the sampling procedure (Cooper, 1979, p. 135). The fail-safe N allows an answer to the question "How many studies totaling a null hypothesis confirmation would be needed to reverse the conclusion that a relationship exists?". The fail-safe N assumes a summed null relation in

undiscovered studies and it estimates the number of additional studies needed to increase the meta-analysis probability to above 0.05. Fail-safe  $\underline{N}$  calculations are provided below.

The probability associated with study results

$$\underline{N}_{fs.05} = \left[ \frac{\sum \underline{z}_{si}}{1.645} \right]^2 - \underline{K} \quad (13)$$

Where equation terms are defined as:

$\underline{N}_{fs.05}$  = the number of additional studies needed to increase the meta-analysis probability to above 0.05,

$\underline{z}_{si}$  = the standard normal deviate as calculated for the Stouffer analysis for each study included,

$\underline{K}$  = the total number of studies included.

1.645 represents the standard normal deviate associated with  $p < 0.05$  (one tail). (Cooper, 1989, p. 97).

---



Homogeneity Analysis of Moderator Variables. If

conceptually linked variables were found in a minimum of three studies, a cluster was formed. After  $r$  values were calculated for each variable, homogeneity analysis as described by Cooper (1989) was performed for each cluster of dependent variables. Homogeneity analysis was conducted using a  $Q$  statistic that is distributed as chi-square.

According to Cooper (p. 115) the  $Q$  statistic tests whether the average effects of the groupings are homogeneous. If the  $Q$  statistic is significant it indicates that, given the sizes of the grouped samples, the range is too great to be explained by sampling error alone (Cooper, 1989, p. 115). Homogeneity analysis answers the question, "Is the variance in effect sizes significantly different from that expected by sampling error?" (Cooper, 1989, p. 114). If the answer is no, then the null hypothesis is supported: the studies are not considered enough alike (i.e., not necessarily addressing the same subject) for further analysis and analysis stops. If the answer is yes, the studies are considered enough alike (i.e., addressing the same subject) for further analysis for other potential sources of variance. If the  $Q$  statistic, distributed as

chi-square, is significant, the values compared are significantly homogeneous.

$$Q_t = \sum (\underline{n}_i - 3) \underline{z}_i^2 - \left[ \frac{[\sum (\underline{n}_i - 3) \underline{z}_i]^2}{\sum (\underline{n}_i - 3)} \right] \quad (14)$$

Distributed as chi-square, with  $\underline{K} - 1$  df.

Where equation terms are defined as:

$\underline{n}_i$  = the number of sampling units to any  $\underline{r}$  on which it is based,

$\underline{z}_i$  = the standard normal deviate for any one study,

$\underline{K}$  = the number of studies being combined.

(Cooper, 1989, p. 112, 115).

#### ANOVA, Cochran's C, Scheffe Analysis and $Q_t$ Analysis.

An ANOVA analysis was used to determine if study characteristics and demographic variables were correlated with the magnitude of the observed effect sizes for each cluster. The analysis of variance was conducted with the various levels of the study characteristics and demographic variables, followed by Cochran's  $\underline{C}$  to assess homogeneity of variance in the results (Winer, 1962). If results were

homogeneous, ANOVA results were interpreted and post hoc analysis was performed using Scheffe post hoc procedures.

If the Cochran's C analysis indicated the variance in the ANOVA results were heterogeneous, the ANOVA analysis was considered invalid and Q<sub>t</sub> analysis was performed on the various levels of the study characteristics and demographic variables.

ANOVA analysis, Cochran's C, Scheffe analysis, and/or qt analysis was accomplished using a standard statistical package (i.e., SPSS) and formulas previously described (i.e., qt statistic formula 12). Because the formulas for these procedures are standard and are readily available in common statistical packages like SPSS they were not reproduced here.

Appendix B  
Data Coding Form

## DATA CODING FORM

262

Study: \_\_\_\_\_  
\_\_\_\_\_

Study ID number: \_\_\_\_\_ Publication year: \_\_\_\_\_

### Methodological Characteristics

PUBFORM: (1) Journal (2) Dissertation (3) Report (4) Book

JOURNAL TYPE: (1) General (2) Speciality (3) NA

SOURCE: (1) CINAL, (2) ERIC, (3) Medline, (4) PsychLit, (5) SocLit  
(6) REF List (7) LIT Review (8) Dissertation (9) Other \_\_\_\_\_

Number of Authors: \_\_\_\_\_

FUNDING: (0) None/Don't Know (1) Company (2) Federal (3) Foundation  
(4) Professional Organization (5) Voluntary (6) Other \_\_\_\_\_

DESIGN: (1) Descriptive (2) Correlational (3) Experimental  
(4) More than one

SAMPLING.METHOD: (1) Random sample (2) Randomized Groups  
(3) Matched subjects (4) Random sample and randomized groups  
(5) Matched subjects and randomized groups  
(6) Random sample and matched subjects (7) Convenience

SAMPLE.SIZE.TOTAL: \_\_\_\_\_ QUALITY.STUDY: \_\_\_\_\_

### Substantive Characteristics

CONTROL GROUP MEAN AGE: \_\_\_\_\_

CONTROL SOC (1) White (2) Black (3) Hispanic  
(4) Asian, Pacific Islander (5) American Indian, Native Alaskan  
(6) Mixed (7) Other/ \_\_\_\_\_

CONTROL MARSTAT (1) Single (Never Married) (2) Married (3) Widowed  
(4) Divorced (5) Mixed (6) Other/ \_\_\_\_\_

CONTROL FAMINCOM (1) 0000 - 9,999 (2) 10,000 - 12,999  
(3) 13,000 - 14,999 (4) 15,000 - 19,999 (5) 20,000 - 24,999  
(6) 25,000 - 34,999 (7) 35,000 - 49,999 (8) 50,000+/  
(9) Unknown (10) Low (11) Middle (12) Upper

CONTROL EDU: (1) Less than 6th Grade (2) 6 to 9th Grade  
(3) 10 to 12th Grade (4) High school graduates  
(5) College graduates (6) Mixed/Unknown

PREGNANT GROUP MEAN AGE: \_\_\_\_\_

PREGNANT SOC (1) White (2) Black (3) Hispanic  
(4) Asian, Pacific Islander (5) American Indian, Native Alaskan  
(6) Mixed (7) Other/ \_\_\_\_\_

**PREGNANT MARSTAT** (1) Single (Never Married) (2) Married (3) Widowed  
(4) Divorced (5) Mixed (6) Other/ \_\_\_\_\_

**PREGNANT FAMINCOM** (1) 0000 - 9,999 (2) 10,000 - 12,999  
(3) 13,000 - 14,999 (4) 15,000 - 19,999 (5) 20,000 - 24,999  
(6) 25,000 - 34,999 (7) 35,000 - 49,999 (8) 50,000+/  
(9) Unknown (10) Low (11) Middle (12) Upper

**PREGNANT EDU:** (1) Less than 6th Grade (2) 6 to 9th Grade  
(3) 10 to 12th Grade (4) High school graduates (5) College graduates  
(6) Mixed/Unknown

**SETTING:** (1) Hospital (2) Clinic (3) Home (4) Hospice  
(5) Long-term facility (6) University (7) Unknown  
(8) Other \_\_\_\_\_

**NTHEORY:** (0) No (1) Yes **NONTHEO:** (0) No (1) Yes

**Guiding Theory/Construct:** \_\_\_\_\_

**Research Topic:** \_\_\_\_\_

**Instrument:** \_\_\_\_\_

**Alpha Reported:** \_\_\_\_\_ **Standardized:** (0) No (1) Yes

**Number of Dependent Variables:** \_\_\_\_\_

#### Computational Values

**SAM.SIZE.EXP:** \_\_\_\_\_ **SAM.SIZE.CON:** \_\_\_\_\_  
**MEAN.EXP:** \_\_\_\_\_ **MEAN.CON:** \_\_\_\_\_  
**SDEXP:** \_\_\_\_\_ **SDCON:** \_\_\_\_\_  
**Pooled Variance Estimate:** \_\_\_\_\_

**STATU:** (1) Frequency, percentage, means, variance  
(2) Bivariate correlation  
(3) Chi-square, Fisher's Exact, McNemar  
(4) Mann-Whitney U, Sign, Wilcoxon matched pairs signed ranks,  
Kruskall Wallis, Kolmogorov-Smirnov  
(5) ANOVA, t  
(6) ANCOVA  
(7) Multivariate correlation ( $r^2$ , etc.)  
(8) MANOVA (repeated measures, time series)  
(9) Factor analysis  
(10) Path analysis  
(11) LISREL

**Observed Value Type:** (1) Chi-Square (2) Z-Value  
(3) t-Value (4) F-Value (5) Other \_\_\_\_\_

**Value:** \_\_\_\_\_ **PVAL:** \_\_\_\_\_

**r:** \_\_\_\_\_ **Fisher's z** \_\_\_\_\_

**POWER:** \_\_\_\_\_

**CODING FORM - GLOSSARY****I. LIST OF TERMS****Section I. Methodological Characteristics**

Study Identification Number (STUDYNO)  
Publication Year (PUBYR)  
Publication Form (PUBF)  
Journal Type (JOURTYP)  
Source Derivation (SOURCE)  
Number Of Authors (NOAUTH)  
Study Field (STUDYFLD)  
Funding For Study (FUNDING)  
Types Of Research Design (DESIGN)  
Sampling Method (METHOD)  
Sample Size: Total (SAMSIZT)  
Quality Of Study Rating (QUALSTD)

**Section II. Substantive Characteristics**

Comparison Group Mean Age (COMPAGE)  
Comparison Group Ethic (COMPETH)  
Comparison Group Marital Status (COMPMAR)  
Comparison Group Family Income (COMPFAM\$)  
Comparison Group Educational Status (COMPEDU)  
Pregnant Group Mean Age (PREGAGE)  
Pregnant Group Ethic (PREGETH)  
Pregnant Group Marital Status (PREGMAR)  
Pregnant Group Family Income (PREGFAM\$)  
Pregnant Group Educational Status (PREGEDU)  
Setting (SETTING)  
Nursing Theory (NTHEORY)  
Non-Nursing Theory (NONTHEO)  
Concept/Construct (CONCEPT)  
Topic (TOPIC)

Instrument Used (INSTRUM)  
Reported Instrument Alpha (INALPHA)  
Standardized Instrument (INSTAND)  
Number Of Dependent Variables (NODVS)

### **Section III. Computational Values**

Sample Size: Comparison Group (COMPSMSZ)  
Mean Value: Comparison Group (COMPMEAN)  
Standard Deviation: Comparison Group (COMPSD)  
Sample Size: Pregnant Group (PREGSMSZ)  
Mean Value: Pregnant Group (PREGMEAN)  
Standard Deviation: Pregnant Group (PREGSD)  
Pooled Variance Estimate (PVAR)  
Statistical Test Used (STATU)  
Observed Value Type (OBVALTYP)  
Observed Value: Ma Variable (OBVAL)

### **Section IV. Effect Size Values: Selected Outcomes**

P-Value (PVAL)  
Z Value (ZVAL)  
R = Correlation E.S. (R)  
Fishers Z (FISHERZ)  
Power Value (POWER)



## II. VARIABLE DEFINITIONS / CODING

### STUDY IDENTIFICATION NUMBER

Definition: The number assigned to the study as it is included in the data set.

Indicators: NONE

Abbreviation: STUDYNO

Coding: Coding begins with 1001 for the first study and continues to the last study included (ex, 1001, 1002, ... 1099).

### PUBLICATION YEAR

Definition: Year specified in the primary source as the date of publication.

Indicators: Note the year of the journal of publication or publication of the report or dissertation.

Abbreviation: PUBYR

Coding: 19xx

### PUBLICATION FORM

Definition: The document variety where the published research report occurs.

Indicators: Identify from source, or consider the document title and where the report appears.

Abbreviation: PUBF

Coding:

- (1) Journal
- (2) Dissertation
- (3) Report
- (4) Book / Book Chapter
- (5) NA i.e. NOT published/

### JOURNAL TYPE

Definition: The nature of the journal, general has a broad appeal within a field of study; a specialty would have a very narrow audience.

Indicators: Identify from source, or consider the document title and where the report appears.

Abbreviation: JOURTYP

Coding:

- (1) General
- (2) Specialty
- (3) NA/

## ARCHIVAL SOURCE

Definition: Index, computer, and additional sources to identify a list of journals and/or dissertations.

Indicators: Identify from the source of the reference.

Abbreviation: SOURCE

Coding:

- (1) CINAL
- (2) ERIC
- (3) MEDLINE
- (4) PsychLit
- (5) SocLit
- (6) STTI
- (7) REF List/ LIT Review
- (8) Dissertation Abstracts
- (9) Computer bulletin board
- (10) Other/

## NUMBER OF AUTHORS

Definition: Actual number of authors contributing to the research project as indicated on the article or report.

Indicators:

Abbreviation: NOAUTH

Coding: Number of authors listed on the article or report.

## STUDY FIELD

Definition: The professional field of study as a source the research as indicated within the text of the article or the background of the primary author.

Indicators: Primary author's current field of study/profession.

Abbreviation: STUDYFLD

Coding:

- (1) Nursing
- (2) Sociology
- (3) Medicine
- (4) Psychology
- (5) Political Science/Government
- (6) Education
- (7) Public Health
- (8) Other/

## RESEARCH TYPE

Definition: The nature of the research project.

Indicators: An indication in source or the project report.

Abbreviation: RESTYPE

Coding:

- (1) Independent research project
- (2) Funded research project
- (3) Dissertation
- (4) Other/

## (5) Unknown

## FUNDING FOR STUDY

Definition: Indication in source that study was supported totally or in part by some agency or group.

Indicators: "funded by"; grant #; "supported by"

Abbreviation: FUNDING

Coding:

- (1) UNKNOWN
- (2) NONE
- (3) Company
- (4) Federal
- (5) Foundation
- (6) Professional Organization
- (7) Voluntary
- (8) Other/

## TYPES OF RESEARCH DESIGN

Definition: Plan, structure, and strategy of the investigator to obtain answers to research questions and control variance (Kerlinger, 1973, p.300).

Indicators:

Abbreviation: DESIGN

Coding:

- (1) Descriptive
- (2) Experimental
- (3) More than one/

## SAMPLING METHOD

Definition: Process by which subjects were chosen for participation in the study.

Indicators: use of terms.

Abbreviation: SAMPMTHD

Coding:

- (1) Random sample
- (2) Randomized Groups
- (3) Matched
- (4) Random and randomized
- (5) Matched and randomized
- (6) Random and matched
- (7) Convenience/

## SAMPLE SIZE TOTAL

Definition: Total number of subjects in the study, i.e. the sum total of the comparison and pregnant groups.

Indicators: number in text or tables.

Abbreviation: SAMSIZT

Coding: numerical value provided in the research report.

## QUALITY OF STUDY RATING

Definition: Mean computed rating on the "Quality of Study

Instrument." The instrument contains 4 elements and 22 items identified as critical components to be included in reports of research. The maximum score is 66 and minimum score is 0.

Indicators: Score derived from the instrument.

Abbreviation: QUALSTD

Coding: Numerical score 0 to 66.

#### COMPARISON GROUP

Definition: The comparison group is a group of females clearly identified as participating in the study other than the primary group of pregnant adolescents that are the focus of the study. The comparison group will all be female and might also have characteristics such as ????? a previous set of pregnant adolescents, a group of non-pregnant adolescents or a group of pregnant or non-pregnant adults.

Indicators: identification in text or tables.

#### COMPARISON GROUP MEAN AGE

Definition: Average chronological age ascribed to comparison group subjects in the research report. Source include numerical values, age range, or age categories given.

Indicators:

Abbreviation: COMPAGE

Coding: numerical value provided.

If recodeing is necessary this variable may be recoded to age categories.

1. Adolescents
2. Adults

#### COMPARISON GROUP ETHNIC

Definition: Ethnic group ascribed to comparison group subjects in the research report.

Indicators: specification in the report.

Abbreviation: COMPETH

Coding:

- (1) White
- (2) Black
- (3) Hispanic
- (4) Asian, Pacific Islander
- (5) American Indian, Native Alaskan
- (6) Mixed group
- (7) Other/

#### COMPARISON GROUP MARITAL STATUS

Definition: Marital status ascribed to comparison group subjects in the research report.

Indicators: specification in the report.

Abbreviation: COMPMAR

## Coding:

- (1) Single (Never Married)
- (2) Married
- (3) Widowed
- (4) Divorced
- (5) Mixed group
- (6) Other/

## COMPARISON GROUP FAMILY INCOME

Definition: Family income ascribed to comparison group subjects in the research report.

Indicators: description fitting a category or specification within the report.

Abbreviation: COMPFAM\$

## Coding:

- (1) Low
- (2) Middle
- (3) Upper
- (4) 0000 - 14,999
- (5) 15,000 - 29,999
- (3) 30,000 - 44,999
- (7) 45,000+
- (8) Unknown/

## COMPARISON GROUP EDUCATIONAL STATUS

Definition: Educational level attained at the time of the study that best describes comparison group subjects in the research report.

Indicators: description fitting a category or specification within the report.

Abbreviation: COMPEDU

## Coding:

- (1) Less than 6th Grade
- (2) 6th to 9th grade
- (3) 10th to 12th Grade
- (4) High school graduates
- (5) Some College or Technical school
- (6) College graduates or more
- (7) Mixed group
- (8) Unknown/

## PREGNANT GROUP

Definition: The pregnant group is a group of pregnant adolescent females clearly identified as participating in the study as the focus of the study. Adolescence is considered between 13 and 19 years of age based consistent with the custom of the U.S. Department of Health and Human Services, National Center for Health Statistics' reporting

of natality statistics.

Indicators: identification in text or tables.

#### PREGNANT GROUP MEAN AGE

Definition: Average chronological age ascribed to pregnant group subjects in the research report. Source include numerical values, age range, or age categories given.

Indicators:

Abbreviation: PREGAGE

Coding: numerical value provided.

If recodeing is necessary this variable may be recoded to age categories.

1. Adolescents
2. Adults

#### PREGNANT GROUP ETHNIC

Definition: Ethnic group ascribed to pregnant group subjects in the research report.

Indicators: specification in the report.

Abbreviation: PREGETH

Coding:

- (1) White
- (2) Black
- (3) Hispanic
- (4) Asian, Pacific Islander
- (5) American Indian, Native Alaskan
- (6) Mixed group
- (7) Other/

#### PREGNANT GROUP MARITAL STATUS

Definition: Marital status ascribed to pregnant group subjects in the research report.

Indicators: specification in the report.

Abbreviation: PREGMAR

Coding:

- (1) Single (Never Married)
- (2) Married
- (3) Widowed
- (4) Divorced
- (5) Mixed group
- (6) Other/

#### PREGNANT GROUP FAMILY INCOME

Definition: Family income ascribed to pregnant group subjects in the research report.

Indicators: description fitting a category or specification within the report.

Abbreviation: PREGFAM\$

Coding:

- (1) Low
- (2) Middle
- (3) Upper
- (4) 0000 - 14,999
- (5) 15,000 - 29,999
- (3) 30,000 - 44,999
- (7) 45,000+
- (8) Unknown/

#### PREGNANT GROUP EDUCATIONAL STATUS

Definition: Educational level attained at the time of the study that best describes pregnant group subjects in the research report.

Indicators: description fitting a category or specification within the report.

Indicators:

Abbreviation: PREGEDU

Coding:

- (1) Less than 6th Grade
- (2) 6th to 9th grade
- (3) 10th to 12th Grade
- (4) High school graduates
- (5) Some College or Technical school
- (6) College graduates or more
- (7) Mixed group
- (8) Unknown

#### SETTING

Definition: The location in which the study was reported to have been conducted.

Indicators: specification in the report.

Abbreviation: SETTING

Coding:

- (1) Hospital
- (2) Clinic
- (3) Home
- (4) Hospice
- (5) Long-term facility
- (6) University
- (7) Unknown
- (8) Other/

#### NURSING THEORY

Definition: Identification of nursing theory as conceptual basis for the study.

Indicators: names of theorist, bibliographic reference.

Abbreviation: NTHEORY

Coding:

- (0) No
- (1) Yes/

### NON-NURSING THEORY

Definition: Identification of a theory other than nursing as the conceptual basis for the study.

Indicators: names of theorist, bibliographic references.

Abbreviation: NONTHEO

Coding:

(0) No

(1) Yes/

### CONCEPT/CONSTRUCT

Definition: Identification of a theory or concept as the basis for the study.

Indicators: names of theorist, use of concept language, bibliographic references.

Abbreviation: CONCEPT

Coding: Written in on coding form, categories will be created from a list generated from the coding forms, then the topics will be coded.

### TOPIC

Definition: Subject matter addressed in the research report.

Indicators: title, definition of terms, abstract.

Abbreviation: TOPIC

Coding: Written in on coding form, categories will be created from a list generated from the coding forms, then the topics will be coded.

### INSTRUMENT USED

Definition: The research tool used to address the research topic and collect the data of interest.

Indicators: Instrument name, description and reliability and validity information.

Abbreviation: INSTRUM

Coding: Written in on coding form, categories will be created from a list generated from the coding forms, then the instruments will be coded.

### REPORTED INSTRUMENT ALPHA

Definition: The reported reliability, Chronbachs alpha of the instrument used to address the research topic.

Indicators: reliability data, alpha =.

Abbreviation: INALPHA

Coding: Numerical value provided in the research report.

### STANDARDIZED INSTRUMENT

Definition:

Indicators: Description of the instrument.

Abbreviation: INSTAND



## Coding:

- (0) No
- (1) Yes/

## NUMBER OF DEPENDENT VARIABLES

Definition: The number of dependent variables the study presents under consideration.

Indicators: description of purpose, research questions or hypotheses, instruments used, data from tables.

Abbreviation: NODVS

Coding: Numerical value of DVs described and reported in the research.

## SAMPLE SIZE: COMPARISON GROUP

Definition: Number of individuals in the comparison group.

Indicators: Report text, tables, or abstract.

Abbreviation: COMPSMSZ

Coding: Numerical value provided in the research report.

## MEAN VALUE: COMPARISON GROUP

Definition: The mean (average) score/value of the comparison group on the instrument that measures the topic of interest.

Indicators: Report text, tables, or abstract.

Abbreviation: COMPMEAN

Coding: Numerical value provided in the research report.

## STANDARD DEVIATION: COMPARISON GROUP

Definition: The statistical standard deviation from the mean score/value for the comparison group.

Indicators: Report text, tables, or abstract.

Abbreviation: COMPSD

Coding: Numerical value provided in the research report.

## SAMPLE SIZE: PREGNANT GROUP

Definition: Number of individuals in the pregnant group.

Indicators: Report text, tables, or abstract.

Abbreviation: PREGSMSZ

Coding: Numerical value provided in the research report.

## MEAN VALUE: PREGNANT GROUP

Definition: The mean (average) score/value of the pregnant group on the instrument that measures the topic of interest.

Indicators: Report text, tables, or abstract.

Abbreviation: PREGMEAN

Coding: Numerical value provided in the research report.

## STANDARD DEVIATION: PREGNANT GROUP

Definition: The statistical standard deviation from the mean score/value for the comparison group.

Indicators: Report text, tables, or abstract.

Abbreviation: PREGSD

Coding: Numerical value provided in the research report.

## POOLED VARIANCE ESTIMATE

Definition: Estimate of the population variance on the outcome variable, obtained when the sums of squared deviations from two or more sources are combined and this total is divided by the combined degrees of freedom of the sources. Assumes that sources variances are homogeneous.

Equation: See appendix Formulas.

Abbreviation: PVAR

Coding: Computed value.

## STATISTICAL TEST USED

Definition: Reported statistical test judged to measure the study question.

Indicators: Report text, tables, or abstract.

Abbreviation: STATU

Coding:

- (1) Frequency, percentage, means, variance
- (2) Bivariate correlation
- (3) Chi-square, Fisher's Exact, McNemar
- (4) Mann-Whitney U, Sign, Wilcoxon matched pairs  
signed ranks, Kruskal Wallis, Kolmogorov-Smirnov
- (5) ANOVA, t
- (6) ANCOVA
- (7) Multivariate correlation (r<sup>2</sup>, etc.)
- (8) MANOVA (repeated measures, time series)
- (9) Factor analysis
- (10) Path analysis
- (11) LISREL
- (12) Other/

## OBSERVED VALUE TYPE

Definition: Value type reported resulting from application of the statistical test used.

Indicators: Report text, tables, or abstract.

Abbreviation: OBVALTYP

Coding:

- (1) Chi-Square
- (2) Z-value
- (3) t-value
- (4) F-value
- (5) Other/

## OBSERVED VALUE: MA VARIABLE

Definition: Actual statistical value reported.

Indicators: Reported in text, tables, or abstract.

Abbreviation: OBVAL

Coding: Numerical value provided in the research report.

## P-VALUE

Definition: P value corresponding with the reported statistical value. The probability level reported in each study associated with the relevant hypothesis;

Indicators: Reported in text, tables, or abstract.

Abbreviation: PVAL

Coding: Numerical value provided in the research report.

## Z VALUE

Definition: The Z score associated with each probability level (P-VALUE) from a stand normal deviate table (Z score table).

Indicators: Calculated from P-VALUE

Abbreviation: ZVAL

Coding: Calculated value.

## r CORRELATION E.S.

Definition: The effect is the magnitude of a relationship or a difference between two groups on a given measure. The effect size may be expressed as a correlation ( $\underline{r}$ ) calculated and used to combine the results of studies and assess effectiveness of variables under study (Rosenthal, 1991).

Indicators: Reported in text, tables, or abstract as a correlation. Other values must be converted to an ( $\underline{r}$ ) value. See appendix Formulas.

Abbreviation: R

Coding: Numerical value provided in the research report or a computed value.

## FISHER'S Z

Definition: The Fisher's  $\underline{z}_r$  is a transformation of  $\underline{r}$  that

is normally distributed and makes the variance independent of the unknown true value of the correlation.

Abbreviation: FISHERZ

Equation: See appendix Formulas.

Abbreviation: FISHERZ

Coding: Computed value.

#### POWER VALUE

Definition: An a posteriori calculation of the probability that a statistical test of the null hypothesis in a completed study would have led to a rejection of that particular null hypothesis. Determination of power depends upon knowledge of three parameters: the significance criterion and directionality, the effect size (ES), and the sample size (Choen, 1988).

Indicators: alpha level; direction (one or two-tails); E.S. (d, r, or F); sample size n.

Abbreviation: POWER

Coding: Computed value.

## Appendix C

### Quality of Study Instrument & QSI Guide

# Quality of Study Instrument - Study Number: \_\_\_\_\_

279

	NA	Absent	Low	Med	High
<b>1.0 Introduction</b>					
1.1 Justification for Study	—	0	1	2	3
1.2 Conceptual framework	—	0	1	2	3
1.3 Statement of problem or purpose	—	0	1	2	3
1.4 Critical review of research	—	0	1	2	3
1.5 Methodological issues	—	0	1	2	3
1.6 Hypotheses or study questions stated	—	0	1	2	3
1.7 Operational definitions	—	0	1	2	3
n = _____					
Subtotal	_____				

<b>2.0 Methodology</b>					
2.1 Design described	—	0	1	2	3
2.2 Control of validity threats	—	0	1	2	3
2.3 Sufficient sample size	—	0	1	2	3
2.4 Representative sample	—	0	1	2	3
2.5 Data collection procedures described	—	0	1	2	3
2.6 Instrument validity described	—	0	1	2	3
2.7 Instrument reliability described	—	0	1	2	3
n = _____					
Subtotal	_____				

<b>3.0 Data analysis and results</b>					
3.1 Statistical treatment	—	0	1	2	3
3.2 Data presentation	—	0	1	2	3
3.3 Results related to problem and/or hypotheses	—	0	1	2	3
3.4 Findings are substantiated by methods used	—	0	1	2	3
n = _____					
Subtotal	_____				

<b>4.0 Conclusions/Recommendations</b>					
4.1 Discussion related to background and significance	—	0	1	2	3
4.2 Conclusions logically derived from findings/results	—	0	1	2	3
4.3 Recommendations consistent with findings	—	0	1	2	3
4.4 Alternate explanations advanced	—	0	1	2	3
n = _____					
Subtotal	_____				

Total n = \_\_\_\_\_ Total score \_\_\_\_\_ Mean \_\_\_\_\_

## QUALITY OF STUDY INSTRUMENT

### GUIDE SHEET

#### GENERAL INSTRUCTIONS:

Consider limitations within journal page limits. This form has been designed as a guide for use when coding the quality of each study.

NA, unless otherwise indicated, should only be used or employed when the research design does not require or support the item.

### 1.0 INTRODUCTION

#### 1.1 Justification for study (in abstract or body of paper)

- 3 clear, sufficient elaboration.
- 2 identified, no elaboration.
- 1 mentioned, vague.
- 0 not given.

#### 1.2 Conceptual or theoretical framework

- 3 identified and described, summarized theoretical or conceptual framework.
- 2 identified and described, NO SUMMARY of theoretical or conceptual framework.
- 1 identified only, not described.
- 0 not identified.

#### 1.3 Statement of problem or purpose (in abstract or body)

- 3 introduced early, clearly stated, does not ramble  
If problem statement, includes phenomenon of concern and population to be studied.  
If purpose statement, includes goal, variables, population, and setting for study.
- 2 clearly stated, other criteria absent.
- 1 vague, rambles, fuzzy global statement, or inferred only.
- 0 not identifiable.

#### 1.4 Critical review of research

- 3 critical review of research included, summarized polar theories and research findings, gaps identified.
- 2 review of research included, NO SUMMARY of research findings or identification of research gaps.
- 1 general review of some literature included.
- 0 no review included.

#### 1.5 Methodological issues

- 3 methodology is clearly appropriate for hypotheses, subjects and situation.
- 2 methodology may not be clearly appropriate for some aspect of the study.
- 1 appropriateness of methodologies are questionable.
- 0 not appropriate.

#### 1.6 Hypotheses or study questions stated

- 3 all hypotheses or study questions stated clearly, expected relationships stated.
- 2 hypotheses or study questions stated.
- 1 inferred, partial, vague.
- 0 not identifiable.

#### 1.7 Operational definitions (listed or found within narrative)

- 3 all key terms identified, variables defined and methods for quantifying them described.
- 2 all key terms identified and variables defined.
- 1 included some but not all key terms.
- 0 not included.



## 2.0 METHODOLOGY

### 2.1 Design described

- 3 clear enough to replicate, includes a description of the research design, the setting used, procedures, description of sample, methods used to collect data (outlined in consecutive order), and data analysis procedures.
- 2 could be replicated with effort, some elements might need clarification with author for exact duplication.
- 1 vague description, missing some elements, confusing.
- 0 not described.

### 2.2 Control of validity threats (code NA except experimental study)

- 3 methods used to control for biases are evident.
- 2 sources of bias evident, methods implied.
- 1 sources of bias evident but method to control vague.
- 0 no attempt to control for validity threats evident.
- NA non-experimental study.

### 2.3 Sufficient sample size

- 3 in general greater than or equal to 30 (large enough not to violate statistical assumptions). Consider homogeneity of sample (heterogeneous generally need larger sample). Appropriate for type of study (e.g. pilot study) and for treatment of data.
- 2 greater than or equal to 30 (large enough not to violate statistical assumptions). However, it may not be appropriate for type of study (e.g. pilot study) and for treatment of data.
- 1 in general less than 30. Questionable number for type of study or treatment of data.
- 0 insufficient or insufficient data to determine.

## 2.4 Representative sample

- 3 used probability sampling - random sample.
- 2 used stratified or purpose sampling and strategy and rationale are clear.
- 1 used non-probability sampling - convenience sample.
- 0 insufficient data to determine.

## 2.5 Data collection procedures described

- 3 detail sufficient to replicate; procedure clear enough to determine if results can be repeated (the who, what, when & how).
- 2 detail sufficient to replicate with effort; some aspect of procedures would need to be clarified with author.
- 1 vague or partial description of procedure.
- 0 not described.

## 2.6 Instrument validity described (content, predictive, construct)

- 3 addresses all 3.
- 2 addresses 2.
- 1 addresses only 1.
- 0 not mentioned.
- NA qualitative study.

2.7 Instrument reliability described stability, (e.g. test-retest), equivalence, (e.g. two instruments or Interrater reliability), homogeneity, (e.g., split halves test).

- 3 addresses all 3.
- 2 addresses 2.
- 1 addresses only 1.
- 0 not mentioned.
- NA qualitative study.

### 3.0 DATA ANALYSIS AND RESULTS

#### 3.1 Statistical treatment

- 3 analytical procedures are appropriate for the design and appropriate to answer research questions (if no research question or hypothesis stated, then score this item = 1).
- 2 analytical procedures are appropriate for the design and appropriate to answer research questions, however, not all research questions or hypotheses are addressed.
- 1 confusing, limited, question appropriateness, no research question(s) or hypothesis per se.
- 0 not specified, or totally inappropriate for design or research questions or hypotheses.
- NA qualitative study.

#### 3.2 Data presentation

- 3 presented clearly, logically, accurately all statistics of interest included; (such as %s, t-tests, df, and p values).
- 2 presented clearly, logically, and accurately, however not all statistics of interest included; (such as %s, t-tests, df, and p values).
- 1 confusing, limited stats and/or inaccuracies (i.e., t-test, but no df).
- 0 inadequate / not presented.

#### 3.3 Results related to problem and/or hypotheses or research questions (relates to 1.5).

- 3 addresses problem, research question or hypothesis clearly & adequately (requires 3 on item 1.5 for this score). Exception: qualitative without problem, RQ or HO that clearly addresses purpose.
- 2 incompletely addresses problem, research question or hypothesis.
- 1 vague or partially addresses problem, RQ, HO (and/or purpose of qualitative studies without problem, RQ or HO).
- 0 results not presented in relation to problem or hypotheses.

### 3.4 Findings are substantiated by methods used

- 3 substantiated, findings supported by data.
- 2 substantiated with qualifications, findings and clearly linked to data.
- 1 partially substantiated/supported.
- 0 not substantiated.

## 4.0 CONCLUSIONS, RECOMMENDATIONS

### 4.1 Discussion related to background, significance, and conceptual framework

- 3 related to all 3; discussion of all the statistically significant results included.
- 2 related to 2; discussion of all the statistically significant results included..
- 1 related to 1.
- 0 not related.

### 4.2 Conclusions logically derived from findings/results

- 3 conclusions logically derived from findings and (must be) related to research questions or hypothesis.
- 2 conclusions indistinct; findings clearly related to research questions or hypothesis.
- 1 partial or vague, fuzzy, too general, logical but not related to research question or hypothesis.
- 0 no attempt to connect conclusions with findings/results or not included.

### 4.3 Recommendations consistent with findings

- 3 relationship between findings and recommendations clearly related to research question or hypothesis and applicability to scientific area of practice.
- 2 relationship between findings and recommendations clearly related to research question or hypothesis; applicability to scientific area of practice vague.
- 1 relationship unclear, illogical; may be clear and logical but not related to research question or hypothesis.
- 0 no recommendations included.

#### 4.4 Alternate explanations presented

- 3 if other conclusions can be drawn, author identifies them; if alternate explanations evident, author identifies them for journals, brief comments acceptable.
- 2 if other conclusions can be drawn, author briefly identifies them.
- 1 inferred or vague attempt.
- 0 not mentioned.

#### SCORING INSTRUCTIONS:

Each item is rated, giving a sum for each of the four categories. The overall sum of the four categories is divided by the number of items (22) resulting in an overall mean rating for the quality of study. The maximum score is 66 and the minimum score is 0.

3	High quality	>=	2.3 to 3.00
2	Medium quality	>=	1.3 to 2.29
1	Low quality	>=	1.2 to 0.01
0	Absent		0
NA	Not applicable		NA

This method of scoring comes from the technical report funded by the National Institutes of Health, National Center for Nursing Research, Academic Research Enhancement Award, Grant Number R15-NR02441, "An Integrative Review of Oncology Nursing Research," page 219, Mary Colette Smith, R.N., Ph.D., Principal Investigator.

#### ACKNOWLEDGEMENT:

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Appendix D

Cluster Variables

Study	Var		Ins			r	Zr	Mean			Total
No	No.	Variable	No.	Instrument	Alpha	Value	Value	Zr	CGN	PGN	N
1001	1	Family Strength	1	Family Strength Questionnaire	0.89	0.948	1.812		55	64	119
1001	2	Parental Communication	2	Parent/Adolescent Communication Scale (Olson)	0.91	0.93	1.653		55	64	119
1001	3	Family Adaptability	3	Family Adaption and Cohesion Evaluation Scale III	0.92	0.33	0.341		55	64	119
1001	4	Family Cohesion	3	Family Adaption and Cohesion Evaluation Scale III	0.92	0.902	1.479		55	64	119
1001	5	Self Esteem	4	Adolescent Self-Esteem Scale	0.89	0.9	1.47		55	64	119
1002	1	Identity Self - TSCS	2	Tennessee Self-Concept Scale	0.8	0.437	0.464		23	23	46
1002	2	Self Satisfaction - TSCS	2	Tennessee Self-Concept Scale	0.8	0.01	0.01		23	23	46
1002	3	Behavior Self - TSCS	2	Tennessee Self-Concept Scale	0.8	0.203	0.203		23	23	46
1002	4	Physical Self - TSCS	2	Tennessee Self-Concept Scale	0.8	0.153	0.153		23	23	46
1002	5	Moral/Ethical Self - TSCS	2	Tennessee Self-Concept Scale	0.8	0.308	0.315		23	23	46
1002	6	Family Self - TSCS	2	Tennessee Self-Concept Scale	0.8	0.221	0.223		23	23	46
1002	7	Personal Self - TSCS	2	Tennessee Self-Concept Scale	0.8	0.053	0.052		23	23	46
1002	8	Social Self - TSCS	2	Tennessee Self-Concept Scale	0.8	0.19	0.19		23	23	46
1002	9	Self criticism - TSCS	2	Tennessee Self-Concept Scale	0.8	0.084	0.083		23	23	46
1002	10	Self Perception TOTAL - TSCS	2	Tennessee Self-Concept Scale	0.8	0.194	0.194		23	23	46
1002	11	Number of brothers	1	ADI Demographics	NP	0.037	0.036	0.053	23	23	46
1002	12	Number of sisters	1	ADI Demographics	NP	0.07	0.069		23	23	46
1002	13	Birth Order	1	ADI Demographics	NP	0.178	0.178		23	23	46
1002	14	Living away from Home	1	ADI Demographics	NP	0.051	0.05		23	23	46
1002	15	At present, more than one sex partner	1	ADI Demographics	NP	0.088	0.087		23	23	46
1003	1	Socio-Economic Status	1	ADI	NP	0.289	0.296		82	43	125
1003	2	Sex typing of activities	1	ADI	0.83	0.174	0.175		82	43	125
1003	3	Educational expectations	1	ADI	NP	0.212	0.214		82	43	125
1003	4	Occupational Aspirations	1	ADI	0.84	0.168	0.169		82	43	125
1003	5	School Grades	1	ADI	NP	0.183	0.185		82	43	125
1003	6	School Dropouts	1	ADI	NP	0.212	0.214		82	43	125
1003	7	School performance	1	ADI	NP	0.183	0.185		82	43	125
1003	8	Sex Role Orientation	1	ADI	0.83	0.262	0.267		82	43	125
1003	9	Locus of Control	2	Rotter Internal/External Scale	0.38	0.094	0.094		82	43	125
1003	10	Self Esteem	1	ADI	NP	-0.014	-0.01		82	43	125
1004	1	Relationship with father	1	ADI	NP	0.253	0.255		12	26	38
1004	2	Relationship with Mother	1	ADI	NP	0	0		12	26	38
1005	1	Self Concept	1	Tennessee Self Concept Scale	NP	0.203	0.204		24	37	61
1005	3	Self Esteem	2	Rosenberg Self Esteem Scale	NP	0.444	0.471		Norms	37	37
1006	1	Locus of Control - School 1	1	Rotter Internal/External Scale	NP	0.164	0.165	0.168	136	28	164
1006	2	Locus of Control - School 2	1	Rotter Internal/External Scale	NP	0.171	0.172		136	28	164
1007	1	Self Esteem - Bagen Construct	1	ADI	NP	0.154	0.154		30	30	60
1007	2	Self Esteem - Coopersmith SEI	2	Coopersmith Self-Esteem Inventory	NP	0.1	0.098		15	15	30
1007	3	Locus of control	3	Norwick-Strickland Locus of Control Scale	NP	0.05	0.049		15	15	30
1008	1	Self Esteem	2	Rosenberg Self Esteem Scale	NP	0.05	0.05		59	69	128
1008	2	Locus of Control	3	Norwick-Strickland Locus of Control Scale	0.23	0.075	0.075		59	69	128
1008	3	Social Acceptance	4	Self Perception Inventory	NP	0.076	0.076		59	69	128
1008	4	School Competence	4	Self Perception Inventory	NP	0.009	0.009		59	69	128
1008	5	Behavioral Conduct	4	Self Perception Inventory	NP	0.02	0.02		59	69	128
1008	6	Global Self Worth	4	Self Perception Inventory	NP	0.225	0.228		59	69	128
1008	7	PSDM - Approach	5	Problem Solving and Decisions Making Inventory	0.61	0.151	0.151	0.278	59	69	128
1008	8	PSDM - Control	5	Problem Solving and Decisions Making Inventory	0.64	0.386	0.405		59	69	128

Study	Var		Ins			r	Zr	Mean			Total
No	No.	Variable	No.	Instrument	Alpha	Value	Value	Zr	CGN	PGN	N
1008	9	Social Support	6	Perceived Competence Scale	0.92	0.101	0.101		59	69	128
1008	10	Beliefs about Ease of Parenting	1	ADI	0.54	0.185	0.187		59	69	128
1008	11	Future Orientation	7	Futuristic Orientation Scale	NP	0.126	0.126		59	69	128
1008	12	Math GPA	1	ADI	NP	0.34	0.353	0.276	59	69	128
1008	13	English GPA	1	ADI	NP	0.317	0.327		59	69	128
1008	14	ITBS - Math Assessment	8	Iowa Test of Basic Skills	NP	0.156	0.156		59	69	128
1008	15	ITBS - Language Assessment	8	Iowa Test of Basic Skills	NP	0.145	0.145		59	69	128
1008	16	Percent of Failed Classes	1	ADI	NP	0.382	0.4		59	69	128
1008	17	Times sex before used protection	1	ADI	NP	0.294	0.301	0.288	28	69	97
1008	18	Percent of protected sex	1	ADI	NP	0.45	0.482		28	69	97
1008	19	Frequency sex in last year	1	ADI	NP	0.189	0.19		28	69	97
1008	20	Confidence in contraceptive	1	ADI	NP	0.177	0.178		28	69	97
1008	21	Daughter of teen mother	1	ADI	NP	0.08	0.08	0.188	58	69	127
1008	22	Sister of teen mother	1	ADI	NP	0.142	0.143		58	69	127
1008	23	Relative of teen mother	1	ADI	NP	0.306	0.315		58	69	127
1008	24	Friend of teen mother	1	ADI	NP	0.212	0.214		58	69	127
1009	1	Prenatal Attachment	1	Prenatal Attachment Tool	0.82	0.075	0.074		32	20	52
1009	2	Maternal-Infant Attachment	2	Maternal-Infant Adaption Scale	0.74	0.038	0.038		32	20	52
1010	1	Onset of Menstruation	1	ADI	NP	0.364	0.38		50	50	100
1010	2	Spelling - Individual performance	2	Wide Range Achievement Test	NP	0.675	0.817		50	50	100
1010	3	Math - Individual performance	2	Wide Range Achievement Test	NP	0.475	0.514		50	50	100
1010	4	Reading - Individual performance	2	Wide Range Achievement Test	NP	0.941	1.743		50	50	100
1010	5	Cannot Say Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.199	0.201		50	50	100
1010	6	Lie Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.083	0.083		50	50	100
1010	7	Confusion Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.362	0.377		50	50	100
1010	8	Corrective Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.083	0.083		50	50	100
1010	9	Hypochondriasis scale	3	Minnesota Multiphasic Personality Inventory	NP	0.421	0.447		50	50	100
1010	10	Depression Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.336	0.348		50	50	100
1010	11	Conversion Hysteria Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.287	0.294		50	50	100
1010	12	Psychopathic Deviate Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.489	0.533		50	50	100
1010	13	Masculinity/Femininity Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.078	0.078		50	50	100
1010	14	Paranoid Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.145	0.146		50	50	100
1010	15	Psychasthenia Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.053	0.053		50	50	100
1010	16	Schizophrenia Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.258	0.263		50	50	100
1010	17	Hypomania Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.174	0.175		50	50	100
1010	18	Social Introversion Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.17	0.171		50	50	100
1010	19	Conscious Anxiety Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.069	0.068		50	50	100
1010	20	Conscious Repression Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.265	0.27		50	50	100
1010	21	Ego Strength Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.537	0.597		50	50	100
1010	22	Low Back Pain Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.285	0.291		50	50	100
1010	23	Caudality Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.241	0.244		50	50	100
1010	24	Dependancy Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.089	0.089		50	50	100
1010	25	Dominance Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.393	0.414		50	50	100
1010	26	Social Responsibility Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.482	0.523		50	50	100
1010	27	Prejudice Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.37	0.386		50	50	100
1010	28	Social Status Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.341	0.354		50	50	100
1010	29	Control Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.03	0.03		50	50	100



Study	Var		Ins			r	Zr	Mean			Total
No	No.	Variable	No.	Instrument	Alpha	Value	Value	Zr	CGN	PGN	N
1010	30	Dissimulation Scale	3	Minnesota Multiphasic Personality Inventory	NP	0.081	0.08		50	50	100
1011	1	Girls Education	1	ADI - Demo	NP	0.46	0.494		35	39	74
1011	2	Foster care	1	ADI - Demo	NP	0.43	0.457		35	39	74
1011	3	Abusive boyfriend	1	ADI - Demo	NP	0.41	0.433		35	39	74
1011	4	Home stability	1	ADI - Demo	NP	0.38	0.397		35	39	74
1011	5	Boyfriends education	1	ADI - Demo	NP	0.36	0.374		35	39	74
1011	6	Boyfriend/Sibling in jail	1	ADI - Demo	NP	0.32	0.329		35	39	74
1011	7	Self perception past Pos	2	Family Relations Inventory	NP	0.156	0.156	0.075	35	39	74
1011	8	Self perception past NEG	2	Family Relations Inventory	NP	0.006	0.006		35	39	74
1011	9	Self perception present Pos	2	Family Relations Inventory	NP	0.112	0.112		35	39	74
1011	10	Self perception present NEG	2	Family Relations Inventory	NP	0.028	0.028		35	39	74
1011	11	Perception of father past Pos	2	Family Relations Inventory	NP	0.331	0.342	0.385	35	39	74
1011	12	Perception of father past NEG	2	Family Relations Inventory	NP	0.485	0.526		35	39	74
1011	13	Perception of father present Pos	2	Family Relations Inventory	NP	0.284	0.291		35	39	74
1011	14	Perception of father present NEG	2	Family Relations Inventory	NP	0.367	0.382		35	39	74
1011	15	Perception of mother past Pos	2	Family Relations Inventory	NP	0.3	0.308	0.277	35	39	74
1011	16	Perception of mother past NEG	2	Family Relations Inventory	NP	0.215	0.216		35	39	74
1011	17	Perception of mother present Pos	2	Family Relations Inventory	NP	0.305	0.313		35	39	74
1011	18	Perception of mother present NEG	2	Family Relations Inventory	NP	0.265	0.27		35	39	74
1011	19	Perception of sister past Pos	2	Family Relations Inventory	NP	0.177	0.178	0.158	35	39	74
1011	20	Perception of sister past NEG	2	Family Relations Inventory	NP	0.074	0.074		35	39	74
1011	21	Perception of sister present Pos	2	Family Relations Inventory	NP	0.34	0.351		35	39	74
1011	22	Perception of sister present NEG	2	Family Relations Inventory	NP	0.029	0.029		35	39	74
1011	23	Perception of brother past Pos	2	Family Relations Inventory	NP	0.126	0.126	0.155	35	39	74
1011	24	Perception of brother past NEG	2	Family Relations Inventory	NP	0.249	0.253		35	39	74
1011	25	Perception of brother present Pos	2	Family Relations Inventory	NP	0.219	0.221		35	39	74
1011	26	Perception of brother present NEG	2	Family Relations Inventory	NP	0.022	0.022		35	39	74
1011	27	Ego development (LSCT)	3	Loevinger Sentence Completion Test	NP	0.278	0.283		34	33	67
1011	28	Autonomy vs dependence card 2 needs	4	Thematic Apperception Test	NP	0.265	0.269	0.228	28	31	59
1011	29	Autonomy vs dependence card 2 presses	4	Thematic Apperception Test	NP	0.236	0.238		28	31	59
1011	30	Autonomy vs dependence card 76F	4	Thematic Apperception Test	NP	0.183	0.183		28	31	59
1011	31	Autonomy vs dependence card 36F needs	4	Thematic Apperception Test	NP	0.236	0.238		28	31	59
1011	32	Autonomy vs dependence card 36F presses	4	Thematic Apperception Test	NP	0.21	0.211		28	31	59
1012	1	Anxiety - Trait	1	State-Trait Anxiety Inventory (Spielberger)	0.72	0.004	0.004		58	35	93
1012	2	Anxiety - State	1	State-Trait Anxiety Inventory (Spielberger)	0.86	0.016	0.016		58	35	93
1012	3	Self Confidence	2	Pharis Self-Confidence Scale	0.89	0.078	0.078		58	35	93
1013	1	Locus of Control	3	Locus of Control Scale for Children	NP	0.167	0.166		20	19	39
1013	2	Impulse Control	2	Offer Self-Image Questionnaire for Adolescents	NP	0.023	0.023	0.091	20	19	39
1013	3	Emotional Tone	2	Offer Self-Image Questionnaire for Adolescents	NP	0.049	0.049		20	19	39
1013	4	Body Image	2	Offer Self-Image Questionnaire for Adolescents	NP	0.15	0.149		20	19	39
1013	5	Social Relations	2	Offer Self-Image Questionnaire for Adolescents	NP	0.074	0.073		20	19	39
1013	6	Morals	2	Offer Self-Image Questionnaire for Adolescents	NP	0.161	0.16		20	19	39
1013	7	Sexual Attitudes	2	Offer Self-Image Questionnaire for Adolescents	NP	0.116	0.115		20	19	39
1013	8	Family Relations	2	Offer Self-Image Questionnaire for Adolescents	NP	0.026	0.026		20	19	39
1013	9	Mastery	2	Offer Self-Image Questionnaire for Adolescents	NP	0.093	0.092		20	19	39
1013	10	Vocational Goals	2	Offer Self-Image Questionnaire for Adolescents	NP	0.18	0.179		20	19	39
1013	11	Psycho-pathology	2	Offer Self-Image Questionnaire for Adolescents	NP	0.09	0.089		20	19	39

Study	Var		Ins			r	Zr	Mean			Total
No	No.	Variable	No.	Instrument	Alpha	Value	Value	Zr	CGN	PGN	N
1013	12	Superior Adjustment	2	Offer Self-Image Questionnaire for Adolescents	NP	0.044	0.044		20	19	39
1013	13	Total Siblings	1	ADI Demographics	NP	0.085	0.084		20	19	39
1013	14	Mothers Education	1	ADI Demographics	NP	0.211	0.211		20	19	39
1013	15	Mothers Age at first child	1	ADI Demographics	NP	0.002	0.002		20	19	39
1013	16	Years behind in school	1	ADI Demographics	NP	0.007	0.006		20	19	39
1014	1	Pregnant sister or friend	1	ADI Demographics	NP	0	0		23	23	46
1014	2	Move to a new home	1	ADI Demographics	NP	0.225	0.226		23	23	46
1014	3	Increased arguments	1	ADI Demographics	NP	0.043	0.043		23	23	46
1014	4	Change in parent's finances	1	ADI Demographics	NP	0.043	0.043		23	23	46
1014	5	Change in school	1	ADI Demographics	NP	0.3	0.306		23	23	46
1014	6	Baptism, confirmation of self or family member	1	ADI Demographics	NP	0.087	0.086		23	23	46
1014	7	Trouble with a sibling	1	ADI Demographics	NP	0.13	0.13		23	23	46
1014	8	Failed a class	1	ADI Demographics	NP	0.044	0.044		23	23	46
1014	9	Parent has a new job	1	ADI Demographics	NP	0	0		23	23	46
1014	10	Death of a close friend or relative	1	ADI Demographics	NP	0	0		23	23	46
1015	1	Number of children in family	1	ADI Demographics	NP	0.547	0.608		31	21	52
1015	2	Family income	1	ADI Demographics	NP	0.554	0.619		31	21	52
1015	3	Intimacy - Mother/daughter	2	Mother/Daughter Relationship Scale	0.91	0.064	0.063		31	21	52
1015	4	Attachment - Mother/daughter	2	Mother/Daughter Relationship Scale	0.91	0	0		31	21	52
1015	5	Strength of feelings - Mother/daughter	2	Mother/Daughter Relationship Scale	0.91	0.068	0.067		31	21	52
1016	1	P Scale - EPQ Scales	2	Eysenck Personality Questionnaire	NP	0.157	0.158		251	16	267
1016	2	E Scale - EPQ Scales	2	Eysenck Personality Questionnaire	NP	0.201	0.204		251	16	267
1016	3	N Scale - EPQ Scales	2	Eysenck Personality Questionnaire	NP	0.036	0.036		251	16	267
1016	4	L Scale - EPQ Scales	2	Eysenck Personality Questionnaire	NP	0.086	0.086		251	16	267
1016	5	Strongly Indicative - Sexual Activity	1	ADI	NP	0.656	0.785	0.593	251	16	267
1016	6	Moderately Indicative - Sexual Activity	1	ADI	NP	0.382	0.401		251	16	267
1016	7	Romantisium - Romantic Items	1	ADI	NP	0.374	0.392		251	16	267
1017	1	Overall level of irrational thinking - CASI	3	Child and Adolescent Scale of Irrationality	NP	0.374	0.388		16	25	41
1017	2	General irrationality - APBQ	1	ADI Adolescent Pregnancy Belief Questionnaire	NP	0.428	0.452		16	25	41
1017	3	Positive fertility - APBQ	1	ADI Adolescent Pregnancy Belief Questionnaire	NP	0.575	0.647		16	25	41
1017	4	Negative fertility - APBQ	1	ADI Adolescent Pregnancy Belief Questionnaire	NP	0.278	0.283		16	25	41
1017	5	Sexual Knowledge - APBQ	1	ADI Adolescent Pregnancy Belief Questionnaire	NP	0.203	0.203		16	25	41
1017	6	Number of years behind in school	1	ADI Adolescent Pregnancy Belief Questionnaire	NP	0.255	0.257		16	25	41
1017	7	Global measure of intelligence	2	Jr/Sr High School Personality Questionnaire	NP	0.226	0.227		16	25	41
1018	1	Self Criticism	2	Tennessee Self-Concept Scale	0.8	0.209	0.211		108	88	196
1018	2	Total Conflict	2	Tennessee Self-Concept Scale	0.8	0.08	0.08		108	88	196
1018	3	Total Self Concept	2	Tennessee Self-Concept Scale	0.8	0.068	0.068		108	88	196
1018	4	Dissatisfaction with family relationships	1	ADI	NP	0.101	0.101		108	88	196
1018	5	Father status	1	ADI	NP	0.11	0.11		108	88	196
1019	1	Onset of menarche less than age 12	1	ADI	NP	0.147	0.147		49	47	96
1019	2	Sexual Activity	1	ADI	NP	0.604	0.696		49	47	96
1020	1	Self Esteem	3	Coopersmith	NP	0.156	0.156		123	98	221
1020	2	Parental Care	2	Parental Bonding Instrument	NP	0.041	0.041		124	101	225
1020	3	Parental Control	3	Parental Bonding Instrument	NP	0.017	0.017		131	100	231
1020	4	Fathers in the Home.	1	ADI Demographic	NP	0.225	0.228		134	108	242
1021	1	Use of leisure time	1	ADI Questionnaire	NP	0.549	0.611		20	30	50
1021	2	Participates in Sports	1	ADI Questionnaire	NP	0.212	0.213		20	30	50

Study	Var		Ins			r	Zr	Mean			Total
No	No.	Variable	No.	Instrument	Alpha	Value	Value	Zr	CGN	PGN	N
1021	3	Has Hobbies	1	ADI Questionnaire	NP	0.695	0.85		20	30	50
1021	4	Person Adolescent feels closest to.	1	ADI Questionnaire	NP	0.53	0.585		20	30	50
1022	1	Residence with parents	1	ADI Questionnaire	NP	0.141	0.142		294	52	346
1022	2	Frequency of sex	1	ADI Questionnaire	NP	0.186	0.188		294	52	346
1022	3	Desire baby before age 20.	1	ADI Questionnaire	NP	0.253	0.259		294	52	346
1023	1	Conflict in the family	3	Family Environment Scale (FES)	0.75	0.084	0.084		193	82	275
1023	2	Control exercised by the parents	3	Family Environment Scale (FES)	0.67	0.046	0.046		193	82	275
1023	3	Teen is Adopted	2	ADI	NP	0.041	0.041		193	82	275
1023	4	Families include step-parents	2	ADI	NP	0.278	0.285		193	82	275
1023	5	Other Teenage mothers in immediate family	2	ADI	NP	0.348	0.363		193	82	275
1023	6	Deaths or serious illness in family	2	ADI	NP	0.042	0.042		193	82	275
1023	7	Held back in school	2	ADI	NP	0.259	0.264	0.349	193	82	275
1023	8	Suspended from School	2	ADI	NP	0.52	0.575		193	82	275
1023	9	School or Career plans	2	ADI	NP	0.206	0.208		193	82	275
1023	10	Families talk about sex with daughters	2	ADI	NP	0.063	0.063		193	82	275
1023	11	Families involved with ETOH, drugs, or Law	2	ADI	NP	0.095	0.095		193	82	275
1023	12	Daughter reports abuse.	2	ADI	NP	0.032	0.032		193	82	275
1023	13	Held back a grade in school	2	ADI	NP	0.148	0.149		193	82	275
1023	14	Suspended from school	2	ADI	NP	0.112	0.112		193	82	275
1023	15	Family involvement with ETOH, drugs, Law	2	ADI	NP	0.148	0.149		193	82	275
1023	16	Report of Abuse	2	ADI	NP	0.174	0.175		193	82	275
1023	17	Relationship with Father	2	ADI	NP	0.166	0.167		193	82	275
1023	18	Relationship with Peers	2	ADI	NP	0.166	0.167		193	82	275
1024	1	Adult male role model in the home	1	ADI	NP	0.018	0.017		32	19	51
1024	2	Self report GPA	1	ADI	NP	0.278	0.283		32	20	52
1024	3	Retained in school	1	ADI	NP	0.376	0.392		32	20	52
1024	4	Special Education	1	ADI	NP	0.336	0.346		32	20	52
1024	5	Educational Goals	1	ADI	NP	0.367	0.381		32	20	52
1024	6	Ranking of parents as a source of information about sex.	1	ADI	NP	0.045	0.045		32	20	52
1024	7	Perceived role of women	2	Attitudes Toward Women Scale for Adolescents	0.72	0.388	0.406		32	20	52
1024	8	Physical Self - TSCS	3	Tennessee Self-Concept Scale	NP	0.038	0.037		32	20	52
1024	9	Moral/Ethical Self - TSCS	3	Tennessee Self-Concept Scale	NP	0.003	0.003		32	20	52
1024	10	Personal Self - TSCS	3	Tennessee Self-Concept Scale	NP	0.087	0.086		32	20	52
1024	11	Social Self - TSCS	3	Tennessee Self-Concept Scale	NP	0.391	0.409		32	20	52
1024	12	Identity Self - TSCS	3	Tennessee Self-Concept Scale	NP	0.102	0.101		32	20	52
1024	13	Self Satisfaction - TSCS	3	Tennessee Self-Concept Scale	NP	0.059	0.059		32	20	52
1024	14	Behavior Self - TSCS	3	Tennessee Self-Concept Scale	NP	0.005	0.005		32	20	52
1024	15	Self criticism - TSCS	3	Tennessee Self-Concept Scale	NP	0.059	0.059		32	20	52
1024	16	Self Perception TOTAL - Tenn Self-concept scale	3	Tennessee Self-Concept Scale	NP	0.077	0.076		32	20	52
1024	17	Cohesion - Family Environment Scale	4	Family Environment Scale (FES)	NP	0.128	0.127		32	20	52
1024	18	Expressive - Family Environment Scale	4	Family Environment Scale (FES)	NP	0.213	0.214		32	20	52
1024	19	Conflict - Family Environment Scale	4	Family Environment Scale (FES)	NP	0.141	0.141		32	20	52
1024	20	Independence - Family Environment Scale	4	Family Environment Scale (FES)	NP	0.004	0.004		32	20	52
1024	21	Achievement - Family Environment Scale	4	Family Environment Scale (FES)	NP	0.096	0.095		32	20	52
1024	22	Inter Cult - Family Environment Scale	4	Family Environment Scale (FES)	NP	0.175	0.175		32	20	52
1024	23	Act Rec - Family Environment Scale	4	Family Environment Scale (FES)	NP	0.218	0.219		32	20	52
1024	24	Moral/religious - Family Environment Scale	4	Family Environment Scale (FES)	NP	0.165	0.165		32	20	52

Study	Var		Ins			r	Zr	Mean			Total
No	No.	Variable	No.	Instrument	Alpha	Value	Value	Zr	CGN	PGN	N
1024	25	Organizational - Family Environment Scale	4	Family Environment Scale (FES)	NP	0.035	0.034		32	20	52
1024	26	Control - Family Environment Scale	4	Family Environment Scale (FES)	NP	0.019	0.019		32	20	52
1025	1	Nurturance - Parental (IPBI)	5	Iowa Parental Behavior Inventory	NP	0.226	0.228	0.241	30	30	60
1025	2	Nurturance - Father (IPBI)	5	Iowa Parental Behavior Inventory	NP	0.241	0.244		30	30	60
1025	3	Nurturance - Mother (IPBI)	5	Iowa Parental Behavior Inventory	NP	0.248	0.251		30	30	60
1025	4	Control - Parental (IPBI)	5	Iowa Parental Behavior Inventory	NP	0.031	0.031	0.047	30	30	60
1025	5	Control - Father (IPBI)	5	Iowa Parental Behavior Inventory	NP	0.006	0.006		30	30	60
1025	6	Control - Mother (IPBI)	5	Iowa Parental Behavior Inventory	NP	0.103	0.102		30	30	60
1025	7	Communication - Parental (IPBI)	5	Iowa Parental Behavior Inventory	NP	0.325	0.335	0.323	30	30	60
1025	8	Communication - Father (IPBI)	5	Iowa Parental Behavior Inventory	NP	0.211	0.213		30	30	60
1025	9	Communication - Mother (IPBI)	5	Iowa Parental Behavior Inventory	NP	0.401	0.421		30	30	60
1025	10	Self Esteem - Rosenberg	2	Rosenberg Self Esteem Scale	NP	0.254	0.258		30	30	60
1025	11	Responsibility	3	Gordon Personal Profile for Responsibility	0.7	0.054	0.054	0.257	30	30	60
1025	12	Responsibility toward pregnancy	4	Positive Responsibility toward Pregnancy Question	0.33	0.433	0.46		30	30	60
1025	13	Presence of father in home	1	ADI	NP	0.424	0.449		30	30	60
1026	1	Social Support - friends	1	Perceived Social Support Instrument	0.88	0.565	0.636		35	35	70
1026	2	Social Support - family	1	Perceived Social Support Instrument	0.9	0.388	0.406		35	35	70
1026	3	Coping - Distancing	2	Ways of Coping Questionnaire	NP	0.254	0.258		35	35	70
1026	4	Self Esteem - Coopersmith	3	Coopersmith	NP	0.396	0.416		35	35	70
1026	5	Coping strategies - escape/avoidance	2	Ways of Coping Questionnaire	NP	0.308	0.316		35	35	70
1026	6	Locus of Control	4	Norwicki-Strickland Int/Ext LOC Scale (ADULT)	NP	0.669	0.805		35	35	70
1027	1	Self Concept - Tenn Self Concept Scale	1	Tennessee Self-Concept Scale	NP	0.286	0.291		15	37	52
1027	2	Locus of Control - Rotter's I/E Scale	2	Rotter Internal/External Scale	NP	0.424	0.448		15	37	52
1028	1	Self Esteem - Coopersmith	2	Coopersmith SEI	NP	0.032	0.032		858	95	953
1028	2	Mom's occupation	1	ADI	NP	0.096	0.096		858	95	953
1028	3	Number of sisters	1	ADI	NP	0.094	0.095		858	95	953
1028	4	Head of household - single parent vs intact family	1	ADI	NP	0.089	0.089		858	95	953
1028	5	Dating onset after 13	1	ADI	NP	0.104	0.105		858	95	953
1028	6	Closest friend/relative (most indicated boyfriend)	1	ADI	NP	0.09	0.091		858	95	953
1028	7	Expected vocation	1	ADI	NP	0.098	0.098		858	95	953
1028	8	Church attendance	1	ADI	NP	0.089	0.089		858	95	953
1028	9	Girl's Feelings toward unexpected pregnancy.	1	ADI	NP	0.09	0.091		858	95	953
1028	10	Family's Feelings toward unexpected pregnancy.	1	ADI	NP	0.112	0.113		858	95	953
1029	1	Schooling	1	ADI	NP	0.522	0.578		100	129	229
1029	2	Future Expectations	1	ADI	NP	0.485	0.529		100	129	229
1029	3	Work Aspirations	1	ADI	NP	0.47	0.509		100	129	229
1029	4	Number of Friends	1	ADI	NP	0.18	0.181		100	129	229
1029	5	Activities of friends	1	ADI	NP	0.287	0.295		100	129	229
1029	6	Acceptance of pregnancy by male friends	1	ADI	NP	0.243	0.248		100	129	229
1029	7	Religious Practice	1	ADI	NP	0.164	0.165		100	129	229
1030	1	Age at first coitus	1	ADI	NP	0.237	0.239		15	44	59
1030	2	Length of relationship with boyfriend	1	ADI	NP	0.338	0.349		15	44	59
1030	3	Recent Crisis	1	ADI	NP	0.13	0.129		15	44	59
1030	4	Previously used contraceptives	1	ADI	NP	0.312	0.32		15	44	59
1030	5	Planned future use of contraceptives	1	ADI	NP	0.225	0.227		15	44	59
1030	6	Person suggesting contraceptive use (self vs others).	1	ADI	NP	0.336	0.347		15	44	59
1030	7	Person suggesting avoidance of contraceptive (self vs others)	1	ADI	NP	0.054	0.054		15	44	59



Study	Var	Variable	Ins	Instrument	Alpha	r	Zr	Mean	CGN	PGN	Total
No	No.		No.		Value	Value	Value	Zr		N	
1030	8	Parents attitude toward daughter's sexual activity.	1	ADI	NP	0.281	0.286		15	44	59
1030	9	Mom's initial reaction	1	ADI	NP	0.112	0.111		15	44	59
1030	10	Father's initial reaction	1	ADI	NP	0.026	0.026		15	44	59
1030	11	Boyfriend happy with pregnancy.	1	ADI	NP	0.264	0.268		15	44	59
1030	12	Desire for pregnancy.	1	ADI	NP	0.322	0.331		15	44	59
1030	13	Wish to keep child.	1	ADI	NP	0.297	0.304		15	44	59
1030	14	Plan to marry boyfriend	1	ADI	NP	0.105	0.105		15	44	59
1030	15	Boyfriend in school	1	ADI	NP	0.01	0.01		15	44	59
1030	16	Boyfriend at work	1	ADI	NP	0.109	0.108		15	44	59
1030	17	Knowledge of contraception - sexual contacts for pregnancy	1	ADI	NP	0.086	0.085		15	44	59
1030	18	Knowledge of contraception - timing of menstrual cycle to	1	ADI	NP	0.056	0.056		15	44	59
1031	1	Personal Control - Something stops me from doing better.	1	ADI	NP	0.152	0.153	0.124	180	16	196
1031	2	Personal Control - Don't have a chance	1	ADI	NP	0.125	0.125		180	16	196
1031	3	Personal Control - Good luck is most important	1	ADI	NP	0.092	0.092		180	16	196
1031	4	Self-Esteem Feel useless	1	ADI	NP	0.047	0.047	0.039	180	16	196
1031	5	Self-Esteem No good at all.	1	ADI	NP	0.061	0.061		180	16	196
1031	6	Self-Esteem Do things as well as others.	1	ADI	NP	0.027	0.027		180	16	196
1031	7	Self-Esteem Would not change self.	1	ADI	NP	0.021	0.021		180	16	196
1031	8	Mood/outlook good	1	ADI	NP	0.004	0.004	0.032	180	16	196
1031	9	Mood/outlook happy	1	ADI	NP	0.007	0.007		180	16	196
1031	10	Mood/outlook Worry	1	ADI	NP	0.085	0.085		180	16	196
1031	11	Religiosity - x/mo church attendance.	1	ADI	NP	0.2	0.203	0.114	180	16	196
1031	12	Religiosity - important.	1	ADI	NP	0.026	0.026		180	16	196
1031	13	Often think about health (Self-report of health status).	1	ADI	NP	0.009	0.009	0.181	180	16	196
1031	14	Self-rating of health (Self-report of health status).	1	ADI	NP	0.069	0.069		180	16	196
1031	15	Self-rating of health relative to others (Self-report of health status).	1	ADI	NP	0.105	0.105		180	16	196
1031	16	Last visit to the doctor.	1	ADI	NP	0.289	0.297		180	16	196
1031	17	Wanted medical attention greater than one year.	1	ADI	NP	0.4	0.423		180	16	196
1032	1	Ambivalence about Ego Identity	1	Q Sort - Adjective List	NP	0.234	0.237		30	32	62
1032	2	Mother component in - Ego Identity	1	Q Sort - Adjective List	NP	0.345	0.357		30	32	62
1032	3	Identification as an adequate woman _ Ego Identity	1	Q Sort - Adjective List	NP	0.895	1.441		30	32	62
1032	4	Dependency Needs	2	Marlowe-Crowne Social Desirability Scale	NP	0.432	0.459		30	32	62
1033	1	Anxiety - State	1	State-Trait Anxiety Inventory	NP	0.501	0.545		8	43	51
1033	2	Anxiety - Trait	1	State-Trait Anxiety Inventory	NP	0.208	0.209		8	43	51
1033	3	L scale MMPI	2	Minnesota Multiphasic Personality Inventory	NP	0.177	0.178	0.344	15	44	59
1033	4	F scale MMPI	2	Minnesota Multiphasic Personality Inventory	NP	0.471	0.507		15	44	59
1033	5	K scale MMPI	2	Minnesota Multiphasic Personality Inventory	NP	0.26	0.264		15	44	59
1033	6	Hs scale MMPI	2	Minnesota Multiphasic Personality Inventory	NP	0.223	0.225		15	44	59
1033	7	D scale MMPI	2	Minnesota Multiphasic Personality Inventory	NP	0.098	0.097		15	44	59
1033	8	Hy scale MMPI	2	Minnesota Multiphasic Personality Inventory	NP	0.277	0.282		15	44	59
1033	9	Pd scale MMPI	2	Minnesota Multiphasic Personality Inventory	NP	0.65	0.769		15	44	59
1033	10	Mf scale MMPI	2	Minnesota Multiphasic Personality Inventory	NP	0.191	0.192		15	44	59
1033	11	Pa scale MMPI	2	Minnesota Multiphasic Personality Inventory	NP	0.367	0.382		15	44	59
1033	12	Pt scale MMPI	2	Minnesota Multiphasic Personality Inventory	NP	0.337	0.348		15	44	59
1033	13	Sc scale MMPI	2	Minnesota Multiphasic Personality Inventory	NP	0.552	0.617		15	44	59
1033	14	Ma scale MMPI	2	Minnesota Multiphasic Personality Inventory	NP	0.536	0.594		15	44	59
1033	15	Si scale MMPI	2	Minnesota Multiphasic Personality Inventory	NP	0.023	0.022		15	44	59



Study	Var		Ins									Total
No	No.	Variable	No.	Instrument	Alpha	r	Zr	Mean	CGN	PGN	N	
1039	8	Contraceptive use preceeding month	1	ADI Demographics	NP	0.179	0.181		86	103	189	
1039	9	Sexual frequency preceeding month	1	ADI Demographics	NP	0.098	0.098		86	103	189	
1039	10	Mother knows of contraceptive use.	1	ADI Demographics	NP	0.201	0.203		86	103	189	
1039	11	Contraceptive attitude and knowledge score	1	ADI Demographics	NP	0.26	0.265		86	56	142	
1040	1	Grades	1	ADI	NP	0.044	0.044		151	136	287	
1040	2	Plan to go to college	1	ADI	NP	0.345	0.359		151	136	287	
1040	3	Sister was a teenage mother	1	ADI	NP	0.07	0.07		151	136	287	
1040	4	Friend was a teenage mother	1	ADI	NP	0.229	0.233		151	136	287	
1040	5	Believe can't get pregnant with 1st sex.	1	ADI	NP	0.158	0.16	0.14	151	136	287	
1040	6	Believe can't get pregnant without climax	1	ADI	NP	0.076	0.076		151	136	287	
1040	7	Believe must have frequent sex for pregnancy	1	ADI	NP	0.21	0.213		151	136	287	
1040	8	Do not know when most likely to get pregnant.	1	ADI	NP	0.112	0.113		151	136	287	
1040	9	Mean number of methods of contraception known.	1	ADI	NP	0.218	0.222		151	136	287	
1040	10	Age at first sex	1	ADI	NP	0.018	0.018		151	136	287	
1040	11	Age at menarche	1	ADI	NP	0.058	0.058		151	136	287	
1040	12	Mean number of siblings	1	ADI	NP	0.183	0.185		151	136	287	
1041	1	School Attendance	1	ADI	NP	0.287	0.294		60	63	123	
1041	2	Contentment - Pearlin & Schooler	2	Perlin and Schooler Questions (1978)	0.72	0.283	0.29		60	63	123	
1041	3	Self Esteem - Rosenberg	3	Rosenberg Self Esteem Scale	NP	0.248	0.253		60	63	123	
1041	4	Sense of Control/Responsibility - Perlin Mastery Scale	4	Perlin Mastery Scale	0.81	0.061	0.061		60	63	123	
1041	5	Anxiety State/Trait Anxiety Inventory	5	State-Trait Anxiety Inventory	0.83	0.064	0.064		60	63	123	
1041	6	Depression - Beck Depression Inventory	6	Beck Depression Inventory	NP	0.079	0.079		60	63	123	
1041	7	Lonliness Scale- UCLA (short form) - Social support	7	Lonliness Scale UCLA (short form)	NP	0.305	0.314	0.171	60	63	123	
1041	8	Social Support Inventory - Social support/help	8	Social Support Inventory	0.73	0.075	0.075		60	63	123	
1041	9	Network Strenght - Strength of social network	8	Social Support Inventory	0.67	0.123	0.123		60	63	123	
1041	10	Conflict with parents - frequency of conflicts with parents	8	Social Support Inventory	NP	0.203	0.205		60	63	123	
1042	1	Knowledge of child development	1	Child Development Scores	NP	0.067	0.067		90	50	140	
1042	2	Knowledge of Reproduction/Contraception	2	Human Reproduction Scores	NP	0.014	0.014		90	50	140	
1042	3	Maternal Satisfaction	3	Maternal Attitude Scale	NP	0.147	0.147	0.082	50	90	140	
1042	4	Encouragement of positive interaction	3	Maternal Attitude Scale	NP	0.013	0.013		50	90	140	
1042	5	Maternal Anxiety	3	Maternal Attitude Scale	NP	0.086	0.086		50	90	140	
1043	1	Defenselessness/Vulnerability	1	ADI	NP	0.07	0.07		328	82	410	
1043	2	Guilt deflection	1	ADI	NP	0.063	0.063		328	82	410	
1043	3	Perceived rejection by father	1	ADI	NP	0.081	0.081		328	82	410	
1043	4	Perceived rejection by school	1	ADI	NP	0.072	0.072		328	82	410	
1043	5	Perceived rejection by peers	1	ADI	NP	0.064	0.064		328	82	410	
1043	6	Contranormative attitudes	1	ADI	NP	0.17	0.171		328	82	410	
1043	7	Delinquent behavior	1	ADI	NP	0.063	0.063		328	82	410	
1043	8	Violent behavior	1	ADI	NP	0.114	0.115		328	82	410	
1043	9	Trouble with authorities	1	ADI	NP	0.156	0.157		328	82	410	
1043	10	Perceived rejection for ascribed characteristics (SES, Rac	1	ADI	NP	0.128	0.129		328	82	410	
1043	11	Awareness of deviant patterns	1	ADI	NP	0.12	0.121		328	82	410	
1043	12	Inconsistency of parental rules	1	ADI	NP	0.058	0.058		328	82	410	
1044	1	Broken Homes	1	ADI	NP	0.262	0.266	0.157	19	26	45	
1044	2	Broken Homes	1	ADI	NP	0.048	0.048	---	36	50	86	
1044	3	Father figure in the home.	1	ADI	NP	0.339	0.349	0.206	19	26	45	
1044	4	Father figure in the home.	1	ADI	NP	0.063	0.063	---	36	50	86	

Study	Var		Ins				r	Zr	Mean			Total
No	No.	Variable	No.	Instrument	Alpha	Value	Value	Zr	CGN	PGN	N	
1044	5	Mother employed outside the home	1	ADI	NP	0.169	0.168	0.195	19	26	45	
1044	6	Mother employed outside the home	1	ADI	NP	0.219	0.221	---	36	50	86	
1044	7	Death in close family or friends.	1	ADI	NP	0.154	0.154	0.161	19	26	45	
1044	8	Death in close family or friends.	1	ADI	NP	0.157	0.157	---	36	50	86	
1044	9	Illness in family, minor or serious.	1	ADI	NP	0.244	0.247	---	19	26	45	
1044	10	Illness in family, minor or serious.	1	ADI	NP	0.141	0.142	---	36	50	86	
1044	11	Three or more sisters	1	ADI	NP	0	0	---	19	26	45	
1044	12	Three or more sisters	1	ADI	NP	0.248	0.252	---	36	50	86	
1044	13	Older sister	1	ADI	NP	0.093	0.092	---	19	26	45	
1044	14	Older sister	1	ADI	NP	0.205	0.207	---	36	50	86	
1044	15	Pregnant sister	1	ADI	NP	0.18	0.18	---	19	26	45	
1044	16	Pregnant sister	1	ADI	NP	0.13	0.13	---	36	50	86	
1044	17	Room of her own.	1	ADI	NP	0.142	0.142	---	19	26	45	
1044	18	Room of her own.	1	ADI	NP	0.23	0.233	---	36	50	86	
1044	19	Corporal punishment.	1	ADI	NP	0.302	0.309	0.25	19	26	45	
1044	20	Corporal punishment.	1	ADI	NP	0.164	0.165	---	36	50	86	
1044	21	Denial of priveleges.	1	ADI	NP	0.349	0.36	---	19	26	45	
1044	22	Denial of priveleges.	1	ADI	NP	0.11	0.11	---	36	50	86	
1044	23	Both corporal punishment and denial of priveleges.	1	ADI	NP	0.349	0.36	---	19	26	45	
1044	24	Both corporal punishment and denial of priveleges.	1	ADI	NP	0.262	0.267	---	36	50	86	
1044	25	Subject considers punishment effective.	1	ADI	NP	0.312	0.319	---	19	26	45	
1044	26	Subject considers punishment effective.	1	ADI	NP	0.107	0.107	---	36	50	86	
1044	27	No religious preference.	1	ADI	NP	0.333	0.343	0.256	19	26	45	
1044	28	No religious preference.	1	ADI	NP	0.053	0.053	---	36	50	86	
1044	29	No religious preference and rarely attended church.	1	ADI	NP	0.464	0.497	---	19	26	45	
1044	30	No religious preference and rarely attended church.	1	ADI	NP	0.203	0.204	---	36	50	86	
1044	31	Regular preference and attended at least once per week.	1	ADI	NP	0.306	0.312	---	19	26	45	
1044	32	Regular preference and attended at least once per week.	1	ADI	NP	0.129	0.129	---	36	50	86	
1044	33	Dated two times per week or more.	1	ADI	NP	0.331	0.34	0.244	19	26	45	
1044	34	Dated two times per week or more.	1	ADI	NP	0.147	0.148	---	36	50	86	
1044	35	Knowledge of dating, marrage, and sex from school class	1	ADI	NP	0.073	0.072	0.237	19	26	45	
1044	36	Knowledge of dating, marrage, and sex from school class	1	ADI	NP	0.297	0.305	---	36	50	86	
1044	37	Knowledge of dating, marrage, and sex from books.	1	ADI	NP	0.225	0.226	---	19	26	45	
1044	38	Knowledge of dating, marrage, and sex from books.	1	ADI	NP	0.296	0.303	---	36	50	86	
1044	39	Knowledge of dating, marrage, and sex from sister.	1	ADI	NP	0.327	0.336	---	19	26	45	
1044	40	Knowledge of dating, marrage, and sex from sister.	1	ADI	NP	0.237	0.24	---	36	50	86	
1044	41	Knowledge of dating, marrage, and sex from somone else	1	ADI	NP	0.221	0.222	---	19	26	45	
1044	42	Knowledge of dating, marrage, and sex from somone else	1	ADI	NP	0.146	0.146	---	36	50	86	
1044	43	Knowledge of dating, marrage, and sex from confidant.	1	ADI	NP	0.357	0.37	---	19	26	45	
1044	44	Knowledge of dating, marrage, and sex from confidant.	1	ADI	NP	0.152	0.152	---	36	50	86	
1044	45	Mensturation at age 12 yrs or less.	1	ADI	NP	0.037	0.036	0.102	19	26	45	
1044	46	Mensturation at age 12 yrs or less.	1	ADI	NP	0.167	0.168	---	36	50	86	
1044	47	Mensturation makes her sick, scared or discusted.	1	ADI	NP	0.239	0.24	0.212	19	26	45	
1044	48	Mensturation makes her sick, scared or discusted.	1	ADI	NP	0.183	0.184	---	36	50	86	
1044	49	Negative feelings or discomfort with mensturation.	1	ADI	NP	0.229	0.231	0.202	19	26	45	
1044	50	Negative feelings or discomfort with mensturation.	1	ADI	NP	0.301	0.309	---	36	50	86	
1044	51	Eight or greater neurotic symptoms within the past year.	1	ADI	NP	0.239	0.241	---	19	26	45	



Study	Var		Ins			r	Zr	Mean			Total
No	No.	Variable	No.	Instrument	Alpha	Value	Value	Zr	CGN	PGN	N
1044	52	Eight or greater neurotic symptoms within the past year.	1	ADI	NP	0.154	0.154	---	36	50	86
1044	53	Four or greater depressive symptoms within the past year	1	ADI	NP	0.202	0.203	---	19	26	45
1044	54	Four or greater depressive symptoms within the past year	1	ADI	NP	0.199	0.2	---	36	50	86
1044	55	Psychosomatic symptoms within the past year.	1	ADI	NP	0.427	0.452	---	19	26	45
1044	56	Psychosomatic symptoms within the past year.	1	ADI	NP	0.226	0.228	---	36	50	86
1044	57	Loss of interest.	1	ADI	NP	0.049	0.049	---	19	26	45
1044	58	Loss of interest.	1	ADI	NP	0.355	0.369	---	36	50	86
1044	59	Loss of interest within the past year.	1	ADI	NP	0.169	0.168	---	19	26	45
1044	60	Loss of interest within the past year.	1	ADI	NP	0.181	0.182	---	36	50	86
1044	61	Ill at ease prior to the past year.	1	ADI	NP	0.076	0.075	---	19	26	45
1044	62	Ill at ease prior to the past year.	1	ADI	NP	0.248	0.252	---	36	50	86
1044	63	Ill at ease within the past year.	1	ADI	NP	0.037	0.036	---	19	26	45
1044	64	Ill at ease within the past year.	1	ADI	NP	0.277	0.283	---	36	50	86
1044	65	Excessive perspiration prior to the past year.	1	ADI	NP	0	0	---	19	26	45
1044	66	Excessive perspiration prior to the past year.	1	ADI	NP	0.265	0.269	---	36	50	86
1044	67	Excessive perspiration within the past year.	1	ADI	NP	0.037	0.036	---	19	26	45
1044	68	Excessive perspiration within the past year.	1	ADI	NP	0.192	0.193	---	36	50	86
1044	69	Cold hands/feet prior to the past year.	1	ADI	NP	0.322	0.33	---	19	26	45
1044	70	Cold hands/feet prior to the past year.	1	ADI	NP	0.103	0.103	---	36	50	86
1044	71	Cold hands/feet within the past year.	1	ADI	NP	0.373	0.387	---	19	26	45
1044	72	Cold hands/feet within the past year.	1	ADI	NP	0.043	0.043	---	36	50	86
1044	73	Dizzy spells within the past year.	1	ADI	NP	0.221	0.222	---	19	26	45
1044	74	Dizzy spells within the past year.	1	ADI	NP	0.141	0.141	---	36	50	86
1044	75	Crying spells within the past year.	1	ADI	NP	0.186	0.186	---	19	26	45
1044	76	Crying spells within the past year.	1	ADI	NP	0.312	0.321	---	36	50	86
1045	1	Two parent home	1	ADI	NP	0.234	0.237	---	36	31	67
1045	2	Broken home	1	ADI	NP	0.159	0.16	---	36	31	67
1045	3	Father absent home	1	ADI	NP	0.092	0.092	---	36	31	67
1045	4	Reconstituted home	1	ADI	NP	0.128	0.128	---	36	31	67
1045	5	Eldest Child	1	ADI	NP	0.234	0.236	---	36	31	67
1045	6	Middle Child	1	ADI	NP	0.319	0.328	---	36	31	67
1045	7	Youngest Child	1	ADI	NP	0.213	0.215	---	36	31	67
1045	8	Extended or non-family members in household	1	ADI	NP	0.043	0.043	---	36	31	67
1045	9	Grandmother in household	1	ADI	NP	0.019	0.019	---	36	31	67
1045	10	Cohesion - Relationship - FES	2	Family Environment Scale	NP	0.123	0.123	0.271	36	31	67
1045	11	Cohesion - Relationship - FES	2	Family Environment Scale	NP	0.175	0.175		36	31	67
1045	12	Expressiveness - Relationship - FES	2	Family Environment Scale	NP	0.325	0.335		36	31	67
1045	13	Expressiveness - Relationship - FES	2	Family Environment Scale	NP	0.035	0.035		36	31	67
1045	14	Conflict - Relationship - FES	2	Family Environment Scale	NP	0.892	1.423		36	31	67
1045	15	Conflict - Relationship - FES	2	Family Environment Scale	NP	0.892	1.423		36	31	67
1045	16	Independence - Personal Growth - FES	2	Family Environment Scale	NP	0.132	0.132		36	31	67
1045	17	Achievement - Personal Growth - FES	2	Family Environment Scale	NP	0.26	0.264		36	31	67
1045	17	Independence - Personal Growth - FES	2	Family Environment Scale	NP	0.226	0.228		36	31	67
1045	19	Achievement - Personal Growth - FES	2	Family Environment Scale	NP	0.152	0.152		36	31	67
1045	20	Intellectual Cultural - Personal Growth - FES	2	Family Environment Scale	NP	0.112	0.112		36	31	67
1045	21	Intellectual Cultural - Personal Growth - FES	2	Family Environment Scale	NP	0.12	0.119		36	31	67
1045	22	Active Recreational - Personal Growth - FES	2	Family Environment Scale	NP	0.125	0.125		36	31	67

Study	Var		Ins				r	Zr	Mean			Total
No	No.	Variable	No.	Instrument	Alpha	Value	Value	Zr	CGN	PGN	N	
1045	23	Active Recreational - Personal Growth - FES	2	Family Environment Scale	NP	0.024	0.024		36	31	67	
1045	24	Moral Religious - Personal Growth - FES	2	Family Environment Scale	NP	0.016	0.015		36	31	67	
1045	25	Moral Religious - Personal Growth - FES	2	Family Environment Scale	NP	0.048	0.048		36	31	67	
1045	26	Organization - System Maintenance - FES	2	Family Environment Scale	NP	0.155	0.155		36	31	67	
1045	27	Organization - System Maintenance - FES	2	Family Environment Scale	NP	0.165	0.165		36	31	67	
1045	28	Control - System Maintenance - FES	2	Family Environment Scale	NP	0.058	0.058		36	31	67	
1045	29	Control - System Maintenance - FES	2	Family Environment Scale	NP	0.306	0.314		36	31	67	
1045	30	Loving - Father - PCR	3	Parent-Child Relationship Scale	NP	0.464	0.499	0.132	36	31	67	
1045	31	Loving - Father - PCR	3	Parent-Child Relationship Scale	NP	0.054	0.054		36	31	67	
1045	32	Rejection - Father - PCR	3	Parent-Child Relationship Scale	NP	0.306	0.313		36	31	67	
1045	33	Rejection - Father - PCR	3	Parent-Child Relationship Scale	NP	0.078	0.077		36	31	67	
1045	34	Demanding - Father - PCR	3	Parent-Child Relationship Scale	NP	0.066	0.065		36	31	67	
1045	35	Demanding - Father - PCR	3	Parent-Child Relationship Scale	NP	0.089	0.089		36	31	67	
1045	36	Casualness - Father - PCR	3	Parent-Child Relationship Scale	NP	0.23	0.232		36	31	67	
1045	37	Casualness - Father - PCR	3	Parent-Child Relationship Scale	NP	0.017	0.017		36	31	67	
1045	38	Attention - Father - PCR	3	Parent-Child Relationship Scale	NP	0.349	0.361		36	31	67	
1045	39	Attention - Father - PCR	3	Parent-Child Relationship Scale	NP	0.101	0.101		36	31	67	
1045	40	Loving - Mother - PCR	3	Parent-Child Relationship Scale	NP	0.212	0.213		36	31	67	
1045	41	Loving - Mother - PCR	3	Parent-Child Relationship Scale	NP	0.013	0.013		36	31	67	
1045	42	Rejection - Mother - PCR	3	Parent-Child Relationship Scale	NP	0.026	0.026		36	31	67	
1045	43	Rejection - Mother - PCR	3	Parent-Child Relationship Scale	NP	0.052	0.051		36	31	67	
1045	44	Demanding - Mother - PCR	3	Parent-Child Relationship Scale	NP	0.015	0.015		36	31	67	
1045	45	Demanding - Mother - PCR	3	Parent-Child Relationship Scale	NP	0.149	0.149		36	31	67	
1045	46	Casualness - Mother - PCR	3	Parent-Child Relationship Scale	NP	0.125	0.125		36	31	67	
1045	47	Casualness - Mother - PCR	3	Parent-Child Relationship Scale	NP	0.071	0.07		36	31	67	
1045	48	Attention - Mother - PCR	3	Parent-Child Relationship Scale	NP	0.167	0.167		36	31	67	
1045	49	Attention - Mother - PCR	3	Parent-Child Relationship Scale	NP	0.011	0.011		36	31	67	
1045	50	Physical - TSCS	4	Tennessee Self-Concept Scale	NP	0.244	0.247	0.128	36	31	67	
1045	51	Physical - TSCS	4	Tennessee Self-Concept Scale	NP	0.126	0.125		36	31	67	
1045	52	Moral-Religious - TSCS	4	Tennessee Self-Concept Scale	NP	0.204	0.206		36	31	67	
1045	53	Moral-Religious - TSCS	4	Tennessee Self-Concept Scale	NP	0.147	0.147		36	31	67	
1045	54	Personal - TSCS	4	Tennessee Self-Concept Scale	NP	0.088	0.087		36	31	67	
1045	55	Personal - TSCS	4	Tennessee Self-Concept Scale	NP	0.007	0.007		36	31	67	
1045	56	Family - TSCS	4	Tennessee Self-Concept Scale	NP	0.089	0.088		36	31	67	
1045	57	Family - TSCS	4	Tennessee Self-Concept Scale	NP	0.064	0.064		36	31	67	
1045	58	Social - TSCS	4	Tennessee Self-Concept Scale	NP	0.24	0.243		36	31	67	
1045	59	Social - TSCS	4	Tennessee Self-Concept Scale	NP	0.117	0.117		36	31	67	
1045	60	Identity - TSCS	4	Tennessee Self-Concept Scale	NP	0.273	0.278		36	31	67	
1045	61	Identity - TSCS	4	Tennessee Self-Concept Scale	NP	0.075	0.074		36	31	67	
1045	62	Self-Esteem - TSCS	4	Tennessee Self-Concept Scale	NP	0.183	0.184		36	31	67	
1045	63	Self-Esteem - TSCS	4	Tennessee Self-Concept Scale	NP	0.059	0.059		36	31	67	
1045	64	Behavior - TSCS	4	Tennessee Self-Concept Scale	NP	0.086	0.086		36	31	67	
1045	65	Behavior - TSCS	4	Tennessee Self-Concept Scale	NP	0.03	0.029		36	31	67	
1045	66	Total - TSCS	4	Tennessee Self-Concept Scale	NP	0.14	0.14	0.096	36	31	67	
1045	67	Total - TSCS	4	Tennessee Self-Concept Scale	NP	0.053	0.053		36	31	67	
1045	68	Enmeshment - SFIS	5	Structural Family Interaction Scale	NP	0.091	0.091	0.236	36	31	67	
1045	69	Enmeshment - SFIS	5	Structural Family Interaction Scale	NP	0.221	0.223		36	31	67	

Study	Var	Variable	Ins	Instrument	Alpha	r	Zr	Mean	CGN	PGN	Total
No	No.		No.			Value	Value	Zr			N
1045	70	Disengagement - SFIS	5	Structural Family Interaction Scale	NP	0.062	0.061		36	31	67
1045	71	Disengagement - SFIS	5	Structural Family Interaction Scale	NP	0.07	0.069		36	31	67
1045	72	Neglect - SFIS	5	Structural Family Interaction Scale	NP	0.201	0.202		36	31	67
1045	73	Neglect - SFIS	5	Structural Family Interaction Scale	NP	0.069	0.068		36	31	67
1045	74	Mother Neglect - SFIS	5	Structural Family Interaction Scale	NP	0.05	0.05		36	31	67
1045	75	Mother Neglect - SFIS	5	Structural Family Interaction Scale	NP	0.226	0.228		36	31	67
1045	76	Father Neglect - SFIS	5	Structural Family Interaction Scale	NP	0.293	0.3		36	31	67
1045	77	Father Neglect - SFIS	5	Structural Family Interaction Scale	NP	0.13	0.13		36	31	67
1045	78	Overprotection - SFIS	5	Structural Family Interaction Scale	NP	0.138	0.138		36	31	67
1045	79	Overprotection - SFIS	5	Structural Family Interaction Scale	NP	0.144	0.144		36	31	67
1045	80	Mother Overprotection - SFIS	5	Structural Family Interaction Scale	NP	0.13	0.129		36	31	67
1045	81	Mother Overprotection - SFIS	5	Structural Family Interaction Scale	NP	0.06	0.059		36	31	67
1045	82	Father Overprotection - SFIS	5	Structural Family Interaction Scale	NP	0.105	0.104		36	31	67
1045	83	Father Overprotection - SFIS	5	Structural Family Interaction Scale	NP	0.257	0.261		36	31	67
1045	84	Rigidity - SFIS	5	Structural Family Interaction Scale	NP	0.118	0.117		36	31	67
1045	85	Rigidity - SFIS	5	Structural Family Interaction Scale	NP	0.429	0.456		36	31	67
1045	86	Flexibility - SFIS	5	Structural Family Interaction Scale	NP	0.282	0.287		36	31	67
1045	87	Flexibility - SFIS	5	Structural Family Interaction Scale	NP	0.359	0.373		36	31	67
1045	88	Parent/Child Conflict Avoidance - SFIS	5	Structural Family Interaction Scale	NP	0.076	0.076		36	31	67
1045	89	Parent/Child Conflict Avoidance - SFIS	5	Structural Family Interaction Scale	NP	0.329	0.34		36	31	67
1045	90	Mother/Child Conflict Avoidance - SFIS	5	Structural Family Interaction Scale	NP	0.332	0.342		36	31	67
1045	91	Mother/Child Conflict Avoidance - SFIS	5	Structural Family Interaction Scale	NP	0.218	0.22		36	31	67
1045	92	Father/Child Conflict Avoidance - SFIS	5	Structural Family Interaction Scale	NP	0.204	0.206		36	31	67
1045	93	Father/Child Conflict Avoidance - SFIS	5	Structural Family Interaction Scale	NP	0.39	0.409		36	31	67
1045	94	Parent Conflict Expression w/o Resolution - SFIS	5	Structural Family Interaction Scale	NP	0.285	0.291		36	31	67
1045	95	Parent Conflict Expression w/o Resolution - SFIS	5	Structural Family Interaction Scale	NP	0.051	0.051		36	31	67
1045	96	Mother Conflict Expression w/o Resolution - SFIS	5	Structural Family Interaction Scale	NP	0.247	0.251		36	31	67
1045	97	Mother Conflict Expression w/o Resolution - SFIS	5	Structural Family Interaction Scale	NP	0.057	0.057		36	31	67
1045	98	Father Conflict Expression w/o Resolution - SFIS	5	Structural Family Interaction Scale	NP	0.093	0.092		36	31	67
1045	99	Father Conflict Expression w/o Resolution - SFIS	5	Structural Family Interaction Scale	NP	0.001	0.001		36	31	67
1045	100	Parent/Conflict Resolution - SFIS	5	Structural Family Interaction Scale	NP	0.03	0.03		36	31	67
1045	101	Parent/Conflict Resolution - SFIS	5	Structural Family Interaction Scale	NP	0.412	0.435		36	31	67
1045	102	Mother/Child Conflict Resolution - SFIS	5	Structural Family Interaction Scale	NP	0.103	0.103		36	31	67
1045	103	Mother/Child Conflict Resolution - SFIS	5	Structural Family Interaction Scale	NP	0.299	0.306		36	31	67
1045	104	Father/Child Conflict Resolution - SFIS	5	Structural Family Interaction Scale	NP	0.244	0.247		36	31	67
1045	105	Father/Child Conflict Resolution - SFIS	5	Structural Family Interaction Scale	NP	0.317	0.326		36	31	67
1045	106	Parent Management - SFIS	5	Structural Family Interaction Scale	NP	0.726	0.914		36	31	67
1045	107	Parent Management - SFIS	5	Structural Family Interaction Scale	NP	0.408	0.431		36	31	67
1045	108	Triangulation - SFIS	5	Structural Family Interaction Scale	NP	0.41	0.432		36	31	67
1045	109	Triangulation - SFIS	5	Structural Family Interaction Scale	NP	0.289	0.296		36	31	67
1045	110	Parent/Child Coalition - SFIS	5	Structural Family Interaction Scale	NP	0.313	0.321		36	31	67
1045	111	Parent/Child Coalition - SFIS	5	Structural Family Interaction Scale	NP	0.622	0.724		36	31	67
1045	112	Detouring - SFIS	5	Structural Family Interaction Scale	NP	0.252	0.256		36	31	67
1045	113	Detouring - SFIS	5	Structural Family Interaction Scale	NP	0.186	0.186		36	31	67
1046	1	L scale MMPI GI vs GIII	1	Minnesota Multiphasic Personality Inventory	NP	0.04	0.04		21	2054	2075
1046	2	L scale MMPI GII vs GIII	1	Minnesota Multiphasic Personality Inventory	NP	0.034	0.034		14	2054	2068
1046	3	F scale MMPI GI vs GIII	1	Minnesota Multiphasic Personality Inventory	NP	0.116	0.117		21	2054	2075

Study	Var		Ins			r	Zr	Mean			Total
No	No.	Variable	No.	Instrument	Alpha	Value	Value	Zr	CGN	PGN	N
1046	4	F scale MMPI GII vs GIII	1	Minnesota Multiphasic Personality Inventory	NP	0.168	0.17		14	2054	2068
1046	5	K scale MMPI GI vs GIII	1	Minnesota Multiphasic Personality Inventory	NP	0.021	0.021		21	2054	2075
1046	6	K scale MMPI GII vs GIII	1	Minnesota Multiphasic Personality Inventory	NP	0.025	0.025		14	2054	2068
1046	7	Hs scale MMPI GI vs GIII	1	Minnesota Multiphasic Personality Inventory	NP	0	0		21	2054	2075
1046	8	Hs scale MMPI GII vs GIII	1	Minnesota Multiphasic Personality Inventory	NP	0.017	0.017		14	2054	2068
1046	9	D scale MMPI GI vs GIII	1	Minnesota Multiphasic Personality Inventory	NP	0.031	0.031		21	2054	2075
1046	10	D scale MMPI GII vs GIII	1	Minnesota Multiphasic Personality Inventory	NP	0.079	0.079		14	2054	2068
1046	11	Hy scale MMPI GI vs GIII	1	Minnesota Multiphasic Personality Inventory	NP	0.024	0.024		21	2054	2075
1046	12	Hy scale MMPI GII vs GIII	1	Minnesota Multiphasic Personality Inventory	NP	0.055	0.055		14	2054	2068
1046	13	Pd scale MMPI GI vs GIII	1	Minnesota Multiphasic Personality Inventory	NP	0.099	0.099		21	2054	2075
1046	14	Pd scale MMPI GII vs GIII	1	Minnesota Multiphasic Personality Inventory	NP	0.157	0.158		14	2054	2068
1046	15	Mf scale MMPI GI vs GIII	1	Minnesota Multiphasic Personality Inventory	NP	0.005	0.005		21	2054	2075
1046	16	Mf scale MMPI GII vs GIII	1	Minnesota Multiphasic Personality Inventory	NP	0.019	0.019		14	2054	2068
1046	17	Pa scale MMPI GI vs GIII	1	Minnesota Multiphasic Personality Inventory	NP	0.019	0.019		21	2054	2075
1046	18	Pa scale MMPI GII vs GIII	1	Minnesota Multiphasic Personality Inventory	NP	0.083	0.083		14	2054	2068
1046	19	Pt scale MMPI GI vs GIII	1	Minnesota Multiphasic Personality Inventory	NP	0.007	0.007		21	2054	2075
1046	20	Pt scale MMPI GII vs GIII	1	Minnesota Multiphasic Personality Inventory	NP	0.094	0.094		14	2054	2068
1046	21	Sc scale MMPI GI vs GIII	1	Minnesota Multiphasic Personality Inventory	NP	0.07	0.07		21	2054	2075
1046	22	Sc scale MMPI GII vs GIII	1	Minnesota Multiphasic Personality Inventory	NP	0.159	0.161		14	2054	2068
1046	23	Ma scale MMPI GI vs GIII	1	Minnesota Multiphasic Personality Inventory	NP	0.115	0.115		21	2054	2075
1046	24	Ma scale MMPI GII vs GIII	1	Minnesota Multiphasic Personality Inventory	NP	0.125	0.125		14	2054	2068
1046	25	Si scale MMPI GI vs GIII	1	Minnesota Multiphasic Personality Inventory	NP	0.005	0.005		21	2054	2075
1046	26	Si scale MMPI GII vs GIII	1	Minnesota Multiphasic Personality Inventory	NP	0.019	0.019		14	2054	2068
1047	1	Ego Identity	1	Ego Identity Scale	NP	0.203	0.204		30	30	60
1048	1	Relationship with mother	1	ADI	NP	0.162	0.163	---	58	175	233
1048	2	Relationship with peers	1	ADI	NP	0.275	0.281	---	57	173	230
1048	3	Ego Development	1	ADI	NP	0.098	0.098		76	275	351
1048	4	Self Esteem - Positive relationship with mother	1	ADI	NP	0.064	0.063		43	100	143
1048	5	Self Esteem - Negative relationship with mother	1	ADI	NP	0.134	0.134		14	73	87
1049	1	Education of Mother	1	ADI - Demo	NP	0.404	0.422	---	17	12	29
1049	2	Education of Father	1	ADI - Demo	NP	0.027	0.027	---	16	9	25
1049	3	Occupation of Mother	1	ADI - Demo	NP	0.178	0.177	---	17	15	32
1049	4	Occupation of Father	1	ADI - Demo	NP	0.037	0.036	---	10	11	21
1049	5	Sexually Active	1	ADI - Demo	NP	0.447	0.475	---	18	18	36
1049	6	Use Birth Control	1	ADI - Demo	NP	0.471	0.505	---	18	18	36
1049	7	Dependancy - DEQ	2	Blatt's Depressive Experience Questionnaire	0.9	0.024	0.023		18	18	36
1049	8	Self Criticism - DEQ	2	Blatt's Depressive Experience Questionnaire	0.9	0.101	0.1		18	18	36
1049	9	Efficacy - DEQ	2	Blatt's Depressive Experience Questionnaire	0.9	0.203	0.203		18	18	36
1049	10	Definition of Self (Conceptual Level of Object Representat	3	Separation Anxiety Test	0.86	0.208	0.209		18	18	36
1049	11	Attachment Pattern	3	Separation Anxiety Test	0.86	0.418	0.44		18	18	36
1050	1	Dominance - CPI	3	California Psychological Inventory	NP	0.346	0.356	0.225	19	19	38
1050	2	Capacity for Satus - CPI	3	California Psychological Inventory	NP	0.373	0.387	---	19	19	38
1050	3	Sociability - CPI	3	California Psychological Inventory	NP	0.251	0.253	---	19	19	38
1050	4	Social Presence - CPI	3	California Psychological Inventory	NP	0.043	0.042	---	19	19	38
1050	5	Self-Acceptance - CPI	3	California Psychological Inventory	NP	0.189	0.189	---	19	19	38
1050	6	Well Being - CPI	3	California Psychological Inventory	NP	0.052	0.051		19	19	38
1050	7	Responsibility - CPI	3	California Psychological Inventory	NP	0.362	0.375	---	19	19	38



Study	Var		Ins			r	Zr	Mean			Total
No	No.	Variable	No.	Instrument	Alpha	Value	Value	Zr	CGN	PGN	N
1050	8	Socialization - CPI	3	California Psychological Inventory	NP	0.314	0.321	----	19	19	38
1050	9	Self-Control - CPI	3	California Psychological Inventory	NP	0.193	0.193	----	19	19	38
1050	10	Tolerance - CPI	3	California Psychological Inventory	NP	0.375	0.389	----	19	19	38
1050	11	Good Impression - CPI	3	California Psychological Inventory	NP	0.038	0.038	----	19	19	38
1050	12	Communality - CPI	3	California Psychological Inventory	NP	0.112	0.111	----	19	19	38
1050	13	Achievement via Conformity - CPI	3	California Psychological Inventory	NP	0.046	0.046	----	19	19	38
1050	14	Achievement via Independence - CPI	3	California Psychological Inventory	NP	0.16	0.16	----	19	19	38
1050	15	Intellectual Efficiency - CPI	3	California Psychological Inventory	NP	0.312	0.318	----	19	19	38
1050	16	Psychological Mindedness - CPI	3	California Psychological Inventory	NP	0.024	0.023	----	19	19	38
1050	17	Flexibility - CPI	3	California Psychological Inventory	NP	0.12	0.119	----	19	19	38
1050	18	Femininity - CPI	3	California Psychological Inventory	NP	0.592	0.673	----	19	19	38
1050	19	Human Nature - Good - VOS	2	Value Orientation Scale	NP	0.139	0.138	0.247	19	19	38
1050	20	Human Nature - Evil - VOS	2	Value Orientation Scale	NP	0.154	0.153	---	19	19	38
1050	21	Human Nature - Good/Evil - VOS	2	Value Orientation Scale	NP	0.161	0.16	---	19	19	38
1050	22	Temporal - Past - VOS	2	Value Orientation Scale	NP	0.178	0.177	---	19	19	38
1050	23	Temporal - Present - VOS	2	Value Orientation Scale	NP	0.196	0.196	---	19	19	38
1050	24	Temporal - Future - VOS	2	Value Orientation Scale	NP	0.048	0.047	---	19	19	38
1050	25	Relational - Collateral - VOS	2	Value Orientation Scale	NP	0.475	0.51	---	19	19	38
1050	26	Relational - Lineal - VOS	2	Value Orientation Scale	NP	0.087	0.086	---	19	19	38
1050	27	Relational - Individual - VOS	2	Value Orientation Scale	NP	0.873	1.333	---	19	19	38
1050	28	Man-Nature - Submissive - VOS	2	Value Orientation Scale	NP	0.463	0.494	---	19	19	38
1050	29	Man-Nature - Dominat - VOS	2	Value Orientation Scale	NP	0.083	0.082	---	19	19	38
1050	30	Man-Nature - Harmony - VOS	2	Value Orientation Scale	NP	0.44	0.467	---	19	19	38
1050	31	Activity - Being - VOS	2	Value Orientation Scale	NP	0.159	0.158	---	19	19	38
1050	32	Activity - Being-IN-Becoming - VOS	2	Value Orientation Scale	NP	0.259	0.262	---	19	19	38
1050	33	Activity - Doing - VOS	2	Value Orientation Scale	NP	0.032	0.032	---	19	19	38
1050	34	Respect for Authority-Human - VOS	2	Value Orientation Scale	NP	0.219	0.22	---	19	19	38
1050	35	Self-Sufficiency - VOS	2	Value Orientation Scale	NP	0.254	0.257	---	19	19	38
1050	36	Human Nature-Evil - VOS	2	Value Orientation Scale	NP	0	0	---	19	19	38
1050	37	Respect for Authority-God - VOS	2	Value Orientation Scale	NP	0.346	0.357	---	19	19	38
1050	38	Present Centeredness - VOS	2	Value Orientation Scale	NP	0.107	0.105	---	19	19	38
1050	39	Impulsivity - VOS	2	Value Orientation Scale	NP	0.009	0.009	---	19	19	38
1050	40	Man Superior to Nature - VOS	2	Value Orientation Scale	NP	0.132	0.131	---	19	19	38
1050	41	Man in Harmony with Nature - Vos	2	Value Orientation Scale	NP	0.335	0.344	---	19	19	38
1050	42	Control over Immediate Gratification - VOS	2	Value Orientation Scale	NP	0.22	0.221	---	19	19	38
1050	43	Parents Education	1	ADI	NP	0	0	---	19	19	38
1050	44	Living Arrangements	1	ADI	NP	0.285	0.289	---	19	19	38
1051	1	Contraceptive Knowledge	1	ADI	NP	0.039	0.039	----	73	77	150
1051	2	Attitude about reproduction / contraception	1	ADI	NP	0.001	0.001	----	73	77	150
1051	3	Self Esteem	1	ADI	NP	0.017	0.017	----	73	77	150
1052	1	Coping Level	1	ADI	NP	0.065	0.064	----	25	148	173
1052	2	Attitude toward Teen Parenthood	1	ADI	NP	0.495	0.541	----	25	148	173
1052	3	Teacher Acceptance	1	ADI	NP	0.224	0.227	----	25	148	173
1052	4	Educational Acceptance	1	ADI	NP	0.224	0.227	----	25	148	173
1052	5	Past Grades	1	ADI	NP	0.402	0.425	----	25	148	173
1052	6	Total TST statements - Self-Concept/Self-Esteem - TST	1	ADI	NP	0.419	0.446	0.381	25	148	173
1052	7	Self-Derogation index	1	ADI	NP	0.095	0.095	----	25	148	173

Study	Var		Ins			r	Zr	Mean			Total
No	No.	Variable	No.	Instrument	Alpha	Value	Value	Zr	CGN	PGN	N
1052	8	Self-Affirmation index	1	ADI	NP	0.175	0.176	----	25	148	173
1052	9	% Derogatory Statements - Self-Concept/Self-Esteem - TST	1	ADI	NP	0.124	0.124	----	25	148	173
1052	10	% Self-Affirmations, Self-Concept/Self-Esteem - TST	1	ADI	NP	0.74	0.948	----	25	148	173
1052	11	Consensual statements, Self-Concept/Self-Esteem - TST	1	ADI	NP	0.396	0.418	----	25	148	173
1052	12	Subconsensual statements, Self-Concept/Self-Esteem - T	1	ADI	NP	0.592	0.68	----	25	148	173
1052	13	Intrest Statements - Self-Concept/Self-Esteem - TST	1	ADI	NP	0.077	0.077	----	25	148	173
1052	14	Social Group	1	ADI	NP	0.53	0.589	----	25	142	167
1052	15	Ideological	1	ADI	NP	0.447	0.48	----	25	142	167
1052	16	Intrest	1	ADI	NP	0.077	0.077	----	25	142	167
1052	17	Ambition	1	ADI	NP	0.316	0.326	----	25	142	167
1052	18	Self-Evaluation	1	ADI	NP	0.577	0.656	----	25	142	167
1052	19	TST mention of gender	1	ADI	NP	0.105	0.105	----	25	142	167
1052	20	TST mention of age	1	ADI	NP	0.083	0.083	----	25	142	167
1052	21	TST mention of parent role	1	ADI	NP	0.753	0.978	----	25	142	167
1052	22	TST mention of partner role	1	ADI	NP	0.24	0.244	----	25	142	167
1052	23	TST mention of school or student role.	1	ADI	NP	0.338	0.351	----	25	142	167
1052	24	Hopefulness about future	1	ADI	NP	0.05	0.05	0.262	25	148	173
1052	25	Past orientation of statements	1	ADI	NP	0.208	0.21	----	25	142	167
1052	26	Future statements	1	ADI	NP	0.385	0.404	----	25	142	167
1052	27	Future of the World	1	ADI	NP	0.365	0.382	----	25	144	169
1052	28	My Future	1	ADI	NP	0.05	0.05	----	25	145	170
1053	1	Sexual Activity - B	1	ADI	NP	0.567	0.641	----	53	71	124
1053	2	Sexual Activity - W	1	ADI	NP	0.423	0.448	----	49	16	65
1053	3	Housing Type - B	1	ADI	NP	0.073	0.073	----	56	78	134
1053	4	Housing Type - W	1	ADI	NP	0.026	0.026	----	51	19	70
1053	5	Mothers Employment - B	1	ADI	NP	0.233	0.236	----	53	76	129
1053	6	Mothers Employment - W	1	ADI	NP	0.066	0.066	----	51	19	70
1053	7	Fathers Employment - B	1	ADI	NP	0.159	0.16	----	50	68	118
1053	8	Fathers Employment - W	1	ADI	NP	0.229	0.231	----	48	17	65
1053	9	Family Structure (single parent)- B	1	ADI	NP	0.194	0.195	----	47	71	118
1053	10	Family Structure (single parent) - W	1	ADI	NP	0.109	0.109	----	50	19	69
1053	11	Parent/Child Communication (Mother) - B	1	ADI	NP	0.077	0.077	----	54	75	129
1053	12	Parent/Child Communication (Mother) - W	1	ADI	NP	0.046	0.046	----	51	19	70
1053	13	Parent/Child Communication (FATHER) - B	1	ADI	NP	0.208	0.21	----	35	62	97
1053	14	Parent/Child Communication (FATHER) - W	1	ADI	NP	0.106	0.105	----	45	14	59
1053	15	Seek Mothers Opinion - B	1	ADI	NP	0.08	0.08	----	49	70	119
1053	16	Seek Mothers Opinion - W	1	ADI	NP	0.259	0.262	----	42	16	58
1053	17	Seek Fathers Opinion - B	1	ADI	NP	0.396	0.414	----	34	11	45
1053	18	Seek Fathers Opinion - W	1	ADI	NP	0.306	0.315	----	31	50	81
1053	19	Maternal Nurture - B	1	ADI	NP	0.135	0.135	----	56	77	133
1053	20	Maternal Nurture - W	1	ADI	NP	0.244	0.247	----	51	19	70
1053	21	Parents Knowledge of Person Teen Dates - B	1	ADI	NP	0.15	0.15	----	44	67	111
1053	22	Parents Knowledge of Person Teen Dates - W	1	ADI	NP	0.167	0.167	----	44	19	63
1053	23	Have a Curfew - B	1	ADI	NP	0.147	0.147	----	50	75	125
1053	24	Have a Curfew - W	1	ADI	NP	0.092	0.092	----	48	19	67
1053	25	Parent Control - B	1	ADI	NP	0.092	0.092	----	56	77	133
1053	26	Parent Control - W	1	ADI	NP	0.055	0.054	----	51	19	70

Study	Var		Ins			r	Zr	Mean			Total
No	No.	Variable	No.	Instrument	Alpha	Value	Value	Zr	CGN	PGN	N
1053	27	Overall Grade Average - B	1	ADI	NP	0.219	0.221	---	55	74	129
1053	28	Overall Grade Average - W	1	ADI	NP	0.144	0.143	---	47	17	64
1053	29	Future Aspirations - B	1	ADI	NP	0.203	0.205	---	56	77	133
1053	30	Future Aspirations - W	1	ADI	NP	0.193	0.194	---	51	19	70
1053	31	Aspiration to Highest Degree - B	1	ADI	NP	0.191	0.193	---	56	77	133
1053	32	Aspiration to Highest Degree - W	1	ADI	NP	0.351	0.364	---	51	19	70
1053	33	Locus of Control - B	1	ADI	NP	0.055	0.055	---	56	77	133
1053	34	Locus of Control - W	1	ADI	NP	0.021	0.021	---	51	19	70
1053	35	Organized Youth Group Activity - B	1	ADI	NP	0.244	0.248	---	56	77	133
1053	36	Organized Youth Group Activity - W	1	ADI	NP	0.017	0.017	---	51	19	70
1054	1	Oral Craving	2	Blacky Picture Results	NP	0.307	0.314	0.201	30	30	60
1054	2	Oral Rejection	2	Blacky Picture Results	NP	0.72	0.901	---	30	30	60
1054	3	Sugar Coating	2	Blacky Picture Results	NP	0.134	0.133	---	30	30	60
1054	4	Playfulness	2	Blacky Picture Results	NP	0.034	0.034	---	30	30	60
1054	5	Supply Seeking	2	Blacky Picture Results	NP	0.171	0.172	---	30	30	60
1054	6	Resentment over Oral Deprivation	2	Blacky Picture Results	NP	0.269	0.273	---	30	30	60
1054	7	Exploitation	2	Blacky Picture Results	NP	0.135	0.134	---	30	30	60
1054	8	Choosing Obvious Neutral Responses	2	Blacky Picture Results	NP	0.034	0.034	---	30	30	60
1054	9	Attempted Denial of Anal Preoccupation	2	Blacky Picture Results	NP	0.124	0.124	---	30	30	60
1054	10	Undisguised Oedipal Intensity	2	Blacky Picture Results	NP	0.267	0.271	---	30	30	60
1054	11	Disguised Oedipal Intensity	2	Blacky Picture Results	NP	0.267	0.271	---	30	30	60
1054	12	Fear of Punishment for Masturbation	2	Blacky Picture Results	NP	0.066	0.065	---	30	30	60
1054	13	Concern over Sexual Maturation	2	Blacky Picture Results	NP	0.169	0.169	---	30	30	60
1054	14	Denial of Masturbation Guilt	2	Blacky Picture Results	NP	0.24	0.243	---	30	30	60
1054	15	Penis Envy	2	Blacky Picture Results	NP	0.068	0.068	---	30	30	60
1054	16	Father as Preferred Identification Object	2	Blacky Picture Results	NP	0.066	0.065	---	30	30	60
1054	17	Mother as Preferred Identification Object	2	Blacky Picture Results	NP	0.233	0.236	---	30	30	60
1054	18	Evasion of Identification Issue	2	Blacky Picture Results	NP	0.067	0.067	---	30	30	60
1054	19	Overt Hostility Toward Sibling and Mother	2	Blacky Picture Results	NP	0.201	0.202	---	30	30	60
1054	20	Reaction Formation to Sibling Rivalry	2	Blacky Picture Results	NP	0.067	0.067	---	30	30	60
1054	21	Rejection in Favor of Sibling	2	Blacky Picture Results	NP	0.067	0.067	---	30	30	60
1054	22	Partial Denial of Guilt	2	Blacky Picture Results	NP	0.201	0.202	---	30	30	60
1054	23	Guilt-Ridden Hostility Toward Sibling	2	Blacky Picture Results	NP	0.068	0.068	---	30	30	60
1054	24	Qualification of Pervasive Guilt	2	Blacky Picture Results	NP	0.037	0.036	---	30	30	60
1054	25	Overtly Positive Perception of Self and Mother	2	Blacky Picture Results	NP	0.138	0.138	---	30	30	60
1054	26	Overtly negative perception of self and Mother	2	Blacky Picture Results	NP	0.207	0.209	---	30	30	60
1054	27	Father surrogate as love object	2	Blacky Picture Results	NP	0.401	0.421	---	30	30	60
1054	28	Heterosexual fantasy	2	Blacky Picture Results	NP	0.372	0.388	---	30	30	60
1054	29	Narcissism	2	Blacky Picture Results	NP	0.434	0.461	---	30	30	60
1054	30	Mother an Adolescent at Subjects Birth	1	ADI - Demographics	NP	0.356	0.37		30	30	60
1054	31	Second Oldest Sibling	1	ADI - Demographics	NP	0.269	0.273		30	30	60
1054	32	Mother Absence Ages 1-10	1	ADI - Demographics	NP	0.435	0.462		30	30	60
1054	33	Father Absence Ages 1-10	1	ADI - Demographics	NP	0.509	0.557		30	30	60
1054	34	Broken Home	1	ADI - Demographics	NP	0.554	0.619		30	30	60
1054	35	Parents Never Married	1	ADI - Demographics	NP	0.46	0.493		30	30	60
1054	36	History of Living Outside the Home	1	ADI - Demographics	NP	0.931	1.657		30	30	60
1054	37	Court Involvement Abuse/Neglect	1	ADI - Demographics	NP	0.399	0.419		30	30	60

Study	Var		Ins			r	Zr	Mean			Total
No	No.	Variable	No.	Instrument	Alpha	Value	Value	Zr	CGN	PGN	N
1054	38	Court Involvement PINS Petition	1	ADI - Demographics	NP	0.484	0.524		30	30	60
1054	39	Sexual Activity at Age 14 and Below	1	ADI - Demographics	NP	0.6	0.689		30	30	60
1054	40	Complete Nonuse of Birth Control Methods	1	ADI - Demographics	NP	0.844	1.229		30	30	60
1054	41	Negative Attitude toward Abortion	1	ADI - Demographics	NP	0.307	0.315		30	30	60
1054	42	Positive Attitude toward Out of Wedlock Pregnancy	1	ADI - Demographics	NP	0.811	1.122		30	30	60
1054	43	Consistent Relationship with a Male Figure for 6 months or	1	ADI - Demographics	NP	0.47	0.506		30	30	60
1054	44	Below Grade Level	1	ADI - Demographics	NP	0.411	0.433		30	30	60
1054	45	Poor Academic Achievement	1	ADI - Demographics	NP	0.599	0.687		30	30	60
1054	46	Unrealistic Goals	1	ADI - Demographics	NP	0.847	1.238		30	30	60
1054	47	Outside Interests and Activities	1	ADI - Demographics	NP	0.551	0.616		30	30	60
1055	1	Residence Rural/Urban	1	ADI - Demographics	NP	0.079	0.079	---	91	58	149
1055	2	Religious Affiliation	1	ADI - Demographics	NP	0.135	0.136	---	91	58	149
1055	3	Religious Participation	1	ADI - Demographics	NP	0.233	0.236	---	91	58	149
1055	4	Income Source - Parents	1	ADI - Demographics	NP	0.433	0.462	---	91	58	149
1055	5	Completed Years of Education	1	ADI - Demographics	NP	0.289	0.297	---	91	58	149
1055	6	Parents Marital Status	1	ADI - Demographics	NP	0.244	0.249	---	91	58	149
1055	7	Parents Living Together	1	ADI - Demographics	NP	0.247	0.252	---	91	58	149
1055	8	Adolescent Hopefulness	2	Hopefulness Scale for Adolescents	0.86	0.038	0.038	---	91	58	149
1055	9	Self Esteem (Rosenberg)	3	Rosenberg Self Esteem Scale	0.89	0.178	0.179	---	91	58	149
1055	10	Social Support (Total Functional)	4	Norbeck Social Support Questionnaire	0.82	0.161	0.162	0.151	91	58	149
1055	11	Social Support (Total Network)	4	Norbeck Social Support Questionnaire	0.82	0.153	0.154	---	91	58	149
1055	12	Social Support (Total Loss)	4	Norbeck Social Support Questionnaire	0.82	0.136	0.137	---	91	58	149
1056	1	Receipt of Public Funds	1	ADI - Interview	NP	0.055	0.054	---	16	20	36
1056	2	Presence of father in home	1	ADI - Interview	NP	0.287	0.292	---	16	20	36
1056	3	Education HS dropout	1	ADI - Interview	NP	0.176	0.175	---	16	20	36
1056	4	College Attendance	1	ADI - Interview	NP	0.378	0.392	---	16	20	36
1056	5	Mother Post HS Education	1	ADI - Interview	NP	0.387	0.402	---	16	20	36
1056	6	Employment HX part time.	1	ADI - Interview	NP	0.302	0.308	---	16	20	36
1056	7	Sexual Activity	2	ADI - Pregnancy Adulthood Negotiation of Status Interview	NP	0.225	0.226	0.152	16	20	36
1056	8	ETOH consumption	2	ADI - Pregnancy Adulthood Negotiation of Status Interview	NP	0.038	0.038		16	20	36
1056	9	Driving a Car	2	ADI - Pregnancy Adulthood Negotiation of Status Interview	NP	0.108	0.107		16	20	36
1056	10	Voting	2	ADI - Pregnancy Adulthood Negotiation of Status Interview	NP	0.237	0.238		16	20	36
1056	11	Registered voter	2	ADI - Pregnancy Adulthood Negotiation of Status Interview	NP	0.341	0.351	---	16	20	36
1056	12	Church Attendance	2	ADI - Pregnancy Adulthood Negotiation of Status Interview	NP	0.344	0.353	---	16	20	36
1056	13	Psychological Decision Making (Responsibility)	2	ADI - Pregnancy Adulthood Negotiation of Status Interview	NP	0.135	0.134	---	16	20	36
1056	14	Psychological Decision Making (Efficiency)	2	ADI - Pregnancy Adulthood Negotiation of Status Interview	NP	0.135	0.134	---	16	20	36
1056	15	Spontaneous Abortion	2	ADI - Pregnancy Adulthood Negotiation of Status Interview	NP	0.359	0.371	---	16	20	36
1056	16	Elective Abortion	2	ADI - Pregnancy Adulthood Negotiation of Status Interview	NP	0.217	0.218	---	16	20	36
1057	1	Locus of Control	4	Norwick-Strickland Locus of Control Scale	NP	0	0	---	35	71	106
1057	2	Ego Development (Total Protocol Rating)	3	Loevinger's Sentence Completion	NP	0.115	0.115	0.125	35	71	106
1057	3	Ego Development (Continuous Protocol Rating)	3	Loevinger's Sentence Completion	NP	0.136	0.136	---	35	71	106
1057	4	Knowledge of Reproduction Anatomy and Physiology	2	Reproductive Anatomy and Physiology Test	NP	0.159	0.159	---	35	71	106
1057	5	Knowledge of Contraception		Contraceptive Knowledge Test	NP	0.086	0.086	---	35	71	106
1057	6	Changes in Residence in the past 5 years.	1	ADI - Demographics	NP	0.357	0.372		35	71	106
1057	7	Mothers age at 1st Pregnancy	1	ADI - Demographics	NP	0.37	0.387		35	71	106
1057	8	Coital Experience	1	ADI - Demographics	NP	0.713	0.89	---	35	71	106
1057	9	Current/Steady Boyfriend	1	ADI - Demographics	NP	0.405	0.428	---	35	71	106



Study	Var		Ins			r	Zr	Mean			Total
No	No.	Variable	No.	Instrument	Alpha	Value	Value	Zr	CGN	PGN	N
1057	10	Contraceptive Use	1	ADI - Demographics	NP	0.562	0.633	---	35	71	106
1057	11	Contraceptive Choice - Oral Contraceptives	1	ADI - Demographics	NP	0.595	0.682	---	35	71	106
1057	12	Church Attendance - Self	1	ADI - Demographics	NP	0.358	0.373	---	35	71	106
1057	13	Church Attendance - Family	1	ADI - Demographics	NP	0.365	0.381	---	35	71	106
1057	14	Subjects Living Arrangements	1	ADI - Demographics	NP	0.238	0.241	---	35	71	106
1057	15	Source of Reproductive Information (Parents vs Peers)	1	ADI - Demographics	NP	0.176	0.177	---	35	71	106
1057	16	Could Talk with parents about personal problems	1	ADI - Demographics	NP	0.242	0.246	---	35	71	106
1057	17	Sisterly relationship with mother	1	ADI - Demographics	NP	0.233	0.236	---	35	71	106
1057	18	Current School Enrollment	1	ADI - Demographics	NP	0.214	0.216	---	35	71	106
1057	19	Highest Grade completed	1	ADI - Demographics	NP	0.066	0.066	---	35	71	106
1057	20	Occupation of Father	1	ADI - Demographics	NP	0.334	0.345	---	35	71	106
1057	21	Occupation of Mother	1	ADI - Demographics	NP	0.402	0.424	---	35	71	106
1057	22	Family source of income (include public assistance)	1	ADI - Demographics	NP	0.367	0.384	---	35	71	106
1057	23	Mothers Education HS or better	1	ADI - Demographics	NP	0.453	0.487	---	35	71	106
1057	24	Mothers marital status at first pregnancy (single)	1	ADI - Demographics	NP	0.37	0.386	---	35	71	106
1058	1	Family Structure	1	ADI - Demographics	NP	0.075	0.074	---	26	26	52
1058	2	Trouble with Law	1	ADI - Demographics	NP	0.119	0.119	---	26	26	52
1058	3	GPA	1	ADI - Demographics	NP	0.096	0.095	---	26	26	52
1058	4	Educational Aspirations	1	ADI - Demographics	NP	0.037	0.036	---	26	26	52
1058	5	Vocational Aspirations	1	ADI - Demographics	NP	0.024	0.024	---	26	26	52
1058	6	Number of extended family who are teen parents	1	ADI - Demographics	NP	0.006	0.006	---	26	26	52
1058	7	Number of siblings who are teen parents	1	ADI - Demographics	NP	0.02	0.019	---	26	26	52
1058	8	Number of friends who are teen parents	1	ADI - Demographics	NP	0.139	0.138	---	26	26	52
1058	9	Social Support & premarital sex (support groups attitude to)	2	Social Support Groups Attitudes	NP	0.03	0.029	0.072	26	26	52
1058	10	Social Support & contraception (support groups attitude to)	2	Social Support Groups Attitudes	NP	0.003	0.003	---	26	26	52
1058	11	Social Support & pregnancy (support groups attitude toward)	2	Social Support Groups Attitudes	NP	0.266	0.27	---	26	26	52
1058	12	Social Support & abortion (support groups attitude toward)	2	Social Support Groups Attitudes	NP	0.047	0.047	---	26	26	52
1058	13	Social Support & adoption (support groups attitude toward)	2	Social Support Groups Attitudes	NP	0.012	0.012	---	26	26	52
1058	14	Locus of Control	3	Rotter Internal/External Scale	NP	0.315	0.323	---	26	26	52
1058	15	Perceived opportunities for success	4	Adolescent View of Opportunity Scale	0.75	0.163	0.163	---	26	26	52
1058	16	Attitudes toward teen parenting	5	Early Parenting Attitude Scale	0.63	0.325	0.334	---	26	26	52
1058	17	Psychosocial competence	6	Psychosocial Competence Interview	0.94	0.079	0.079	---	26	26	52
1058	18	Coping Style	7	Behavioral Attributes and Psychosocial Competence Scale	NP	0.057	0.056	---	26	26	52
1058	19	Self Concept (Rosenberg)	8	Rosenberg Self Esteem Scale	NP	0.193	0.193	---	26	26	52
1059	1	Living Arrangements (Live with parents)	1	ADI - Demographics	NP	0.191	0.192	---	84	98	182
1059	2	Ego Identity Stage	2	Objective Measure of Ego Identity Status	NP	0.187	0.188	---	84	98	182
1059	3	Self Esteem	3	Rosenberg Self Esteem Scale	0.92	0.055	0.055	---	84	98	182
1059	4	Mothers style of parenting - Democratic (Acceptance)	4	Children's Report of Parental Behavior	0.76	0.046	0.046	0.063	84	98	182
1059	5	Mothers style of parenting - Democratic (Child Centered)	4	Children's Report of Parental Behavior	0.76	0.027	0.027	---	84	98	182
1059	6	Mothers style of parenting - Democratic (Positive Involvement)	4	Children's Report of Parental Behavior	0.76	0.02	0.02	---	84	98	182
1059	7	Mothers style of parenting - Authoritative (Control with Guilt)	4	Children's Report of Parental Behavior	0.76	0.05	0.05	---	84	98	182
1059	8	Mothers style of parenting - Authoritative (Hostile Control)	4	Children's Report of Parental Behavior	0.76	0.134	0.134	---	84	98	182
1059	9	Mothers style of parenting - Authoritative (Instill Persistent)	4	Children's Report of Parental Behavior	0.76	0.065	0.065	---	84	98	182
1059	10	Mothers style of parenting - Permissive (Non-Enforcement)	4	Children's Report of Parental Behavior	0.76	0.132	0.132	---	84	98	182
1059	11	Mothers style of parenting - Permissive (Lax Discipline)	4	Children's Report of Parental Behavior	0.76	0.031	0.031	---	84	98	182
1059	12	Knowledge of Sexual Information	5	ADI - Sexual Knowledge	NP	0.039	0.039	---	84	98	182
1059	13	Social Support - Trust with Information	6	Social Support Scale	NP	0.185	0.187	0.097	84	98	182

Study	Var		Ins			r	Zr	Mean			Total
No	No.	Variable	No.	Instrument	Alpha	Value	Value	Zr	CGN	PGN	N
1059	14	Social Support - Care NO matter what	6	Social Support Scale	NP	0.012	0.012	---	84	98	182
1059	15	Social Support - Accepts Best and Worst	6	Social Support Scale	NP	0.092	0.092	---	84	98	182
1060	1	Family Structure (more dependant structure/requiring publ	1	ADI	NP	0.191	0.192	---	84	98	182
1060	2	Teen's Mother was a pregnant teen	1	ADI	NP	0.232	0.235	---	42	44	86
1060	3	Qualtiy of Thought - Preoccupied	2	Adult Attachment Interview	0.75	0.281	0.287	0.233	42	44	86
1060	4	Qualtiy of Thought - Repressed	2	Adult Attachment Interview	0.75	0.298	0.306	---	42	44	86
1060	5	Qualtiy of Thought - Disorganized	2	Adult Attachment Interview	0.75	0.157	0.157	---	42	44	86
1060	6	Qualtiy of Thought - Secure	2	Adult Attachment Interview	0.75	0.181	0.182	---	42	44	86
1060	7	Psychological Development - Deprived	2	Adult Attachment Interview	0.75	0.328	0.338	---	42	44	86
1060	8	Psychological Development - CCompetitive	2	Adult Attachment Interview	0.75	0.081	0.08	---	42	44	86
1060	9	Psychological Development - Mature	2	Adult Attachment Interview	0.75	0.377	0.394	---	42	44	86
1061	1	Length of reationship with boyfriend	1	ADI - Demo	NP	-0.43	-0.45		16	15	31
1061	2	Total number of family problems	1	ADI - Demo	NP	0.2	0.199		16	15	31
1061	3	Mother/Daughter Incongruence of reported family problem	1	ADI - Demo	NP	0.21	0.21		16	15	31
1061	4	Number of family changes	1	ADI - Demo	NP	-0.02	-0.02		16	15	31
1061	5	Family Conflict Incongruence	2	Family Environment Questionnaire (Moos)	0.79	-0.28	-0.28		16	15	31
1061	6	Family Control Incongruence	2	Family Environment Questionnaire (Moos)	0.79	-0.09	-0.09		16	15	31
1061	7	Family Cohesion Incongruence	2	Family Environment Questionnaire (Moos)	0.79	0.13	0.129		16	15	31
1061	8	Family Organization Incongruence	2	Family Environment Questionnaire (Moos)	0.79	-0.08	-0.08		16	15	31
1061	9	Family Independence Incongruence	2	Family Environment Questionnaire (Moos)	0.79	0.03	0.03		16	15	31
1061	10	Family Total Incongruence	2	Family Environment Questionnaire (Moos)	0.79	0.24	0.241		16	15	31
1061	11	Family Social climate - Organization (Moos' FES)	2	Family Environment Questionnaire (Moos)	0.79	-0.25	-0.25		16	15	31
1061	12	Family Social climate - Independence (Moos' FES)	2	Family Environment Questionnaire (Moos)	0.79	-0.13	-0.13		16	15	31
1061	13	Family Social climate - Cohesion (Moos' FES)	2	Family Environment Questionnaire (Moos)	0.79	0.1	0.099		16	15	31
1061	14	Family Social climate - Control (Moos' FES)	2	Family Environment Questionnaire (Moos)	0.79	0.05	0.049		16	15	31
1061	15	Family Social climate - Expressiveness (Moos' FES)	2	Family Environment Questionnaire (Moos)	0.79	-0.08	-0.08		16	15	31
1061	16	Family Social climate - Conflict (Moos' FES)	2	Family Environment Questionnaire (Moos)	0.79	0.07	0.069		16	15	31
1062	1	Educational Aspiration	1	Educational Aspiration Measure	NP	0.21	0.212		173	170	343
1062	2	Self Esteem	2	Rosenberg Self Esteem Scale	0.836	0.02	0.02		173	164	337
1063	1	Life Stress (Life Events Check list)	4	Life Events Check List	0.72	0.095	0.094		39	25	64
1063	2	Internal Locus of Control (Health Locus of Control Scale)	2	Multidimensional Health Locus of Control	0.7	0.064	0.064		39	25	64
1063	3	Chance Locus of Control (Health Locus of Control Scale)	2	Multidimensional Health Locus of Control	0.7	0.113	0.113		39	25	64
1063	4	Powerful Other Locus of Control (Health Locus of Control	2	Multidimensional Health Locus of Control	0.7	0.307	0.314		39	25	64
1063	5	Scholastic (Perception of Self and Self Worth)	3	Self Perception Profile for Adolescents	0.8	0	0		39	25	64
1063	6	Acceptance (Perception of Self and Self Worth)	3	Self Perception Profile for Adolescents	0.8	0	0		39	25	64
1063	7	Athletic (Perception of Self and Self Worth)	3	Self Perception Profile for Adolescents	0.8	0.222	0.224		39	25	64
1063	8	Appearance (Perception of Self and Self Worth)	3	Self Perception Profile for Adolescents	0.8	0.199	0.2		39	25	64
1063	9	Job Competence (Perception of Self and Self Worth)	3	Self Perception Profile for Adolescents	0.8	0.162	0.162		39	25	64
1063	10	Romance (Perception of Self and Self Worth)	3	Self Perception Profile for Adolescents	0.8	0	0		39	25	64
1063	11	Conduct (Perception of Self and Self Worth)	3	Self Perception Profile for Adolescents	0.8	0.204	0.205		39	25	64
1063	12	Close Friend (Perception of Self and Self Worth)	3	Self Perception Profile for Adolescents	0.8	0.235	0.238		39	25	64
1063	13	Self Worth (Perception of Self and Self Worth)	3	Self Perception Profile for Adolescents	0.8	0.157	0.157		39	25	64
1063	14	Age at Menarche	1	ADI - Demo	NP	0.117	0.116		39	25	64
1063	15	Age at first intercourse	1	ADI - Demo	NP	0.269	0.274		39	25	64
1063	16	Teen's Mother's age at first birth	1	ADI - Demo	NP	0.143	0.143		39	25	64
1063	17	Mother deceased	1	ADI - Demo	NP	0.248	0.251		39	24	63
1063	18	Father deceased	1	ADI - Demo	NP	0.101	0.1		39	24	63

Study	No	Var	Ins			r	Zr	Mean			Total
	No	Variable	No.	Instrument	Alpha	Value	Value	Zr	CGN	PGN	N
1063	19	History of Drug or ETOH abuse	1	ADI - Demo	NP	0.059	0.059		39	24	63
1063	20	History of Psychiatric Problems	1	ADI - Demo	NP	0.192	0.192		39	24	63
1063	21	Method of Contraception	1	ADI - Demo	NP	0.048	0.048		39	24	63
1064	1	Satisfaction with social support	1	Family & Friends APGAR	0.8	0.332	0.34		20	20	40
1064	2	Self Esteem (Rosenberg)	2	Rosenberg Self Esteem Scale	0.85	-0.15	-0.15		20	20	40
1064	3	Locus of Control (Nowicki Strickland Scale)	3	Nowicki-Strickland Locus of Control Scale for Children	0.71	-0.26	-0.26		20	20	40
1065	1	Interpersonal Trust (Rotter IT Scale)	4	Rotter Interpersonal Trust Scale	0.64	0.143	0.143		32	32	64
1065	2	Locus of Control (Rotter I/E LOC Scale)	3	Rotter Internal/External Scale	0.66	0.193	0.194		32	32	64
1065	3	Psychosocial competence	2	Tyler's Behavioral Attributes of Psychosocial Competence Scale	0.86	0.029	0.029		32	32	64
1065	4	Dropped out of School	1	ADI - Demo	NP	0.222	0.224	---	32	32	64
1065	5	Failed a Class	1	ADI - Demo	NP	0.27	0.274	---	32	32	64
1065	6	Grades	1	ADI - Demo	NP	0.406	0.428	---	32	32	64
1065	7	Dating Age	1	ADI - Demo	NP	0.219	0.221	---	32	32	64
1065	8	Steady Boyfriend	1	ADI - Demo	NP	0.158	0.158	---	32	32	64
1065	9	Church Attendance	1	ADI - Demo	NP	0.487	0.528	---	32	32	64
1065	10	Number of Siblings	1	ADI - Demo	NP	0.188	0.188	---	32	32	64
1065	11	Teen Lives With Parents/Others	1	ADI - Demo	NP	0.15	0.15	---	32	32	64
1065	12	Father Works	1	ADI - Demo	NP	0.29	0.296	---	32	32	64
1065	13	Mother Works	1	ADI - Demo	NP	0.197	0.198	---	32	32	64
1065	14	Formal Class (Sex Education)	1	ADI - Demo	NP	0.094	0.094	---	32	32	64
1065	15	Formal Class (Assertiveness)	1	ADI - Demo	NP	0.045	0.045	---	32	32	64
1065	16	Formal Class (Get along with outhers)	1	ADI - Demo	NP	0.344	0.356	---	32	32	64
1065	17	Formal Class (Marriage and Family Relationships)	1	ADI - Demo	NP	0.127	0.127	---	32	32	64
1066	1	Family History on Welfare (ADI)	1	ADI - Demo	NP	0.07	0.07	---	252	172	424
1066	2	Lived with both Parents (ADI)	1	ADI - Demo	NP	0.198	0.2	---	252	172	424
1066	3	Used Contraception at last intercourse (ADI)	1	ADI - Demo	NP	0.113	0.113	---	252	172	424
1067	1	Mothers Occupation	1	ADI - Demo	NP	0.1	0.1	---	779	95	874
1067	2	Number of Sisters	1	ADI - Demo	NP	0.099	0.099	---	779	95	874
1067	3	No. Sisters < 17 yrs	1	ADI - Demo	NP	0.094	0.094	---	779	95	874
1067	4	Head of Household	1	ADI - Demo	NP	0.093	0.093	---	779	95	874
1067	5	Dating Age	1	ADI - Demo	NP	0.109	0.109	---	779	95	874
1067	6	Cloest Friend (Boyfriend/Other)	1	ADI - Demo	NP	0.094	0.095	---	779	95	874
1067	7	Vocational Expectation	1	ADI - Demo	NP	0.102	0.102	---	779	95	874
1067	8	Church Attendance	1	ADI - Demo	NP	0.093	0.093	---	779	95	874
1067	9	Feelings toward Pregnancy - Self	1	ADI - Demo	NP	0.094	0.095	---	779	95	874
1067	10	Feelings toward Pregnancy - Family	1	ADI - Demo	NP	0.117	0.118	---	779	95	874
1067	11	Self-Esteem	2	Coopersmith SE Inventory	NP	0.034	0.034	---	779	95	874
1068	1	Daughters Statements/Interactions	1	ADI - Bales Categories of Interactions	NP	0.552	0.604	---	7	9	16
1068	2	Mothers Statements/Interactions	1	ADI - Bales Categories of Interactions	NP	0.34	0.353	---	7	9	16
1068	3	Fathers Statements/Interactions	1	ADI - Bales Categories of Interactions	NP	0.583	0.647	---	7	9	16

Appendix E

Meta-Analysis of the Clusters

# **Meta-Analysis of Cluster ACPer** **ACADEMIC PERFORMANCE**

STUDY NO	VAR NO	VARIABLE	TOTAL N	r	MEAN r	Zr	MEAN Zr
1003	5	School Grades	125	0.183	0.193	0.185	0.195
1003	6	School Dropouts	125	0.212		0.214	
1003	7	School performance	125	0.183		0.185	
1008	4	School Competence	128	0.009	0.225	0.009	0.232
1008	12	Math GPA	128	0.340		0.353	
1008	13	English GPA	128	0.317		0.327	
1008	14	ITBS - Math Assessment	128	0.156		0.156	
1008	15	ITBS - Language Assessment	128	0.145		0.145	
1008	16	Percent of Failed Classes	128	0.382		0.400	
1010	2	Spelling - Individual performance	100	0.675	0.697	0.817	1.025
1010	3	Math - Individual performance	100	0.475		0.514	
1010	4	Reading - Individual performance	100	0.941		1.743	
1011	1	Girls Education	74	0.460		0.494	
1013	16	Years behind in school	39	0.007		0.006	
1014	8	Failed a class	46	0.044		0.044	
1017	6	Number of years behind in school	41	0.255	0.240	0.257	0.242
1017	7	Global measure of intelligence	41	0.226		0.227	
1023	7	Held back in school	275	0.259	0.260	0.264	0.275
1023	8	Suspended from School	275	0.520		0.575	
1023	13	Held back a grade in school	275	0.148		0.149	
1023	14	Suspended from school	275	0.112		0.112	
1024	2	Self report GPA	52	0.278	0.330	0.283	0.340
1024	3	Retained in school	52	0.376		0.392	
1024	4	Special Education	52	0.336		0.346	
1036	5	GPA	60	0.362		0.376	
1040	1	Grades	287	0.044		0.044	
1052	3	Teacher Acceptance	173	0.224	0.297	0.227	0.308
1052	4	Educational Acceptance	173	0.224		0.227	
1052	5	Past Grades	173	0.402		0.425	
1052	23	TST mention of school/student role	167	0.338		0.351	
1053	27	Overall Grade Average - B	129	0.219	0.181	0.221	0.182
1053	28	Overall Grade Average - W	64	0.144		0.143	
1054	44	Below Grade Level	60	0.411	0.505	0.433	0.560
1054	45	Poor Academic Achievement	60	0.599		0.687	
1055	5	Completed Years of Education	149	0.289		0.297	
1056	3	Education HS dropout	36	0.176	0.277	0.175	0.283
1056	4	College Attendance	36	0.378		0.392	
1057	18	Current School Enrollment	106	0.214	0.140	0.216	0.141
1057	19	Highest Grade completed	106	0.066		0.066	
1065	4	Dropped out of School	64	0.222	0.299	0.224	0.309
1065	5	Failed a Class	64	0.270		0.274	
1065	6	Grades	64	0.406		0.428	

Meta-Analysis of Cluster ACPER ACADEMIC PERFORMANCE						
		N	=	18		
		Total Subjects	=	1944		
		Control Group	=	985		
		Pregnant Group	=	959		
		Weighted Effect Size Zr	=	0.11		
		STD	=	0.323		
		95% Confidence Int. LOWER	=	0.065		
		UPPER	=	0.15		
		STOFFER Method Zst	=	2.68		
		Zst p < value	=	0.004		
		Fail-Safe N Nfs	=	94		
		BESD Control Group	=	0.555		
		BESD Pregnant Group	=	0.445		
		Difference in BESD	=	0.11		
		Qt / CHISQ value	=	182.3		
		df	=	17		
		Significance p < value	=	0.01		

# Meta-Analysis of Cluster ANX

## ANXIETY

STUDY	VAR		TOTAL				
NO	NO	VARIABLE	N	r	MEAN r	Zr	MEAN Zr
1010	19	Conscious Anxiety Scale	100	0.069		0.068	
1012	1	Anxiety - Trait	93	0.004	0.010	0.004	0.010
1012	2	Anxiety - State	93	0.016		0.016	
1033	1	Anxiety - State	51	0.501	0.356	0.545	0.376
1033	2	Anxiety - Trait	51	0.208		0.209	
1033	18	Ax scale MMPI - Anxiety	59	0.360		0.373	
1034	10	Severe Menstrual Symptoms - Anxiety	178	0.143		0.143	
1035	3	Anxiety/State S/T AI	43	0.133	0.110	0.132	0.109
1035	4	Anxiety/State S/T AI - PEP pregnant	34	0.164		0.163	
1035	5	Anxiety/Trait S/T AI	43	0.002		0.002	
1035	6	Anxiety/Trait S/T AI - PEP pregnant	34	0.140		0.139	
1041	5	Anxiety State/Trait Anxiety Inv.	123	0.064		0.064	
1042	5	Maternal Anxiety	140	0.086		0.086	
1049	10	Definition of Self	36	0.208	0.313	0.209	0.324
1049	11	Attachment Pattern	36	0.418		0.440	
		N	=	8			
		Total Subjects	=	764			
		Control Group	=	352			
		Pregnant Group	=	412			
		Weighted Effect Size Zr	=	0.12			
		STD	=	0.123			
		95% Confidence Int. LOWER	=	0.045			
		UPPER	=	0.185			
		STOFFER Method Zst	=	0.85			
		Zst p < value	=	0.212			
		Fail-Safe N Nfs	=	6			
		BESD Control Group	=	0.443			
		BESD Pregnant Group	=	0.558			
		Difference in BESD	=	0.115			
		Qt / CHISQ value	=	6.5			
		df	=	7			
		Significance p < value	=	0.5			

## Meta-Analysis of Cluster APCOM

### Parental Communication

STUDY	VAR		TOTAL				
NO	NO	VARIABLE	N	r	MEAN r	Zr	MEAN Zr
1001	2	Parental Communication	119	0.930		1.653	
1023	10	Families talk about sex /c daughters	275	0.063		0.063	
1024	6	Ranking parents source information a	52	0.045		0.045	
1025	7	Communication - Parental (IPBI)	60	0.325	0.3125	0.335	0.323
1025	8	Communication - Father (IPBI)	60	0.211		0.213	
1025	9	Communication - Mother (IPBI)	60	0.401		0.421	
1030	8	Parents attitude toward daughter's s	59	0.281		0.286	
1045	88	Parent/Child Conflict Avoidance SFIS	67	0.076	0.3136	0.076	0.342
1045	89	Parent/Child Conflict Avoidance SFIS	67	0.329		0.34	
1045	94	Parent Conflict Expression w/o Resol	67	0.285		0.291	
1045	95	Parent Conflict Expression w/o Resol	67	0.051		0.051	
1045	100	Parent/Conflict Resolution - SFIS	67	0.03		0.03	
1045	101	Parent/Conflict Resolution - SFIS	67	0.412		0.435	
1045	106	Parent Management - SFIS	67	0.726		0.914	
1045	107	Parent Management - SFIS	67	0.408		0.431	
1045	108	Triangulation - SFIS	67	0.41		0.432	
1045	109	Triangulation - SFIS	67	0.289		0.296	
1045	110	Parent/Child Coalition - SFIS	67	0.313		0.321	
1045	111	Parent/Child Coalition - SFIS	67	0.622		0.724	
1045	112	Detouring - SFIS	67	0.252		0.256	
1045	113	Detouring - SFIS	67	0.186		0.186	
1053	11	Parent/Child Communication (Mother)	129	0.077	0.1599	0.077	0.162
1053	12	Parent/Child Communication (Mother)	70	0.046		0.046	
1053	13	Parent/Child Communication (FATHER)	97	0.208		0.21	
1053	14	Parent/Child Communication (FATHER)	59	0.106		0.105	
1053	15	Seek Mothers Opinion - B	119	0.08		0.08	
1053	16	Seek Mothers Opinion - W	58	0.259		0.262	
1053	17	Seek Fathers Opinion - B	45	0.396		0.414	
1053	18	Seek Fathers Opinion - W	81	0.306		0.315	
1053	19	Maternal Nurture - B	133	0.135		0.135	
1053	20	Maternal Nurture - W	70	0.244		0.247	
1053	21	Parents Knowledge of Person Teen Dat	111	0.15		0.15	
1053	22	Parents Knowledge of Person Teen Dat	63	0.167		0.167	
1053	23	Have a Curfew - B	125	0.147		0.147	
1053	24	Have a Curfew - W	67	0.092		0.092	
1053	25	Parent Control - B	133	0.092		0.092	
1053	26	Parent Control - W	70	0.055		0.054	
1057	15	Source of Reproductive Information	106	0.176	0.2168	0.177	0.219
1057	16	Could Talk with parents re. problems	106	0.242		0.246	
1057	17	Sisterly relationship with mother	106	0.233		0.236	
1068	1	Daughters Statements/Interactions	16	0.552	0.4914	0.604	0.535
1068	2	Mothers Statements/Interactions	16	0.34		0.353	
1068	3	Fathers Statements/Interactions	16	0.583		0.647	



Meta-Analysis of Cluster APCOM							
Parental Communication							
		N	=	9			
		Total Subjects	=	883			
		Control Group	=	457			
		Pregnant Group	=	426			
		Weighted Effect Size Zr	=	0.30			
		STD	=	0.525			
		95% Confidence Int. LOWER	=	0.235			
		UPPER	=	0.360			
		STOFFER Method Zst	=	1.53			
		Zst p < value	=	0.067			
		Fail-Safe N Nfs	=	3			
		BESD Control Group	=	0.648			
		BESD Pregnant Group	=	0.353			
		Difference in BESD	=	0.295			
		Qt / CHISQ value	=	260.6			
		df	=	8			
		Significance p < value	=	0.01			

Meta-Analysis of Cluster BAPAR							
Parenting Beliefs							
STUDY NO	VAR NO	VARIABLE	TOTAL N	r	MEAN r	Zr	MEAN Zr
1008	10	Beliefs about Ease of Parenting	128	0.185		0.187	
1009	1	Prenatal Attachment	52	0.075	0.0567	0.074	0.0562
1009	2	Maternal-Infant Attachment	52	0.038		0.038	
1022	3	Desire baby before age 20.	346	0.253		0.259	
1028	9	Girl's Feelings toward unexpected pr	953	0.09		0.091	
1030	12	Desire for pregnancy.	59	0.322	0.3095	0.331	0.3174
1030	13	Wish to keep child.	59	0.297		0.304	
1042	1	Knowledge of child development	140	0.067	0.0784	0.067	0.0784
1042	3	Maternal Satisfaction	140	0.147		0.147	
1042	4	Encouragement of positive interactio	140	0.013		0.013	
1042	5	Maternal Anxiety	140	0.086		0.086	
1052	2	Attitude toward Teen Parenthood	173	0.495	0.3674	0.541	0.3925
1052	22	TST mention of partner role	167	0.24		0.244	
1054	41	Negative Attitude toward Abortion	60	0.307	0.559	0.315	0.7186
1054	42	Positive Attitude toward Out of Wedl	60	0.811		1.122	
1056	15	Spontaneous Abortion	36	0.359	0.2883	0.371	0.2943
1056	16	Elective Abortion	36	0.217		0.218	
1058	16	Attitudes toward teen parenting	52	0.325		0.334	
1067	9	Feelings toward Pregnancy - Self	874	0.094	0.1058	0.095	0.1062
1067	10	Feelings toward Pregnancy - Family	874	0.117		0.118	
		N	=	11			
		Total Subjects	=	2873			
		Control Group	=	2224			
		Pregnant Group	=	649			
		Weighted Effect Size Zr	=	0.15			
		STD	=	0.195			
		95% Confidence Int. LOWER	=	0.11			
		UPPER	=	0.18			
		STOFFER Method Zst	=	5.57			
		Zst p < value	=	0.000			
		Fail-Safe N Nfs	=	130			
		BESD Control Group	=	0.428			
		BESD Pregnant Group	=	0.573			
		Difference in BESD	=	0.145			
		Qt / CHISQ value	=	34.8			
		df	=	10			
		Significance p < value	=	0.01			

## Meta-Analysis of Cluster CHRCH

### Religious Activity

STUDY NO	VAR NO	VARIABLE	TOTAL N	r	MEAN r	Zr	MEAN Zr
1028	8	Church attendance	953	0.089		0.089	
1029	7	Religious Practice	229	0.164		0.165	
1031	11	Religiosity - x/mo church attendanc	196	0.200	0.113	0.203	0.114
1031	12	Religiosity - important.	196	0.026		0.026	
1044	27	No religious preference.	45	0.333	0.248	0.343	0.256
1044	28	No religious preference.	86	0.053		0.053	
1044	29	No religious preference and rarely a	45	0.464		0.497	
1044	30	No religious preference and rarely a	86	0.203		0.204	
1044	31	Regular preference and attended at 1	45	0.306		0.312	
1044	32	Regular preference and attended at 1	86	0.129		0.129	
1056	12	Church Attendance	36	0.344		0.353	
1057	12	Church Attendance - Self	106	0.358	0.361	0.373	0.377
1057	13	Church Attendance - Family	106	0.365		0.381	
1065	9	Church Attendance	64	0.487		0.528	
1067	8	Church Attendance	874	0.093		0.093	
1050	28	Man-Nature - Submissive - VOS	38	0.463	0.231	0.494	0.239
1050	29	Man-Nature - Dominat - VOS	38	0.083		0.082	
1050	30	Man-Nature - Harmony - VOS	38	0.440		0.467	
1050	34	Respect for Authority-Human - VOS	38	0.219		0.220	
1050	36	Human Nature-Evil - VOS	38	0.000		0.000	
1050	37	Respect for Authority-God - VOS	38	0.346		0.357	
1050	40	Man Superior to Nature - VOS	38	0.132		0.131	
1050	41	Man in Harmony with Nature - Vos	38	0.335		0.344	
1050	19	Human Nature - Good - VOS	38	0.139		0.138	
1050	20	Human Nature - Evil - VOS	38	0.154		0.153	
1055	2	Religious Affiliation	149	0.135	0.184	0.136	0.186
1055	3	Religious Participation	149	0.233		0.236	
1045	24	Moral Religious - Personal Growth -	67	0.016	0.032	0.015	0.032
1045	25	Moral Religious - Personal Growth -	67	0.048		0.048	
		N	=	11			
		Total Subjects	=	2843			
		Control Group	=	2201			
		Pregnant Group	=	642			
		Weighted Effect Size Zr	=	0.12			
		STD	=	0.18			
		95% Confidence Int. LOWER	=	0.08			
		UPPER	=	0.15			
		STOFFER Method Zst	=	4.49			
		Zst p < value	=	####			
		Fail-Safe N Nfs	=	109			
		BESD Control Group	=	0.56			
		BESD Pregnant Group	=	0.44			
		Difference in BESD	=	0.12			
		Qt / CHISQ value	=	29.2			
		df	=	10			
		Significance p < value	=	0.01			

Meta-Analysis of Cluster CONUSE							
Contraception Use							
STUDY NO	VAR NO	VARIABLE	TOTAL N	r	MEAN r	Zr	MEAN Zr
1008	17	Times sex before used protection	97	0.294	0.3071	0.301	0.3207
1008	18	Percent of protected sex	97	0.45		0.482	
1008	20	Confidence in contraceptive	97	0.177		0.178	
1030	4	Previously used contraceptives	59	0.312	0.2318	0.32	0.2369
1030	5	Planned future use of contraceptives	59	0.225		0.227	
1030	6	Person suggesting contraceptive use	59	0.336		0.347	
1030	7	Person suggesting avodiance of contr	59	0.054		0.054	
1034	3	Consistant use of contraceptives	127	0.536		0.597	
1039	8	Contraceptive use preceeding month	189	0.179	0.2197	0.181	0.2231
1039	11	Contraceptive attitude and knowledge	142	0.26		0.265	
1049	6	Use Birth Control	36	0.471		0.505	
1051	2	Attitude about reproduction / contra	150	0.001		0.001	
1054	40	Complete Nonuse of Birth Control Met	60	0.844		1.229	
1057	10	Contraceptive Use	106	0.562	0.5785	0.633	0.6578
1057	11	Contraceptive Choice - Oral Contracp	106	0.595		0.682	
1063	21	Method of Contraception	63	0.048		0.048	
1066	3	Used Contraception at last intercour	424	0.113		0.113	
		N	=	10			
		Total Subjects	=	1311			
		Control Group	=	604			
		Pregnant Group	=	707			
		Weighted Effect Size Zr	=	0.16			
		STD	=	0.502			
		95% Confidence Int. LOWER	=	0.105			
		UPPER	=	0.21			
		STOFFER Method Zst	=	0.324			
		Zst p < value	=	0.001			
		Fail-Safe N Nfs	=	25			
		BESD Control Group	=	0.58			
		BESD Pregnant Group	=	0.42			
		Difference in BESD	=	0.16			
		Qt / CHISQ value	=	169.5			
		df	=	9			
		Significance p < value	=	0.01			

Meta-Analysis of Cluster DADH						
Father in the Home						
STUDY	VAR		TOTAL			
NO	NO	VARIABLE	N	r	MEAN r	Zr
1018	5	Father status	196	0.110		0.110
1020	4	Fathers in the Home.	242	0.225		0.228
1024	1	Adult male role model in the home	51	0.018		0.017
1025	13	Presence of father in home	60	0.424		0.449
1044	3	Father figure in the home.	45	0.339	0.2011	0.349
1044	4	Father figure in the home.	86	0.063		0.063
1045	3	Father absent home	67	0.092		0.092
1054	33	Father Absence Ages 1-10	60	0.509		0.557
1056	2	Presence of father in home	36	0.287		0.292
1063	18	Father deceased	63	0.101		0.100
		N	=	9		
		Total Subjects	=	906		
		Control Group	=	480		
		Pregnant Group	=	426		
		Weighted Effect Size Zr	=	0.07		
		STD	=	0.272		
		95% Confidence Int. LOWER	=	-0.013		
		UPPER	=	-0.001		
		STOFFER Method Zst	=	2.68		
		Zst p < value	=	0.004		
		Fail-Safe N Nfs	=	4		
		BESD Control Group	=	0.533		
		BESD Pregnant Group	=	0.468		
		Difference in BESD	=	0.065		
		Qt / CHISQ value	=	46.7		
		df	=	8		
		Significance p < value	=	0.01		

## Meta-Analysis of Cluster DATE Dating Relationship

STUDY NO	VAR NO	VARIABLE	TOTAL N	r	MEAN r	Zr	MEAN Zr
1011	3	Abusive boyfriend	74	0.410	0.3633	0.433	0.3789
1011	5	Boyfriends education	74	0.360		0.374	
1011	6	Boyfriend/Sibling in jail	74	0.320		0.329	
1016	7	Romantisium - Romantic Items	267	0.374		0.392	
1028	5	Dating onset after 13	953	0.104	0.0975	0.105	0.0977
1028	6	Closest friend/relative (most indica	953	0.090		0.091	
1030	2	Length of relationship with boyfrien	59	0.338	0.1653	0.349	0.1681
1030	11	Boyfriend happy with pregnancy.	59	0.264		0.268	
1030	14	Plan to marry boyfriend	59	0.105		0.105	
1030	15	Boyfriend in school	59	0.010		0.010	
1030	16	Boyfriend at work	59	0.109		0.108	
1039	7	Partner - Social Adjustment Self-Rep	263	0.141		0.141	
1044	33	Dated two times per week or more.	45	0.331	0.2392	0.340	0.2439
1044	34	Dated two times per week or more.	86	0.147		0.148	
1052	22	TST mention of partner role	167	0.240		0.244	
1054	43	Consistent Relationship with a Male	60	0.470		0.506	
1057	9	Current/Steady Boyfriend	106	0.405		0.428	
1061	1	Length of realationship with boyfrie	31	-0.43		-0.45	
1065	7	Dating Age	64	0.219	0.1885	0.221	0.1895
1065	8	Steady Boyfriend	64	0.158		0.158	
1067	5	Dating Age	874	0.109	0.1018	0.109	0.1021
1067	6	Cloest Friend (Boyfriend/Other)	874	0.094		0.095	
		N	=	12			
		Total Subjects	=	3049			
		Control Group	=	2246			
		Pregnant Group	=	803			
		Weighted Effect Size Zr	=	0.04			
		STD	=	0.279			
		95% Confidence Int. LOWER	=	-0.07			
		UPPER	=	0.001			
		STOFFER Method Zst	=	0.43			
		Zst p < value	=	0.674			
		Fail-Safe N Nfs	=	11			
		BESD Control Group	=	0.483			
		BESD Pregnant Group	=	0.518			
		Difference in BESD	=	0.035			
		Qt / CHISQ value	=	101			
		df	=	11			
		Significance p < value	=	0.01			

## Meta-Analysis of Cluster DPNCY Dependency

STUDY NO	VAR NO	VARIABLE	TOTAL N	r	MEAN r	Zr	MEAN Zr
1011	28	Autonomy vs dependence card 2 needs	59	0.265	0.2259	0.269	0.2281
1011	29	Autonomy vs dependence card 2 presse	59	0.236		0.238	
1011	30	Autonomy vs dependence card 76F	59	0.183		0.183	
1011	31	Autonomy vs dependence card 36F need	59	0.236		0.238	
1011	32	Autonomy vs dependence card 36F pres	59	0.210		0.211	
1032	4	Dependency Needs	62	0.432		0.459	
1043	1	Defenselessness/Vulnerability	410	0.070		0.070	
1049	7	Dependancy - DEQ	36	0.024		0.023	
		N	=	4			
		Total Subjects	=	567			
		Control Group	=	404			
		Pregnant Group	=	163			
		Weighted Effect Size Zr	=	0.11			
		STD	=	0.179			
		95% Confidence Int. LOWER	=	0.025			
		UPPER	=	0.190			
		STOFFER Method Zst	=	1.53			
		Zst p < value	=	0.067			
		Fail-Safe N Nfs	=	5			
		BESD Control Group	=	0.448			
		BESD Pregnant Group	=	0.553			
		Difference in BESD	=	0.105			
		Qt / CHISQ value	=	8.3			
		df	=	3			
		Significance p < value	=	0.05			

Meta-Analysis of Cluster DPSN							
Depression							
STUDY	VAR		TOTAL				
NO	NO	VARIABLE	N	r	MEAN r	Zr	MEAN Zr
1010	10	Depression Scale	100	0.336		0.348	
1034	9	Severe Menstrual Symptoms - Depressi	178	0.078		0.078	
1035	7	Depression - Zung's	43	0.137	0.2075	0.136	0.2088
1035	8	Depression - Zung's - PEP pregnant g	34	0.278		0.281	
1041	6	Depression - Beck Depression Invento	123	0.079		0.079	
1043	2	Guilt deflection	410	0.063		0.063	
1044	54	Four or greater depressive symptoms	86	0.199	0.2005	0.200	0.2015
1044	53	Four or greater depressive symptoms	45	0.202		0.203	
		N	=	6			
		Total Subjects	=	985			
		Control Group	=	601			
		Pregnant Group	=	384			
		Weighted Effect Size Zr	=	0.12			
		STD	=	0.102			
		95% Confidence Int. LOWER	=	0.057			
		UPPER	=	0.180			
		STOFFER Method Zst	=	1.97			
		Zst p < value	=	0.026			
		Fail-Safe N Nfs	=	13			
		BESD Control Group	=	0.44			
		BESD Pregnant Group	=	0.56			
		Difference in BESD	=	0.12			
		Qt / CHISQ value	=	8.1			
		df	=	5			
		Significance p < value	=	0.25			



Meta-Analysis of Cluster EDEX							
Educational Expectations							
STUDY	VAR		TOTAL				
NO	NO	VARIABLE	N	r	MEAN r	Zr	MEAN Zr
1003	3	Educational expectations	125	0.212		0.214	
1023	9	School or Career plans	275	0.206		0.208	
1024	5	Special Education	52	0.336		0.346	
1028	7	Expected vocation	953	0.098		0.098	
1029	1	Schooling	229	0.522		0.578	
1040	2	Plan to go to college	287	0.345		0.359	
1053	31	Aspiration to Highest Degree - B	133	0.191	0.2709	0.193	0.2783
1053	32	Aspiration to Highest Degree - W	70	0.351		0.364	
1058	4	Educational Aspirations	52	0.037		0.036	
1062	1	Educational Aspiration	343	0.210		0.212	
		N	=	9			
		Total Subjects	=	2449			
		Control Group	=	1671			
		Pregnant Group	=	778			
		Weighted Effect Size Zr	=	0.21			
		STD	=	0.237			
		95% Confidence Int. LOWER	=	0.165			
		UPPER	=	0.240			
		STOFFER Method Zst	=	6.77			
		Zst p < value	=	0.000			
		Fail-Safe N Nfs	=	146			
		BESD Control Group	=	0.604			
		BESD Pregnant Group	=	0.397			
		Difference in BESD	=	0.207			
		Qt / CHISQ value	=	66.1			
		df	=	8			
		Significance p < value	=	0.01			

## Meta-Analysis of Cluster EGOST

### Ego Strength

STUDY	VAR		TOTAL				
NO	NO	VARIABLE	N	r	MEAN r	Zr	MEAN Zr
1008	5	Behavioral Conduct	128	0.020	0.1854	0.020	0.1921
1008	7	PSDM - Approach	128	0.151		0.151	
1008	8	PSDM - Control	128	0.386		0.405	
1010	21	Ego Strength Scale	100	0.537		0.597	
1011	27	Ego development (LSCT)	67	0.278		0.283	
1016	7	Romantisium - Romantic Items	267	0.374		0.392	
1017	1	Overall level of irrational thinking	41	0.374	0.3425	0.388	0.3557
1017	2	General irrationality - APBQ	41	0.428		0.452	
1017	7	Global measure of intelligenece	41	0.226		0.227	
1031	8	Mood/outlook good	196	0.004	0.1211	0.004	0.1249
1031	9	Mood/outlook happy	196	0.007		0.007	
1031	10	Mood/outlook Worrry	196	0.085		0.085	
1031	13	Often think about health (Self-repor	196	0.009		0.009	
1031	14	Self-rating of health (Self-report o	196	0.069		0.069	
1031	15	Self-rating of health relative to ot	196	0.105		0.105	
1031	16	Last visit to the doctor.	196	0.289		0.297	
1031	17	Wanted medical attention greater tha	196	0.400		0.423	
1032	1	Ambivalence about Ego Identity	62	0.234	0.4914	0.237	0.6781
1032	2	Mother component in - Ego Identity	62	0.345		0.357	
1032	3	Identificatn as an adequate woman	62	0.895		1.441	
1033	16	Es scale MMPI - Ego Strenght	59	0.232		0.234	
1034	4	Severe Menstrual Symptoms - Irritabi	178	0.113	0.0959	0.113	0.0961
1034	5	Severe Menstrual Symptoms - Fatigue	178	0.140		0.141	
1034	6	Severe Menstrual Symptoms - Pain	178	0.057		0.057	
1034	7	Severe Menstrual Symptoms - Breast S	178	0.046		0.046	
1034	8	Severe Menstrual Symptoms - Abdomina	178	0.094		0.094	
1034	9	Severe Menstrual Symptoms - Depressi	178	0.078		0.078	
1034	10	Severe Menstrual Symptoms - Anxiety	178	0.143		0.143	
1037	1	Number of Life Events - Adolescent L	40	0.143	0.1689	0.142	0.1684
1037	2	Total Life-Change Event scores - Ado	40	0.195		0.195	
1039	4	Emotional Distress	263	0.120	0.0954	0.120	0.0957
1039	5	Spare Time - Social Adjustment Self-	263	0.093		0.093	
1039	6	Family - Social Adjustment Self-Repo	263	0.028		0.028	
1039	7	Partner - Social Adjustment Self-Rep	263	0.141		0.141	
1041	2	Contentment - Pearlín & Schooler	123	0.283	0.2942	0.290	0.302
1041	7	Lonliness Scale- UCLA (short form)	123	0.305		0.314	
1043	3	Perceived rejection by father	410	0.081	0.1076	0.081	0.108
1043	4	Perceived rejection by school	410	0.072		0.072	
1043	5	Perceived rejection by peers	410	0.064		0.064	
1043	6	Contranormative attitudes	410	0.170		0.171	
1043	7	Delinquent behavior	410	0.063		0.063	
1043	8	Violent behavior	410	0.114		0.115	
1043	9	Trouble with authorities	410	0.156		0.157	
1043	10	Perceived rejection for ascribed cha	410	0.128		0.129	
1043	11	Awareness of deviant patterns	410	0.120		0.121	
1044	47	Mensturation makes her sick, scared	45	0.239	0.238	0.240	0.241
1044	48	Mensturation makes her sick, scared	86	0.183		0.184	
1044	49	Negative feelings or discomfort with	45	0.229		0.231	
1044	50	Negative feelings or discomfort with	86	0.301		0.309	
1048	3	Ego Development	351	0.098		0.098	
1049	7	Dependancy - DEQ	36	0.024	0.1093	0.023	0.1088
1049	8	Self Criticism - DEQ	36	0.101		0.100	

## Meta-Analysis of Cluster EGOST

### Ego Strength

1049	9	Efficacy - DEQ	36	0.203		0.203	
1050	1	Dominance - CPI	38	0.346	0.2168	0.356	0.2246
1050	2	Capacity for Satus - CPI	38	0.373		0.387	
1050	3	Sociability - CPI	38	0.251		0.253	
1050	4	Social Presence - CPI	38	0.043		0.042	
1050	5	Self-Acceptance - CPI	38	0.189		0.189	
1050	6	Well Being - CPI	38	0.052		0.051	
1050	7	Responsibility - CPI	38	0.362		0.375	
1050	8	Socialization - CPI	38	0.314		0.321	
1050	9	Self-Control - CPI	38	0.193		0.193	
1050	10	Tolerance - CPI	38	0.375		0.389	
1050	11	Good Impression - CPI	38	0.038		0.038	
1050	12	Communality - CPI	38	0.112		0.111	
1050	13	Achievement via Conformity - CPI	38	0.046		0.046	
1050	14	Achievement via Independence - CPI	38	0.160		0.160	
1050	15	Intellectual Efficiency - CPI	38	0.312		0.318	
1050	16	Psychological Mindedness - CPI	38	0.024		0.023	
1050	17	Flexibility - CPI	38	0.120		0.119	
1050	18	Feminity - CPI	38	0.592		0.673	
1052	1	Coping Level	173	0.065		0.064	
1054	1	Oral Craving	60	0.307	0.2137	0.314	0.2357
1054	2	Oral Rejection	60	0.720		0.901	
1054	3	Sugar Coating	60	0.134		0.133	
1054	4	Playfulness	60	0.034		0.034	
1054	5	Supply Seeking	60	0.171		0.172	
1054	6	Resentment over Oral Deprivation	60	0.269		0.273	
1054	7	Exploitation	60	0.135		0.134	
1054	8	Choosing Obvious Neutral Responses	60	0.034		0.034	
1054	9	Attempted Denial of Anal Preoccupati	60	0.124		0.124	
1054	10	Undisguised Oedipal Intensity	60	0.267		0.271	
1054	11	Disguised Oedipal Intensity	60	0.267		0.271	
1054	12	Fear of Punishment for Masturbation	60	0.066		0.065	
1054	13	Concern over Sexual Maturation	60	0.169		0.169	
1054	14	Denial of Masturbation Guilt	60	0.240		0.243	
1054	15	Penis Envy	60	0.068		0.068	
1054	16	Father as Preferred Identification O	60	0.066		0.065	
1054	17	Mother as Preferred Identification O	60	0.233		0.236	
1054	18	Evasion of Identification Issue	60	0.067		0.067	
1054	19	Overt Hostility Toward Sibling and M	60	0.201		0.202	
1054	20	Reaction Formation to Sibling Rivalr	60	0.067		0.067	
1054	21	Rejection in Favor of Sibling	60	0.067		0.067	
1054	22	Partial Denial of Guilt	60	0.201		0.202	
1054	23	Guilt-Ridden Hostility Toward Sibling	60	0.068		0.068	
1054	24	Qualification of Pervasive Guilt	60	0.037		0.036	
1054	25	Overtly Positive Percetion of Self an	60	0.138		0.138	
1054	26	Overtly negative perception of self	60	0.207		0.209	
1054	27	Fater surrogate as love object	60	0.401		0.421	
1054	28	Heterosexual fantasy	60	0.372		0.388	
1054	29	Narcissism	60	0.434		0.461	
1054	46	Unrealistic Goals	60	0.847		1.238	
1056	13	Psychological Decision Making (Respo	36	0.135	0.1349	0.134	0.1338
1056	14	Psychological Decision Making (Effic	36	0.135		0.134	
1057	2	Ego Development (Total Protocol Rati	106	0.115	0.1253	0.115	0.1253
1057	3	Ego Development (Continuous Protocol	106	0.136		0.136	
1058	18	Coping Style	52	0.057		0.056	

Meta-Analysis of Cluster EGOST							
Ego Strength							
1059	2	Ego Identity Stage	182	0.187		0.188	
1060	3	Qualtiy of Thought - Preoccupied	86	0.281	0.2432	0.287	0.2493
1060	4	Qualtiy of Thought - Repressed	86	0.298		0.306	
1060	5	Qualtiy of Thought - Disorganized	86	0.157		0.157	
1060	6	Qualtiy of Thought - Secure	86	0.181		0.182	
1060	7	Psychological Development - Deprived	86	0.328		0.338	
1060	8	Psychological Development - CCompeti	86	0.081		0.080	
1060	9	Psychological Development - Mature	86	0.377		0.394	
1063	19	History of Drug or ETOH abuse	63	0.059	0.1254	0.059	0.1256
1063	20	History of Psychiatric Problems	63	0.192		0.192	
1065	1	Interpersonal Trust (Rotter IT Scale	64	0.143	0.0858	0.143	0.0856
1065	3	Psychosocial competence	64	0.029		0.029	
1068	1	Daughters Statements/Interactions	16	0.552	0.4914	0.604	0.5347
1068	2	Mothers Statements/Interactions	16	0.340		0.353	
1068	3	Fathers Statements/Interactions	16	0.583		0.647	
		N	=	27			
		Total Subjects	=	3328			
		Control Group	=	1741			
		Pregnant Group	=	1587			
		Weighted Effect Size Zr	=	0.02			
		STD	=	0.232			
		95% Confidence Int. LOWER	=	-0.015			
		UPPER	=	0.055			
		STOFFER Method Zst	=	0.17			
		Zst p < value	=	0.579			
		Fail-Safe N Nfs	=	10			
		BESD Control Group	=	0.51			
		BESD Pregnant Group	=	0.49			
		Difference in BESD	=	0.02			
		Qt / CHISQ value	=	141			
		df	=	26			
		Signiicance p < value	=	0.01			

## Meta-Analysis of Cluster FAMCS

### Family Dynamics

STUDY	VAR		TOTAL				
NO	NO	VARIABLE	N	r	MEAN r	Zr	MEAN Zr
1001	1	Family Strength	119	0.948	0.7267	1.812	1.2105
1001	3	Family Adaptability	119	0.330		0.341	
1001	4	Family Cohesion	119	0.902		1.479	
1002	14	Living away from Home	46	0.051		0.050	
1003	1	Socio-Economic Status	125	0.289		0.296	
1011	2	Foster care	74	0.430	0.405	0.457	0.4272
1011	4	Home stability	74	0.380		0.397	
1014	2	Move to a new home	46	0.225	0.1036	0.226	0.1043
1014	3	Increased arguments	46	0.043		0.043	
1014	4	Change in parent's finances	46	0.043		0.043	
1014	5	Change in school	46	0.300		0.306	
1014	6	Baptism, confirmation of self or fam	46	0.087		0.086	
1014	7	Trouble with a sibling	46	0.130		0.130	
1014	9	Parent has a new job	46	0.000		0.000	
1014	10	Death of a close friend or relative	46	0.000		0.000	
1015	2	Family income	52	0.554		0.619	
1018	4	Dissatisfaction with family relation	196	0.101		0.101	
1020	2	Parental Care	225	0.041	0.0289	0.041	0.0289
1020	3	Parential Control	231	0.017		0.017	
1021	4	Person Adolescent feels closest to.	50	0.530		0.585	
1022	1	Residence with parents	346	0.141		0.142	
1023	1	Conflict in the family	275	0.084	0.1045	0.084	0.1055
1023	2	Control exercised by the parents	275	0.046		0.046	
1023	3	Teen is Adopted	275	0.041		0.041	
1023	6	Deaths or serious illness in family	275	0.042		0.042	
1023	4	Families include step-parents	275	0.278		0.285	
1023	11	Families involved with ETOH, drugs,	275	0.095		0.095	
1023	12	Daughter reports abuse.	275	0.032		0.032	
1023	15	Family involvement with ETOH, drugs,	275	0.148		0.149	
1023	16	Report of Abuse	275	0.174		0.175	
1024	17	Cohesion - Family Environment Scale	52	0.128	0.1193	0.127	0.1194
1024	26	Control - Family Environment Scale	52	0.019		0.019	
1024	18	Expressive - Family Environment Scal	52	0.213		0.214	
1024	19	Conflict - Family Environment Scale	52	0.141		0.141	
1024	20	Independence - Family Environment Sc	52	0.004		0.004	
1024	21	Achievement - Family Environment Sca	52	0.096		0.095	
1024	22	Inter Cult - Family Environment Scal	52	0.175		0.175	
1024	23	Act Rec - Family Environment Scale	52	0.218		0.219	
1024	24	Moral/religious - Family Environment	52	0.165		0.165	
1024	25	Orgizational - Family Environment Sc	52	0.035		0.034	
1025	1	Nurturance - Parental (IPBI)	60	0.226	0.1992	0.228	0.2034
1025	2	Nurturance - Father (IPBI)	60	0.241		0.244	
1025	3	Nurturance - Mother (IPBI)	60	0.248		0.251	
1025	4	Control - Parental (IPBI)	60	0.031		0.031	
1025	5	Control - Father (IPBI)	60	0.006		0.006	
1025	6	Control - Mother (IPBI)	60	0.103		0.102	
1025	7	Communication - Parental (IPBI)	60	0.325		0.335	
1025	8	Communication - Father (IPBI)	60	0.211		0.213	
1025	9	Communication - Mother (IPBI)	60	0.401		0.421	
1026	2	Social Support - family	70	0.388		0.406	
1028	4	Head of household - single parent vs	953	0.089		0.089	
1030	3	Recent Crisis	59	0.130		0.129	

## Meta-Analysis of Cluster FAMCS

### Family Dynamics

1036	10	Love - Parent Child Relations Questi	60	0.219	0.1593	0.221	0.1599
1036	11	Demand - Parent Child Relations Ques	60	0.095		0.095	
1036	12	Attention - Parent Child Relations Q	60	0.241		0.244	
1036	13	Rejection - Parent Child Relations Q	60	0.120		0.119	
1036	14	Casual - Parent Child Relations Ques	60	0.121		0.121	
1037	1	Number of Life Events - Adolescent L	40	0.143	0.1689	0.142	0.1684
1037	2	Total Life-Change Event scores - Ado	40	0.195		0.195	
1038	3	Intimacy/Attachment/Strength of Feel	95	0.506		0.555	
1039	4	Emotional Distress	263	0.120	0.074	0.120	0.0741
1039	6	Family - Social Adjustment Self-Repo	263	0.028		0.028	
1041	10	Conflict with parents - frequency of	123	0.203		0.205	
1043	12	Inconsistency of parental rules	410	0.058		0.058	
1044	1	Broken Homes	45	0.262	0.2084	0.266	0.2115
1044	2	Broken Homes	86	0.048		0.048	
1044	7	Death in close family or friends.	45	0.154		0.154	
1044	8	Death in close family or friends.	86	0.157		0.157	
1044	9	Illness in family, minor or serious.	45	0.244		0.247	
1044	10	Illness in family, minor or serious.	86	0.141		0.142	
1044	17	Room of her own.	45	0.142		0.142	
1044	18	Room of her own.	86	0.230		0.233	
1044	19	Corporal punishment.	45	0.302		0.309	
1044	20	Corporal punishment.	86	0.164		0.165	
1044	21	Denial of priveleges.	45	0.349		0.360	
1044	22	Denial of priveleges.	86	0.110		0.110	
1044	23	Both corporal punishment and denial	45	0.349		0.360	
1044	24	Both corporal punishment and denial	86	0.262		0.267	
1044	25	Subject considers punishment effecti	45	0.312		0.319	
1044	26	Subject considers punishment effecti	86	0.107		0.107	
1045	1	Two parent home	67	0.234	0.1925	0.237	0.2375
1045	2	Broken home	67	0.159		0.160	
1045	4	Reconstituted home	67	0.128		0.128	
1045	8	Extended or non-family members in ho	67	0.043		0.043	
1045	9	Grandmother in household	67	0.019		0.019	
1045	10	Cohesion - Relationship - FES	67	0.123		0.123	
1045	11	Cohesion - Relationship - FES	67	0.175		0.175	
1045	12	Expressiveness - Relationship - FES	67	0.325		0.335	
1045	13	Expressiveness - Relationship - FES	67	0.035		0.035	
1045	14	Conflict - Relationship - FES	67	0.892		1.423	
1045	15	Conflict - Relationship - FES	67	0.892		1.423	
1045	16	Independence - Personal Growth - FES	67	0.132		0.132	
1045	17	Achievement - Personal Growth - FES	67	0.260		0.264	
1045	17	Independence - Personal Growth - FES	67	0.226		0.228	
1045	19	Achievement - Personal Growth - FES	67	0.152		0.152	
1045	20	Intellectual Cultural - Personal Gr	67	0.112		0.112	
1045	21	Intellectual Cultural - Personal Gr	67	0.120		0.119	
1045	22	Active Recreational - Personal Growt	67	0.125		0.125	
1045	23	Active Recreational - Personal Growt	67	0.024		0.024	
1045	24	Moral Religious - Personal Growth -	67	0.016		0.015	
1045	25	Moral Religious - Personal Growth -	67	0.048		0.048	
1045	26	Organization - System Maintenance -	67	0.155		0.155	
1045	27	Organization - System Maintenance -	67	0.165		0.165	
1045	28	Control - System Maintenance - FES	67	0.058		0.058	
1050	44	Living Arrangements	38	0.285		0.289	
1053	3	Housing Type - B	134	0.073	0.1181	0.073	0.1184
1053	4	Housing Type - W	70	0.026		0.026	

## Meta-Analysis of Cluster FAMCS

### Family Dynamics

1053	19	Maternal Nurture - B	133	0.135		0.135	
1053	20	Maternal Nurture - W	70	0.244		0.247	
1053	21	Parents Knowledge of Person Teen Dat	111	0.150		0.150	
1053	22	Parents Knowledge of Person Teen Dat	63	0.167		0.167	
1053	23	Have a Curfew - B	125	0.147		0.147	
1053	24	Have a Curfew - W	67	0.092		0.092	
1053	25	Parent Control - B	133	0.092		0.092	
1053	26	Parent Control - W	70	0.055		0.054	
1054	34	Broken Home	60	0.554	0.5655	0.619	0.7424
1054	35	Parents Never Married	60	0.460		0.493	
1054	36	History of Living Outside the Home	60	0.931		1.657	
1054	37	Court Involvement Abuse/Neglect	60	0.399		0.419	
1054	38	Court Involvement PINS Petition	60	0.484		0.524	
1055	1	Residence Rural/Urban	149	0.079	0.2077	0.079	0.2133
1055	4	Income Source - Parents	149	0.433		0.462	
1055	6	Parents Marital Status	149	0.244		0.249	
1055	7	Parents Living Together	149	0.247		0.252	
1055	10	Social Support (Total Functional)	149	0.161		0.162	
1055	11	Social Support (Total Network)	149	0.153		0.154	
1055	12	Social Support (Total Loss)	149	0.136		0.137	
1056	1	Receipt of Public Funds	36	0.055		0.054	
1057	6	Changes in Residence in the past 5 y	106	0.357	0.3207	0.372	0.3322
1057	14	Subjects Living Arrangements	106	0.238		0.241	
1057	22	Family source of income (include pub	106	0.367		0.384	
1058	1	Family Structure	52	0.075	0.0789	0.074	0.0792
1058	2	Trouble with Law	52	0.119		0.119	
1058	9	Social Support & premarital sex (sup	52	0.030		0.029	
1058	10	Social Support & contraception (supp	52	0.003		0.003	
1058	11	Social Support & pregnancy (support	52	0.266		0.270	
1058	12	Social Support & abortion (support g	52	0.047		0.047	
1058	13	Social Support & adoption (support g	52	0.012		0.012	
1059	1	Living Arrangements (Live with paren	182	0.191		0.192	
1060	1	Family Structure (more dependant str	182	0.191		0.192	
1061	2	Total number of family problems	31	0.200	0.0067	0.199	0.0064
1061	3	Mother/Daughter Incongruence of repo	31	0.210		0.210	
1061	4	Number of family changes	31	-0.02		-0.02	
1061	5	Family Conflict Incongruence	31	-0.28		-0.28	
1061	6	Family Control Incongruence	31	-0.09		-0.09	
1061	7	Family Cohesion Incongruence	31	0.130		0.129	
1061	8	Family Organization Incongruence	31	-0.08		-0.08	
1061	9	Family Independence Incongruence	31	0.030		0.030	
1061	10	Family Total Incongruence	31	0.240		0.241	
1061	11	Family Social climate - Organization	31	-0.25		-0.25	
1061	12	Family Social climate - Independence	31	-0.13		-0.13	
1061	13	Family Social climate - Cohesion (Mo	31	0.100		0.099	
1061	14	Family Social climate - Control (Moo	31	0.050		0.049	
1061	15	Family Social climate - Expressivene	31	-0.08		-0.08	
1061	16	Family Social climate - Conflict (Mo	31	0.070		0.069	
1062	1	Life Stress (Life Events Check list)	64	0.095		0.094	
1065	11	Teen Lives With Parents/Others	64	0.150		0.150	
1066	1	Family History on Welfare (ADI)	424	0.070	0.134	0.070	0.1352
1066	2	Lived with both Parents (ADI)	424	0.198		0.200	
1067	4	Head of Household	874	0.093		0.093	

Meta-Analysis of Cluster FAMCS							
Family Dynamics							
		N	=	38			
		Total Subjects	=	6333			
		Control Group	=	4247			
		Pregnant Group	=	2086			
		Weighted Effect Size Zr	=	0.07			
		STD	=	0.311			
		95% Confidence Int. LOWER	=	0.04			
		UPPER	=	0.09			
		STOFFER Method Zst	=	3.96			
		Zst p < value	=	0.000			
		Fail-Safe N Nfs	=	171			
		BESD Control Group	=	0.534			
		BESD Pregnant Group	=	0.467			
		Difference in BESD	=	0.067			
		Qt / CHISQ value	=	338.4			
		df	=	37			
		Significance p < value	=	0.01			



## Meta-Analysis of Cluster FUTRO

### Future Orientation

STUDY	VAR		TOTAL				
NO	NO	VARIABLE	N	r	MEAN r	Zr	MEAN Zr
1003	3	Educational expectations	125	0.212	0.1897	0.214	0.1914
1003	4	Occupational Aspirations	125	0.168		0.169	
1008	11	Future Orientation	128	0.126		0.126	
1013	10	Vocational Goals	39	0.180		0.179	
1023	9	School or Career plans	275	0.206		0.208	
1028	7	Expected vocation	953	0.098		0.098	
1029	1	Schooling	229	0.522	0.4923	0.578	0.5385
1029	2	Future Expectations	229	0.485		0.529	
1029	3	Work Aspirations	229	0.470		0.509	
1040	2	Plan to go to college	287	0.345		0.359	
1052	16	Intrest	167	0.077	0.2072	0.077	0.2142
1052	17	Ambition	167	0.316		0.326	
1052	24	Hopefulness about future	173	0.050		0.050	
1052	25	Past orientation of statements	167	0.208		0.210	
1052	26	Future statements	167	0.385		0.404	
1052	27	Future of the World	169	0.365		0.382	
1052	28	My Future	170	0.050		0.050	
1053	29	Future Aspirations - B	133	0.203	0.2344	0.205	0.2388
1053	30	Future Aspirations - W	70	0.193		0.194	
1053	31	Aspiration to Highest Degree - B	133	0.191		0.193	
1053	32	Aspiration to Highest Degree - W	70	0.351		0.364	
1054	46	Unrealistic Goals	60	0.847		1.238	
1055	8	Adolescent Hopefulness	149	0.038		0.038	
1058	4	Educational Aspirations	52	0.037	0.0746	0.036	0.0744
1058	5	Vocational Aspirations	52	0.024		0.024	
1058	15	Perceived opportunities for success	52	0.163		0.163	
1062	1	Educational Aspiration	343	0.210		0.212	
1067	7	Vocational Expectation	874	0.102		0.102	
		N	=	14			
		Total Subjects	=	3814			
		Control Group	=	2643			
		Pregnant Group	=	1171			
		Weighted Effect Size Zr	=	0.15			
		STD	=	0.39			
		95% Confidence Int. LOWER	=	0.12			
		UPPER	=	0.18			
		STOFFER Method Zst	=	7.07			
		Zst p < value	=	####			
		Fail-Safe N Nfs	=	204			
		BESD Control Group	=	0.58			
		BESD Pregnant Group	=	0.43			
		Difference in BESD	=	0.15			
		Qt / CHISQ value	=	167			
		df	=	13			
		Significance p < value	=	0.01			

Meta-Analysis of Cluster GRDS							
School Grades							
STUDY	VAR		TOTAL				
NO	NO	VARIABLE	N	r	MEAN r	Zr	MEAN Zr
1003	5	School Grades	125	0.183		0.185	
1008	12	Math GPA	128	0.340	0.3286	0.353	0.340
1008	13	English GPA	128	0.317		0.327	
1024	2	Self report GPA	52	0.278		0.283	
1036	5	GPA	60	0.362		0.376	
1040	1	Grades	287	0.044		0.044	
1052	5	Past Grades	173	0.402		0.425	
1053	27	Overall Grade Average - B	129	0.219	0.1811	0.221	0.182
1053	28	Overall Grade Average - W	64	0.144		0.143	
1065	6	Grades	64	0.406		0.428	
		N	=	8			
		Total Subjects	=	1018			
		Control Group	=	476			
		Pregnant Group	=	542			
		Weighted Effect Size Zr	=	0.24			
		STD	=	0.13			
		95% Confidence Int. LOWER	=	0.17			
		UPPER	=	0.300			
		STOFFER Method Zst	=	5.00			
		Zst p < value	=	0.000			
		Fail-Safe N Nfs	=	123			
		BESD Control Group	=	0.62			
		BESD Pregnant Group	=	0.38			
		Difference in BESD	=	0.24			
		Qt / CHISQ value	=	22.1			
		df	=	7			
		Significance p < value	=	0.01			

# **Meta-Analysis of Cluster KNOSC** **Knowledge of Sexuality / Contraception**

STUDY	VAR		TOTAL				
NO	NO	VARIABLE	N	r	MEAN r	Zr	MEAN Zr
1017	5	Sexual Knowledge - APBQ	41	0.203		0.203	
1030	17	Knowledge of contraception - sexual	59	0.086	0.0711	0.085	0.0706
1030	18	Knowledge of contraception - timing	59	0.056		0.056	
1034	1	Knowledge of contraception	178	0.000	0.1791	0.000	0.1993
1034	2	Knowledge of obtaining contraception	178	0.000		0.000	
1034	3	Consistant use of contraceptives	127	0.536		0.597	
1039	11	Contraceptive attitude and knowledge	142	0.260		0.265	
1040	5	Believe can't get pregnant with 1st	287	0.158	0.155	0.160	0.1565
1040	6	Believe can't get pregnant without c	287	0.076		0.076	
1040	7	Believe must have frequent sex for p	287	0.210		0.213	
1040	8	Do not know when most likely to get	287	0.112		0.113	
1040	9	Mean number of methods of contracept	287	0.218		0.222	
1042	2	Knowledge of Reproduction/Contracept	140	0.014		0.014	
1044	35	Knowledge of dating, marrage, and se	45	0.073	0.2331	0.072	0.2373
1044	36	Knowledge of dating, marrage, and se	86	0.297		0.305	
1044	37	Knowledge of dating, marrage, and se	45	0.225		0.226	
1044	38	Knowledge of dating, marrage, and se	86	0.296		0.303	
1044	39	Knowledge of dating, marrage, and se	45	0.327		0.336	
1044	40	Knowledge of dating, marrage, and se	86	0.237		0.240	
1044	41	Knowledge of dating, marrage, and se	45	0.221		0.222	
1044	42	Knowledge of dating, marrage, and se	86	0.146		0.146	
1044	43	Knowledge of dating, marrage, and se	45	0.357		0.370	
1044	44	Knowledge of dating, marrage, and se	86	0.152		0.152	
1051	1	Contraceptive Knowledge	150	0.039		0.039	
1057	4	Knowledge of Reproduction Anatomy an	106	0.159	0.1223	0.159	0.1225
1057	5	Knowledge of Congtraception	106	0.086		0.086	
1059	12	Knowledge of Sexual Information	182	0.039		0.039	
1065	14	Formal Class (Sex Education)	64	0.094		0.094	
		N	=	11			
		Total Subjects	=	1480			
		Control Group	=	416			
		Pregnant Group	=	764			
		Weighted Effect Size Zr	=	0.06			
		STD	=	0.1			
		95% Confidence Int. LOWER	=	0.01			
		UPPER	=	0.11			
		STOFFER Method Zst	=	0.5			
		Zst p < value	=	0.69			
		Fail-Safe N Nfs	=	11			
		BESD Control Group	=	0.53			
		BESD Pregnant Group	=	0.47			
		Difference in BESD	=	0.06			
		Qt / CHISQ value	=	17.3			
		df	=	10			
		Significance p < value	=	0.10			

# Meta-Analysis of Cluster LAR

333

## Living Arrangements

STUDY NO	VAR NO	VARIABLE	TOTAL N	r	MEAN r	Zr	MEAN Zr
1002	14	Living away from Home	46	0.051		0.050	
1022	1	Residence with parents	346	0.141		0.142	
1028	4	Head of household - single parent vs	953	0.089		0.089	
1044	1	Broken Homes	45	0.262	0.1553	0.266	0.1569
1044	2	Broken Homes	86	0.048		0.048	
1045	1	Two parent home	67	0.234	0.1739	0.237	0.1747
1045	2	Broken home	67	0.159		0.160	
1045	4	Reconstituted home	67	0.128		0.128	
1050	44	Living Arrangements	38	0.285		0.289	
1053	3	Housing Type - B	134	0.073	0.0496	0.073	0.0494
1053	4	Housing Type - W	70	0.026		0.026	
1054	34	Broken Home	60	0.554	0.7423	0.619	1.1379
1054	36	History of Living Outside the Home	60	0.931		1.657	
1055	1	Residence Rural/Urban	149	0.079		0.079	
1057	14	Subjects Living Arrangements	106	0.238		0.241	
1059	1	Living Arrangements (Live with paren	182	0.191		0.192	
1065	11	Teen Lives With Parents/Others	64	0.150		0.150	
1066	2	Lived with both Parents (ADI)	424	0.198		0.200	
1067	4	Head of Household	874	0.093		0.093	
		N	=	14			
		Total Subjects	=	3574			
		Control Group	=	2644			
		Pregnant Group	=	930			
		Weighted Effect Size Zr	=	0.09			
		STD	=	0.339			
		95% Confidence Int. LOWER	=	0.055			
		UPPER	=	0.12			
		STOFFER Method Zst	=	5.42			
		Zst p < value	=	0.000			
		Fail-Safe N Nfs	=	84			
		BESD Control Group	=	0.545			
		BESD Pregnant Group	=	0.455			
		Difference in BESD	=	0.09			
		Qt / CHISQ value	=	106.7			
		df	=	13			
		Significance p < value	=	0.01			

## Meta-Analysis of Cluster LOC

### Locus of Control

STUDY NO	VAR NO	VARIABLE	TOTAL N	r	MEAN r	Zr	MEAN Zr
1003	9	Locus of Control	125	0.094		0.094	
1006	1	Locus of Control - School 1	164	0.164	0.1672	0.165	0.1682
1006	2	Locus of Control - School 2	164	0.171		0.172	
1007	3	Locus of control	30	0.050		0.049	
1008	2	Locus of Control	128	0.075		0.075	
1013	1	Locus of Control	39	0.167		0.166	
1026	6	Locus of Control	70	0.669		0.805	
1027	2	Locus of Control - Rotter's I/E Scal	52	0.424		0.448	
1031	1	Personal Control - Something stops m	196	0.152	0.1231	0.153	0.1235
1031	2	Personal Control - Don't have a chan	196	0.125		0.125	
1031	3	Personal Control - Good luck is most	196	0.092		0.092	
1041	4	Sense of Control/Responsibility - Pe	123	0.061		0.061	
1053	33	Locus of Control - B	133	0.055	0.0378	0.055	0.0376
1053	34	Locus of Control - W	70	0.021		0.021	
1057	1	Locus of Control	106	0.000		0.000	
1058	14	Locus of Control	52	0.315		0.323	
1063	2	Internal Locus of Control (Health Lo	64	0.064	0.1613	0.064	0.1636
1063	3	Chance Locus of Control (Health Locu	64	0.113		0.113	
1063	4	Powerful Other Locus of Control (Hea	64	0.307		0.314	
1064	3	Locus of Control (Nowicki Strickland	40	-0.26		-0.26	
1065	2	Locus of Control (Rotter I/E LOC Sca	64	0.193		0.194	
N			=	15			
Total Subjects			=	1386			
Control Group			=	810			
Pregnant Group			=	576			
Weighted Effect Size Zr			=	0.02			
STD			=	0.278			
95% Confidence Int. LOWER			=	-0.04			
UPPER			=	0.07			
STOFFER Method Zst			=	0.02			
Zst p < value			=	0.50			
Fail-Safe N Nfs			=	15			
BESD Control Group			=	0.508			
BESD Pregnant Group			=	0.493			
Difference in BESD			=	0.015			
Qt / CHISQ value			=	75.5			
df			=	14			
Significance p < value			=	0.01			

# Meta-Analysis of Cluster MAFE

## Role Identity

STUDY	VAR		TOTAL				
NO	NO	VARIABLE	N	r	MEAN r	Zr	MEAN Zr
1003	2	Sex typing of activities	125	0.174	0.218	0.175	0.2212
1003	8	Sex Role Orientation	125	0.262		0.267	
1010	13	Masculinity/Femininity Scale	100	0.078		0.078	
1024	7	Perceived role of women	52	0.388		0.406	
1032	3	Identificaton as an adequate woman	62	0.895		1.441	
1050	18	Feminity - CPI	38	0.592		0.673	
		N	=	5			
		Total Subjects	=	377			
		Control Group	=	213			
		Pregnant Group	=	164			
		Weighted Effect Size Zr	=	0.45			
		STD	=	0.482			
		95% Confidence Int. LOWER	=	0.35			
		UPPER	=	0.55			
		STOFFER Method Zst	=	4.48			
		Zst p < value	=	0.000			
		Fail-Safe N Nfs	=	58			
		BESD Control Group	=	0.275			
		BESD Pregnant Group	=	0.725			
		Difference in BESD	=	0.45			
		Qt / CHISQ value	=	79.6			
		df	=	4			
		Significance p < value	=	0.01			

Meta-Analysis of Cluster MENSTU							
Menstruation Onset							
STUDY	VAR		TOTAL				
NO	NO	VARIABLE	N	r	MEAN r	Zr	MEAN Zr
1010	1	Onset of Menstruation	100	0.364		0.380	
1019	1	Onset of menarche less than age 12	96	0.147		0.147	
1040	11	Age at menarche	287	0.058		0.058	
1044	45	Mensturation at age 12 yrs or less.	45	0.037	0.1019	0.036	0.102
1044	46	Mensturation at age 12 yrs or less.	86	0.167		0.168	
1063	14	Age at Menarche	64	0.117		0.116	
		N	=	5			
		Total Subjects	=	678			
		Control Group	=	344			
		Pregnant Group	=	334			
		Weighted Effect Size Zr	=	0.05			
		STD	=	0.187			
		95% Confidence Int. LOWER	=	-0.025			
		UPPER	=	0.125			
		STOFFER Method Zst	=	1.09			
		Zst p < value	=	0.147			
		Fail-Safe N Nfs	=	2			
		BESD Control Group	=	0.475			
		BESD Pregnant Group	=	0.525			
		Difference in BESD	=	0.05			
		Qt / CHISQ value	=	17.4			
		df	=	4			
		Significance p < value	=	0.01			

Meta-Analysis of Cluster OCEX							
Occupational Expectations							
STUDY	VAR		TOTAL				
NO	NO	VARIABLE	N	r	MEAN r	Zr	MEAN Zr
1003	4	Occupational Aspirations	125	0.168		0.169	
1013	10	Vocational Goals	39	0.180		0.179	
1023	9	School or Career plans	275	0.206		0.208	
1029	3	Work Aspirations	229	0.470		0.509	
1058	5	Vocational Aspirations	52	0.024		0.024	
1067	7	Vocational Expectation	874	0.102		0.102	
		N	=	6			
		Total Subjects	=	1594			
		Control Group	=	1200			
		Pregnant Group	=	394			
		Weighted Effect Size Zr	=	0.18			
		STD	=	0.151			
		95% Confidence Int. LOWER	=	0.13			
		UPPER	=	0.23			
		STOFFER Method Zst	=	4.78			
		Zst p < value	=	0.000			
		Fail-Safe N Nfs	=	50			
		BESD Control Group	=	0.59			
		BESD Pregnant Group	=	0.41			
		Difference in BESD	=	0.18			
		Qt / CHISQ value	=	31.1			
		df	=	5			
		Significance p < value	=	0.01			



## Meta-Analysis of Cluster PARNT

### Parental Relationship

STUDY	VAR		TOTAL				
NO	NO	VARIABLE	N	r	MEAN r	Zr	MEAN Zr
1001	2	Parental Communication	119	0.930		1.653	
1004	1	Relationship with father	38	0.253	0.1265	0.255	0.1275
1004	2	Relationship with Mother	38	0.000		0.000	
1011	11	Perception of father past Pos	74	0.331	0.319	0.342	0.3309
1011	12	Perception of father past NEG	74	0.485		0.526	
1011	13	Perception of father present Pos	74	0.284		0.291	
1011	14	Perception of father present NEG	74	0.367		0.382	
1011	15	Perception of mother past Pos	74	0.300		0.308	
1011	16	Perception of mother past NEG	74	0.215		0.216	
1011	17	Perception of mother present Pos	74	0.305		0.313	
1011	18	Perception of mother present NEG	74	0.265		0.270	
1013	14	Mothers Education	39	0.211	0.1061	0.211	0.1063
1013	15	Mothers Age at first child	39	0.002		0.002	
1018	5	Father status	196	0.110		0.110	
1020	4	Fathers in the Home.	242	0.225		0.228	
1023	10	Families talk about sex with daughter	275	0.063	0.1142	0.063	0.1149
1023	17	Relationship with Father	275	0.166		0.167	
1024	1	Adult male role model in the home	51	0.018	0.0314	0.017	0.0311
1024	6	Ranking of parents as a source of in	52	0.045		0.045	
1025	2	Nurturance - Father (IPBI)	60	0.241	0.245	0.244	0.2527
1025	3	Nurturance - Mother (IPBI)	60	0.248		0.251	
1025	5	Control - Father (IPBI)	60	0.006		0.006	
1025	6	Control - Mother (IPBI)	60	0.103		0.102	
1025	7	Communication - Parental (IPBI)	60	0.325		0.335	
1025	8	Communication - Father (IPBI)	60	0.211		0.213	
1025	9	Communication - Mother (IPBI)	60	0.401		0.421	
1025	13	Presence of father in home	60	0.424		0.449	
1028	2	Mom's occupation	953	0.096		0.096	
1030	8	Parents attitude toward daughter's s	59	0.281	0.1396	0.286	0.1411
1030	9	Mom's initial reaction	59	0.112		0.111	
1030	10	Father's initial reaction	59	0.026		0.026	
1036	2	Mother's age (Teenager's mother)	60	0.530	0.2724	0.586	0.2909
1036	3	Mother's employed (Teenager's mother)	60	0.181		0.181	
1036	4	Mother's married (Teenager's mother)	60	0.106		0.106	
1038	1	Mothers (teen's mother) worked outsi	72	0.196	0.2081	0.197	0.2098
1038	2	Mothers (teen's mother) marital stat	75	0.221		0.223	
1043	3	Perceived rejection by father	410	0.081		0.081	
1044	3	Father figure in the home.	45	0.339	0.2011	0.349	0.206
1044	4	Father figure in the home.	86	0.063		0.063	
1045	3	Father absent home	67	0.092	0.1943	0.092	0.2026
1045	30	Loving - Father - PCR	67	0.464		0.499	
1045	31	Loving - Father - PCR	67	0.054		0.054	
1045	32	Rejection - Father - PCR	67	0.306		0.313	
1045	33	Rejection - Father - PCR	67	0.078		0.077	
1045	34	Demanding - Father - PCR	67	0.066		0.065	
1045	35	Demanding - Father - PCR	67	0.089		0.089	
1045	36	Casualness - Father - PCR	67	0.230		0.232	
1045	37	Casualness - Father - PCR	67	0.017		0.017	
1045	38	Attention - Father - PCR	67	0.349		0.361	
1045	39	Attention - Father - PCR	67	0.101		0.101	
1045	40	Loving - Mother - PCR	67	0.212		0.213	
1045	41	Loving - Mother - PCR	67	0.013		0.013	

## Meta-Analysis of Cluster PARNT

### Parental Relationship

1045	42	Rejection - Mother - PCR	67	0.026		0.026	
1045	43	Rejection - Mother - PCR	67	0.052		0.051	
1045	44	Demanding - Mother - PCR	67	0.015		0.015	
1045	45	Demanding - Mother - PCR	67	0.149		0.149	
1045	46	Casualness - Mother - PCR	67	0.125		0.125	
1045	47	Casualness - Mother - PCR	67	0.071		0.070	
1045	48	Attention - Mother - PCR	67	0.167		0.167	
1045	49	Attention - Mother - PCR	67	0.011		0.011	
1045	68	Enmeshment - SFIS	67	0.091		0.091	
1045	69	Enmeshment - SFIS	67	0.221		0.223	
1045	70	Disengagement - SFIS	67	0.062		0.061	
1045	71	Disengagement - SFIS	67	0.070		0.069	
1045	72	Neglect - SFIS	67	0.201		0.202	
1045	73	Neglect - SFIS	67	0.069		0.068	
1045	74	Mother Neglect - SFIS	67	0.050		0.050	
1045	75	Mother Neglect - SFIS	67	0.226		0.228	
1045	76	Father Neglect - SFIS	67	0.293		0.300	
1045	77	Father Neglect - SFIS	67	0.130		0.130	
1045	78	Overprotection - SFIS	67	0.138		0.138	
1045	79	Overprotection - SFIS	67	0.144		0.144	
1045	80	Mother Overprotection - SFIS	67	0.130		0.129	
1045	81	Mother Overprotection - SFIS	67	0.060		0.059	
1045	82	Father Overprotection - SFIS	67	0.105		0.104	
1045	83	Father Overprotection - SFIS	67	0.257		0.261	
1045	84	Rigidity - SFIS	67	0.118		0.117	
1045	85	Rigidity - SFIS	67	0.429		0.456	
1045	86	Flexibility - SFIS	67	0.282		0.287	
1045	87	Flexibility - SFIS	67	0.359		0.373	
1045	88	Parent/Child Conflict Avoidance - SF	67	0.076		0.076	
1045	89	Parent/Child Conflict Avoidance - SF	67	0.329		0.340	
1045	90	Mother/Child Conflict Avoidance - SF	67	0.332		0.342	
1045	91	Mother/Child Conflict Avoidance - SF	67	0.218		0.220	
1045	92	Father/Child Conflict Avoidance - SF	67	0.204		0.206	
1045	93	Father/Child Conflict Avoidance - SF	67	0.390		0.409	
1045	94	Parent Conflict Expression w/o Resol	67	0.285		0.291	
1045	95	Parent Conflict Expression w/o Resol	67	0.051		0.051	
1045	96	Mother Conflict Expression w/o Resol	67	0.247		0.251	
1045	97	Mother Conflict Expression w/o Resol	67	0.057		0.057	
1045	98	Father Conflict Expression w/o Resol	67	0.093		0.092	
1045	99	Father Conflict Expression w/o Resol	67	0.001		0.001	
1045	100	Parent/Conflict Resolution - SFIS	67	0.030		0.030	
1045	101	Parent/Conflict Resolution - SFIS	67	0.412		0.435	
1045	102	Mother/Child Conflict Resolution - S	67	0.103		0.103	
1045	103	Mother/Child Conflict Resolution - S	67	0.299		0.306	
1045	104	Father/Child Conflict Resolution - S	67	0.244		0.247	
1045	105	Father/Child Conflict Resolution - S	67	0.317		0.326	
1045	106	Parent Management - SFIS	67	0.726		0.914	
1045	107	Parent Management - SFIS	67	0.408		0.431	
1045	108	Triangulation - SFIS	67	0.410		0.432	
1045	109	Triangulation - SFIS	67	0.289		0.296	
1045	110	Parent/Child Coalition - SFIS	67	0.313		0.321	
1045	111	Parent/Child Coalition - SFIS	67	0.622		0.724	
1045	112	Detouring - SFIS	67	0.252		0.256	
1045	113	Detouring - SFIS	67	0.186		0.186	
1048	1	Relationship with mother	233	0.162		0.163	

## Meta-Analysis of Cluster PARNT

### Parental Relationship

1049	1	Education of Mother	29	0.404	0.1616	0.422	0.1653
1049	2	Education of Father	25	0.027		0.027	
1049	3	Occupation of Mother	32	0.178		0.177	
1049	4	Occupation of Father	21	0.037		0.036	
1050	43	Parents Education	38	0.000		0.000	
1053	5	Mothers Employment - B	129	0.233	0.1623	0.236	0.1643
1053	6	Mothers Employment - W	70	0.066		0.066	
1053	7	Fathers Employment - B	118	0.159		0.160	
1053	8	Fathers Employment - W	65	0.229		0.231	
1053	11	Parent/Child Communication (Mother)	129	0.077		0.077	
1053	12	Parent/Child Communication (Mother)	70	0.046		0.046	
1053	13	Parent/Child Communication (FATHER)	97	0.208		0.210	
1053	14	Parent/Child Communication (FATHER)	59	0.106		0.105	
1053	15	Seek Mothers Opinion - B	119	0.080		0.080	
1053	16	Seek Mothers Opinion - W	58	0.259		0.262	
1053	17	Seek Fathers Opinion - B	45	0.396		0.414	
1053	18	Seek Fathers Opinion - W	81	0.306		0.315	
1053	19	Maternal Nurture - B	133	0.135		0.135	
1053	20	Maternal Nurture - W	70	0.244		0.247	
1053	21	Parents Knowledge of Person Teen Dat	111	0.150		0.150	
1053	22	Parents Knowledge of Person Teen Dat	63	0.167		0.167	
1053	23	Have a Curfew - B	125	0.147		0.147	
1053	24	Have a Curfew - W	67	0.092		0.092	
1053	25	Parent Control - B	133	0.092		0.092	
1053	26	Parent Control - W	70	0.055		0.054	
1054	30	Mother an Adolescent at Subjects Bir	60	0.356	0.4399	0.370	0.4704
1054	32	Mother Absence Ages 1-10	60	0.435		0.462	
1054	33	Father Absence Ages 1-10	60	0.509		0.557	
1054	35	Parents Never Married	60	0.460		0.493	
1056	2	Presence of father in home	36	0.287	0.3371	0.292	0.347
1056	5	Mother Post HS Education	36	0.387		0.402	
1057	7	Mothers age at 1st Pregnancy	106	0.370	0.3224	0.387	0.3359
1057	15	Source of Reproductive Information (	106	0.176		0.177	
1057	16	Could Talk with parents about person	106	0.242		0.246	
1057	17	Sisterly relationship with mother	106	0.233		0.236	
1057	20	Occupation of Father	106	0.334		0.345	
1057	21	Occupation of Mother	106	0.402		0.424	
1057	23	Mothers Education HS or better	106	0.453		0.487	
1057	24	Mothers marital status at first preg	106	0.370		0.386	
1059	4	Mothers style of parenting - Democra	182	0.046	0.0631	0.046	0.0632
1059	5	Mothers style of parenting - Democra	182	0.027		0.027	
1059	6	Mothers style of parenting - Democra	182	0.020		0.020	
1059	7	Mothers style of parenting - Authora	182	0.050		0.050	
1059	8	Mothers style of parenting - Authora	182	0.134		0.134	
1059	9	Mothers style of parenting - Authora	182	0.065		0.065	
1059	10	Mothers style of parenting - Permiss	182	0.132		0.132	
1059	11	Mothers style of parenting - Permiss	182	0.031		0.031	
1063	17	Mother deceased	63	0.248	0.1745	0.251	0.1759
1063	18	Father deceased	63	0.101		0.100	
1065	12	Father Works	64	0.290	0.2437	0.296	0.2473
1065	13	Mother Works	64	0.197		0.198	
1067	1	Mothers Occupation	874	0.100		0.100	
1068	1	Daughters Statements/Interactions	16	0.552	0.4914	0.604	0.5347
1068	2	Mothers Statements/Interactions	16	0.340		0.353	
1068	3	Fathers Statements/Interactions	16	0.583		0.647	

Meta-Analysis of Cluster PARNT							
Parental Relationship							
		N	=	28			
		Total Subjects	=	4676			
		Control Group	=	3175			
		Pregnant Group	=	1501			
		Weighted Effect Size	Zr	=	0.14		
			STD	=	0.32		
		95% Confidence Int.	LOWER	=	0.105		
			UPPER	=	0.160		
		STOFFER Method	Zst	=	5.07		
			Zst p < value	=	0.000		
		Fail-Safe N	Nfs	=	95		
		BESD Control Group		=	0.568		
		BESD Pregnant Group		=	0.433		
		Difference in BESD		=	0.135		
		Qt / CHISQ value		=	319.9		
			df	=	27		
		Significance	p < value	=	0.01		

# Meta-Analysis of Cluster PEERS

## Peer Relationship

STUDY NO	VAR NO	VARIABLE	TOTAL N	r	MEAN r	Zr	MEAN Zr
1011	3	Abusive boyfriend	74	0.410	0.3633	0.433	0.3789
1011	5	Boyfriends education	74	0.360		0.374	
1011	6	Boyfriend/Sibling in jail	74	0.320		0.329	
1016	7	Romantisium - Romantic Items	267	0.374		0.392	
1021	1	Use of leisure time	50	0.549	0.4852	0.611	0.5581
1021	2	Participates in Sports	50	0.212		0.213	
1021	3	Has Hobbies	50	0.695		0.850	
1023	18	Relationship with Peers	275	0.166		0.167	
1026	1	Social Support - friends	70	0.565		0.636	
1028	5	Dating onset after 13	953	0.104	0.0975	0.105	0.0977
1028	6	Closest friend/relative (most indica	953	0.090		0.091	
1029	4	Number of Friends	229	0.180	0.2368	0.181	0.2413
1029	5	Activities of friends	229	0.287		0.295	
1029	6	Acceptance of pregnancy by male frie	229	0.243		0.248	
1030	2	Length of relationship with boyfrien	59	0.338	0.1653	0.349	0.1681
1030	11	Boyfriend happy with pregnancy.	59	0.264		0.268	
1030	14	Plan to marry boyfriend	59	0.105		0.105	
1030	15	Boyfriend in school	59	0.010		0.010	
1030	16	Boyfriend at work	59	0.109		0.108	
1039	5	Spare Time - Social Adjustment Self-	263	0.093	0.1168	0.093	0.1172
1039	7	Partner - Social Adjustment Self-Rep	263	0.141		0.141	
1044	33	Dated two times per week or more.	45	0.331	0.2392	0.340	0.2439
1044	34	Dated two times per week or more.	86	0.147		0.148	
1008	24	Friend of teen mother	127	0.212		0.214	
1014	1	Pregnant sister or friend	46	0.000		0.000	
1040	4	Friend was a teenage mother	287	0.229		0.233	
1058	8	Number of friends who are teen paren	52	0.139		0.138	
		N	=	14			
		Total Subjects	=	2883			
		Control Group	=	1935			
		Pregnant Group	=	948			
		Weighted Effect Size Zr	=	0.01			
		STD	=	0.28			
		95% Confidence Int. LOWER	=	-0			
		UPPER	=	0.04			
		STOFFER Method Zst	=	1.61			
		Zst p < value	=	0.06			
		Fail-Safe N Nfs	=	4			
		BESD Control Group	=	0.5			
		BESD Pregnant Group	=	0.5			
		Difference in BESD	=	0.01			
		Qt / CHISQ value	=	135			
		df	=	13			
		Significance p < value	=	0.01			

**Meta-Analysis of Cluster PTRM**  
**Pregnant Role Model**

STUDY	VAR		TOTAL				
NO	NO	VARIABLE	N	r	MEAN r	Zr	MEAN Zr
1008	21	Daughter of teen mother	127	0.080	0.185	0.080	0.1879
1008	22	Sister of teen mother	127	0.142		0.143	
1008	23	Relative of teen mother	127	0.306		0.315	
1008	24	Friend of teen mother	127	0.212		0.214	
1013	15	Mothers Age at first child	39	0.002		0.002	
1014	1	Pregnant sister or friend	46	0.000		0.000	
1040	3	Sister was a teenage mother	287	0.070	0.1497	0.070	0.1516
1040	4	Friend was a teenage mother	287	0.229		0.233	
1058	6	Number of extended family who are te	52	0.006	0.0548	0.006	0.0546
1058	7	Number of siblings who are teen pare	52	0.020		0.019	
1058	8	Number of friends who are teen paren	52	0.139		0.138	
1060	2	Teen's Mother was a pregnant teen	86	0.232		0.235	
1063	16	Teen's Mother's age at first birth	64	0.143		0.143	
		N	=	7			
		Total Subjects	=	701			
		Control Group	=	359			
		Pregnant Group	=	342			
		Weighted Effect Size Zr	=	0.12			
		STD	=	0.122			
		95% Confidence Int. LOWER	=	0.04			
		UPPER	=	0.19			
		STOFFER Method Zst	=	2.95			
		Zst p < value	=	0.002			
		Fail-Safe N Nfs	=	5			
		BESD Control Group	=	0.558			
		BESD Pregnant Group	=	0.443			
		Difference in BESD	=	0.115			
		Qt / CHISQ value	=	7.5			
		df	=	6			
		Significance p < value	=	0.50			

# Meta-Analysis of Cluster RDAD

## Father Relationship

STUDY	VAR		TOTAL				
NO	NO	VARIABLE	N	r	MEAN r	Zr	MEAN Zr
1004	1	Relationship with father	38	0.253		0.255	
1011	11	Perception of father past Pos	74	0.331	0.3668	0.342	0.3851
1011	12	Perception of father past NEG	74	0.485		0.526	
1011	13	Perception of father present Pos	74	0.284		0.291	
1011	14	Perception of father present NEG	74	0.367		0.382	
1018	5	Father status	196	0.110		0.110	
1020	4	Fathers in the Home.	242	0.225		0.228	
1023	17	Relationship with Father	275	0.166		0.167	
1024	1	Adult male role model in the home	51	0.018		0.017	
1025	2	Nurturance - Father (IPBI)	60	0.241	0.2207	0.244	0.228
1025	5	Control - Father (IPBI)	60	0.006		0.006	
1025	8	Communication - Father (IPBI)	60	0.211		0.213	
1025	13	Presence of father in home	60	0.424		0.449	
1030	10	Father's initial reaction	59	0.026		0.026	
1043	3	Perceived rejection by father	410	0.081		0.081	
1044	3	Father figure in the home.	45	0.339	0.2011	0.349	0.206
1044	4	Father figure in the home.	86	0.063		0.063	
1045	3	Father absent home	67	0.092	0.1848	0.092	0.1894
1045	30	Loving - Father - PCR	67	0.464		0.499	
1045	31	Loving - Father - PCR	67	0.054		0.054	
1045	32	Rejection - Father - PCR	67	0.306		0.313	
1045	33	Rejection - Father - PCR	67	0.078		0.077	
1045	34	Demanding - Father - PCR	67	0.066		0.065	
1045	35	Demanding - Father - PCR	67	0.089		0.089	
1045	36	Casualness - Father - PCR	67	0.230		0.232	
1045	37	Casualness - Father - PCR	67	0.017		0.017	
1045	38	Attention - Father - PCR	67	0.349		0.361	
1045	39	Attention - Father - PCR	67	0.101		0.101	
1045	76	Father Neglect - SFIS	67	0.293		0.300	
1045	77	Father Neglect - SFIS	67	0.130		0.130	
1045	82	Father Overprotection - SFIS	67	0.105		0.104	
1045	83	Father Overprotection - SFIS	67	0.257		0.261	
1045	92	Father/Child Conflict Avoidance - SF	67	0.204		0.206	
1045	93	Father/Child Conflict Avoidance - SF	67	0.390		0.409	
1045	98	Father Conflict Expression w/o Resol	67	0.093		0.092	
1045	99	Father Conflict Expression w/o Resol	67	0.001		0.001	
1045	104	Father/Child Conflict Resolution - S	67	0.244		0.247	
1045	105	Father/Child Conflict Resolution - S	67	0.317		0.326	
1049	2	Education of Father	25	0.027	0.0322	0.027	0.0314
1049	4	Occupation of Father	21	0.037		0.036	
1050	43	Parents Education	38	0.000		0.000	
1053	7	Fathers Employment - B	118	0.159	0.2339	0.160	0.239
1053	8	Fathers Employment - W	65	0.229		0.231	
1053	13	Parent/Child Communication (FATHER)	97	0.208		0.210	
1053	14	Parent/Child Communication (FATHER)	59	0.106		0.105	
1053	17	Seek Fathers Opinion - B	45	0.396		0.414	
1053	18	Seek Fathers Opinion - W	81	0.306		0.315	
1054	33	Father Absence Ages 1-10	60	0.509		0.557	
1056	2	Presence of father in home	36	0.287		0.292	
1057	20	Occupation of Father	106	0.334		0.345	
1063	18	Father deceased	63	0.101		0.100	
1065	12	Father Works	64	0.290		0.296	

<b>Meta-Analysis of Cluster RDAD</b>							
<b>Father Relationship</b>							
1068	1	Daughters Statements/Interactions	16	0.552	0.5671	0.604	0.6256
1068	3	Fathers Statements/Interactions	16	0.583		0.647	
		N	=	20			
		Total Subjects	=	2129			
		Control Group	=	1222			
		Pregnant Group	=	907			
		Weighted Effect Size Zr	=	0.13			
		STD	=	0.228			
		95% Confidence Int. LOWER	=	0.08			
		UPPER	=	0.165			
		STOFFER Method Zst	=	4.23			
		Zst p < value	=	0.000			
		Fail-Safe N Nfs	=	23			
		BESD Control Group	=	0.563			
		BESD Pregnant Group	=	0.438			
		Difference in BESD	=	0.125			
		Qt / CHISQ value	=	53.9			
		df	=	19			
		Significance p < value	=	0.01			



## Meta-Analysis of Cluster RMOM

### Mother Relationship

STUDY	VAR		TOTAL				
NO	NO	VARIABLE	N	r	MEAN r	Zr	MEAN Zr
1004	2	Relationship with Mother	38	0.000		0.000	
1011	15	Perception of mother past Pos	74	0.300	0.2712	0.308	0.2767
1011	16	Perception of mother past NEG	74	0.215		0.216	
1011	17	Perception of mother present Pos	74	0.305		0.313	
1011	18	Perception of mother present NEG	74	0.265		0.270	
1013	14	Mothers Education	39	0.211	0.1061	0.211	0.1063
1013	15	Mothers Age at first child	39	0.002		0.002	
1015	3	Intimacy - Mother/daughter	52	0.064	0.0437	0.063	0.0434
1015	4	Attachment - Mother/daughter	52	0.000		0.000	
1015	5	Strength of feelings - Mother/daught	52	0.068		0.067	
1025	3	Nurturance - Mother (IPBI)	60	0.248	0.2505	0.251	0.2582
1025	6	Control - Mother (IPBI)	60	0.103		0.102	
1025	9	Communication - Mother (IPBI)	60	0.401		0.421	
1028	2	Mom's occupation	953	0.096		0.096	
1030	9	Mom's initial reaction	59	0.112		0.111	
1036	2	Mother's age (Teenager's mother)	60	0.530	0.2097	0.586	0.2191
1036	3	Mother's employed (Teenager's mother)	60	0.181		0.181	
1036	4	Mother's married (Teenager's mother)	60	0.106		0.106	
1036	7	Affection - Walker Affective Mother/	60	0.111		0.110	
1036	8	Interdependance - Walker Affective M	60	0.220		0.222	
1036	9	Disclosure - Walker Affective Mother	60	0.110		0.109	
1038	1	Mothers (teen's mother) worked outsi	72	0.196	0.2122	0.197	0.2141
1038	2	Mothers (teen's mother) marital stat	75	0.221		0.223	
1038	2	Mothers (teen's mother) marital stat	75	0.221		0.223	
1039	10	Mother knows of contraceptive use.	189	0.201		0.203	
1045	40	Loving - Mother - PCR	67	0.212	0.1281	0.213	0.1293
1045	41	Loving - Mother - PCR	67	0.013		0.013	
1045	42	Rejection - Mother - PCR	67	0.026		0.026	
1045	43	Rejection - Mother - PCR	67	0.052		0.051	
1045	44	Demanding - Mother - PCR	67	0.015		0.015	
1045	45	Demanding - Mother - PCR	67	0.149		0.149	
1045	46	Casualness - Mother - PCR	67	0.125		0.125	
1045	47	Casualness - Mother - PCR	67	0.071		0.070	
1045	48	Attention - Mother - PCR	67	0.167		0.167	
1045	49	Attention - Mother - PCR	67	0.011		0.011	
1045	74	Mother Neglect - SFIS	67	0.050		0.050	
1045	75	Mother Neglect - SFIS	67	0.226		0.228	
1045	80	Mother Overprotection - SFIS	67	0.130		0.129	
1045	81	Mother Overprotection - SFIS	67	0.060		0.059	
1045	90	Mother/Child Conflict Avoidance - SF	67	0.332		0.342	
1045	91	Mother/Child Conflict Avoidance - SF	67	0.218		0.220	
1045	96	Mother Conflict Expression w/o Resol	67	0.247		0.251	
1045	97	Mother Conflict Expression w/o Resol	67	0.057		0.057	
1045	102	Mother/Child Conflict Resolution - S	67	0.103		0.103	
1045	103	Mother/Child Conflict Resolution - S	67	0.299		0.306	
1048	1	Relationship with mother	233	0.162		0.163	
1049	1	Education of Mother	29	0.404	0.2911	0.422	0.2992
1049	3	Occupation of Mother	32	0.178		0.177	
1050	43	Parents Education	38	0.000		0.000	
1053	5	Mothers Employment - B	129	0.233	0.1425	0.236	0.1437
1053	6	Mothers Employment - W	70	0.066		0.066	
1053	11	Parent/Child Communication (Mother)	129	0.077		0.077	

## Meta-Analysis of Cluster RMOM

### Mother Relationship

1053	12	Parent/Child Communication (Mother)	70	0.046		0.046	
1053	15	Seek Mothers Opinion - B	119	0.080		0.080	
1053	16	Seek Mothers Opinion - W	58	0.259		0.262	
1053	19	Maternal Nurture - B	133	0.135		0.135	
1053	20	Maternal Nurture - W	70	0.244		0.247	
1054	30	Mother and Adolescent at Subjects Birth	60	0.356	0.417	0.370	0.4417
1054	32	Mother Absence Ages 1-10	60	0.435		0.462	
1054	35	Parents Never Married	60	0.460		0.493	
1056	5	Mother Post HS Education	36	0.387		0.402	
1057	7	Mothers age at 1st Pregnancy	106	0.370	0.3339	0.387	0.3494
1057	15	Source of Reproductive Information (	106	0.176		0.177	
1057	17	Sisterly relationship with mother	106	0.233		0.236	
1057	21	Occupation of Mother	106	0.402		0.424	
1057	23	Mothers Education HS or better	106	0.453		0.487	
1057	24	Mothers marital status at first preg	106	0.370		0.386	
1059	4	Mothers style of parenting - Democra	182	0.046	0.0631	0.046	0.0632
1059	5	Mothers style of parenting - Democra	182	0.027		0.027	
1059	6	Mothers style of parenting - Democra	182	0.020		0.020	
1059	7	Mothers style of parenting - Authora	182	0.050		0.050	
1059	8	Mothers style of parenting - Authora	182	0.134		0.134	
1059	9	Mothers style of parenting - Authora	182	0.065		0.065	
1059	10	Mothers style of parenting - Permiss	182	0.132		0.132	
1059	11	Mothers style of parenting - Permiss	182	0.031		0.031	
1063	17	Mother deceased	63	0.248		0.251	
1065	13	Mother Works	64	0.197		0.198	
1067	1	Mothers Occupation	874	0.100		0.100	
1068	1	Daughters Statements/Interactions	16	0.552	0.4458	0.604	0.4787
1068	2	Mothers Statements/Interactions	16	0.340		0.353	
		N	=	23			
		Total Subjects	=	3493			
		Control Group	=	2387			
		Pregnant Group	=	1106			
		Weighted Effect Size Zr	=	0.10			
		STD	=	0.191			
		95% Confidence Int. LOWER	=	0.06			
		UPPER	=	0.130			
		STOFFER Method Zst	=	4.6			
		Zst p < value	=	0.000			
		Fail-Safe N Nfs	=	6			
		BESD Control Group	=	0.548			
		BESD Pregnant Group	=	0.453			
		Difference in BESD	=	0.095			
		Qt / CHISQ value	=	43.5			
		df	=	22			
		Significance p < value	=	0.01			

## Meta-Analysis of Cluster SEXAT

### Sexual Activity

STUDY	VAR		TOTAL				
NO	NO	VARIABLE	N	r	MEAN r	Zr	MEAN Zr
1008	10	Beliefs about Ease of Parenting	128	0.185	0.2591	0.187	0.2678
1008	17	Times sex before used protection	97	0.294		0.301	
1008	18	Percent of protected sex	97	0.450		0.482	
1008	19	Frequency sex in last year	97	0.189		0.190	
1008	20	Confidence in contraceptive	97	0.177		0.178	
1009	1	Prenatal Attachment	52	0.075	0.0567	0.074	0.0562
1009	2	Maternal-Infant Attachment	52	0.038		0.038	
1010	1	Onset of Menstruation	100	0.364		0.380	
1016	5	Strongly Indicative - Sexual Activity	267	0.656	0.5189	0.785	0.593
1016	6	Moderately Indicative - Sexual Activity	267	0.382		0.401	
1017	5	Sexual Knowledge - APBQ	41	0.203		0.203	
1019	1	Onset of menarche less than age 12	96	0.147	0.3757	0.147	0.422
1019	2	Sexual Activity	96	0.604		0.696	
1022	2	Frequency of sex	346	0.186	0.2196	0.188	0.2232
1022	3	Desire baby before age 20.	346	0.253		0.259	
1028	9	Girl's Feelings toward unexpected pregnancy	953	0.090		0.091	
1030	1	Age at first coitus	59	0.237	0.2139	0.239	0.2181
1030	4	Previously used contraceptives	59	0.312		0.320	
1030	5	Planned future use of contraceptives	59	0.225		0.227	
1030	6	Person suggesting contraceptive use	59	0.336		0.347	
1030	7	Person suggesting avoidance of contraceptive	59	0.054		0.054	
1030	12	Desire for pregnancy.	59	0.322		0.331	
1030	13	Wish to keep child.	59	0.297		0.304	
1030	17	Knowledge of contraception - sexual	59	0.086		0.085	
1030	18	Knowledge of contraception - timing	59	0.056		0.056	
1034	1	Knowledge of contraception	178	0.000	0.1791	0.000	0.1993
1034	2	Knowledge of obtaining contraception	178	0.000		0.000	
1034	3	Consistent use of contraceptives	127	0.536		0.597	
1039	8	Contraceptive use preceding month	189	0.179	0.1793	0.181	0.1815
1039	9	Sexual frequency preceding month	189	0.098		0.098	
1039	11	Contraceptive attitude and knowledge	142	0.260		0.265	
1040	5	Believe can't get pregnant with 1st	287	0.158	0.1216	0.160	0.1226
1040	6	Believe can't get pregnant without c	287	0.076		0.076	
1040	7	Believe must have frequent sex for p	287	0.210		0.213	
1040	8	Do not know when most likely to get	287	0.112		0.113	
1040	9	Mean number of methods of contraceptive	287	0.218		0.222	
1040	10	Age at first sex	287	0.018		0.018	
1040	11	Age at menarche	287	0.058		0.058	
1042	1	Knowledge of child development	140	0.067	0.0655	0.067	0.0655
1042	2	Knowledge of Reproduction/Contraception	140	0.014		0.014	
1042	3	Maternal Satisfaction	140	0.147		0.147	
1042	4	Encouragement of positive interaction	140	0.013		0.013	
1042	5	Maternal Anxiety	140	0.086		0.086	
1044	35	Knowledge of dating, marriage, and sex	45	0.073	0.2113	0.072	0.2147
1044	36	Knowledge of dating, marriage, and sex	86	0.297		0.305	
1044	37	Knowledge of dating, marriage, and sex	45	0.225		0.226	
1044	38	Knowledge of dating, marriage, and sex	86	0.296		0.303	
1044	39	Knowledge of dating, marriage, and sex	45	0.327		0.336	
1044	40	Knowledge of dating, marriage, and sex	86	0.237		0.240	
1044	41	Knowledge of dating, marriage, and sex	45	0.221		0.222	
1044	42	Knowledge of dating, marriage, and sex	86	0.146		0.146	
1044	43	Knowledge of dating, marriage, and sex	45	0.357		0.370	

## Meta-Analysis of Cluster SEXAT

### Sexual Activity

1044	44	Knowledge of dating, marriage, and se	86	0.152		0.152	
1044	45	Menstruation at age 12 yrs or less.	45	0.037		0.036	
1044	46	Menstruation at age 12 yrs or less.	86	0.167		0.168	
1049	5	Sexually Active	36	0.447	0.4593	0.475	0.49
1049	6	Use Birth Control	36	0.471		0.505	
1051	1	Contraceptive Knowledge	150	0.039	0.0201	0.039	0.02
1051	2	Attitude about reproduction / contra	150	0.001		0.001	
1052	2	Attitude toward Teen Parenthood	173	0.495	0.3674	0.541	0.3925
1052	22	TST mention of partner role	167	0.240		0.244	
1053	1	Sexual Activity - B	124	0.567	0.4949	0.641	0.5443
1053	2	Sexual Activity - W	65	0.423		0.448	
1054	39	Sexual Activity at Age 14 and Below	60	0.600	0.6407	0.689	0.8387
1054	40	Complete Nonuse of Birth Control Met	60	0.844		1.229	
1054	41	Negative Attitude toward Abortion	60	0.307		0.315	
1054	42	Positive Attitude toward Out of Wedl	60	0.811		1.122	
1056	7	Sexual Activity	36	0.225	0.2672	0.226	0.2715
1056	15	Spontaneous Abortion	36	0.359		0.371	
1056	16	Elective Abortion	36	0.217		0.218	
1057	4	Knowledge of Reproduction Anatomy an	106	0.159	0.4229	0.159	0.4901
1057	5	Knowledge of Congtraception	106	0.086		0.086	
1057	8	Coital Experience	106	0.713		0.890	
1057	10	Contraceptive Use	106	0.562		0.633	
1057	11	Contraceptive Choice - Oral Contracp	106	0.595		0.682	
1058	16	Attitudes toward teen parenting	52	0.325		0.334	
1059	12	Knowledge of Sexual Information	182	0.039		0.039	
1063	14	Age at Menarche	64	0.117	0.0824	0.116	0.082
1063	21	Method of Contraception	63	0.048		0.048	
1065	14	Formal Class (Sex Education)	64	0.094		0.094	
1066	3	Used Contraception at last intercour	424	0.113		0.113	
1067	9	Feelings toward Pregnancy - Self	874	0.094	0.1058	0.095	0.1062
1067	10	Feelings toward Pregnancy - Family	874	0.117		0.118	
<b>N</b>			=	27			
<b>Total Subjects</b>			=	5312			
<b>Control Group</b>			=	3547			
<b>Pregnant Group</b>			=	1765			
<b>Weighted Effect Size</b>			<b>Zr</b>	=	0.14		
			<b>STD</b>	=	0.24		
<b>95% Confidence Int.</b>			<b>LOWER</b>	=	0.11		
			<b>UPPER</b>	=	####		
<b>STOFFER Method</b>			<b>Zst</b>	=	6.26		
			<b>Zst p &lt; value</b>	=	####		
<b>Fail-Safe N</b>			<b>Nfs</b>	=	233		
<b>BESD Control Group</b>				=	0.43		
<b>BESD Pregnant Group</b>				=	0.57		
<b>Difference in BESD</b>				=	0.14		
<b>Qt / CHISQ value</b>				=	175		
			<b>df</b>	=	26		
<b>Significance</b>			<b>p &lt; value</b>	=	0.01		

## Meta-Analysis of Cluster SIBS Sibling Relationship

STUDY	VAR		TOTAL				
NO	NO	VARIABLE	N	r	MEAN r	Zr	MEAN Zr
1002	11	Number of brothers	46	0.037	0.0948	0.036	0.0944
1002	12	Number of sisters	46	0.070		0.069	
1002	13	Birth Order	46	0.178		0.178	
1008	22	Sister of teen mother	127	0.142	0.2242	0.143	0.2288
1008	23	Relative of teen mother	127	0.306		0.315	
1011	6	Boyfriend/Sibling in jail	74	0.320	0.1729	0.329	0.1759
1011	19	Perception of sister past Pos	74	0.177		0.178	
1011	20	Perception of sister past NEG	74	0.074		0.074	
1011	21	Perception of sister present Pos	74	0.340		0.351	
1011	22	Perception of sister present NEG	74	0.029		0.029	
1011	23	Perception of brother past Pos	74	0.126		0.126	
1011	24	Perception of brother past NEG	74	0.249		0.253	
1011	25	Perception of brother present Pos	74	0.219		0.221	
1011	26	Perception of brother present NEG	74	0.022		0.022	
1013	13	Total Siblings	39	0.085		0.084	
1014	1	Pregnant sister or friend	46	0.000	0.0652	0.000	0.0649
1014	7	Trouble with a sibling	46	0.130		0.130	
1015	1	Number of children in family	52	0.547		0.608	
1028	3	Number of sisters	953	0.094		0.095	
1036	1	Birth Order	60	0.217	0.3366	0.218	0.3537
1036	6	Number of children (sibs) in teen's	60	0.456		0.489	
1040	3	Sister was a teenage mother	287	0.070	0.1266	0.070	0.1275
1040	12	Mean number of siblings	287	0.183		0.185	
1044	11	Three or more sisters	45	0.000	0.1366	0.000	0.1378
1044	12	Three or more sisters	86	0.248		0.252	
1044	13	Older sister	45	0.093		0.092	
1044	14	Older sister	86	0.205		0.207	
1045	5	Eldest Child	67	0.234	0.2551	0.236	0.2596
1045	6	Middle Child	67	0.319		0.328	
1045	7	Youngest Child	67	0.213		0.215	
1054	31	Second Oldest Sibling	60	0.269		0.273	
1058	6	Number of extended family who are te	52	0.006	0.0129	0.006	0.0128
1058	7	Number of siblings who are teen pare	52	0.020		0.019	
1067	2	Number of Sisters	874	0.099	0.0962	0.099	0.0965
1067	3	No. Sisters < 17 yrs	874	0.094		0.094	

Meta-Analysis of Cluster SIBS							
Sibling Relationship							
		N	=	14			
		Total Subjects	=	2826			
		Control Group	=	2165			
		Pregnant Group	=	703			
		Weighted Effect Size Zr	=	0.10			
		STD	=	0.196			
		95% Confidence Int. LOWER	=	0.06			
		UPPER	=	0.130			
		STOFFER Method Zst	=	4.34			
		Zst p < value	=	0.000			
		Fail-Safe N Nfs	=	72			
		BESD Control Group	=	0.548			
		BESD Pregnant Group	=	0.453			
		Difference in BESD	=	0.095			
		Qt / CHISQ value	=	32.2			
		df	=	13			
		Significance p < value	=	0.01			

## Meta-Analysis of Cluster SLFCN

### Self Concept

STUDY	VAR		TOTAL				
NO	NO	VARIABLE	N	r	MEAN r	Zr	MEAN Zr
1001	5	Self Esteem	119	0.900		1.470	
1002	1	Identity Self - TSCS	46	0.437	0.1852	0.464	0.1886
1002	2	Self Satisfacition - TSCS	46	0.010		0.010	
1002	3	Behavior Self - TSCS	46	0.203		0.203	
1002	4	Physical Self - TSCS	46	0.153		0.153	
1002	5	Moral/Ethical Self - TSCS	46	0.308		0.315	
1002	6	Family Self - TSCS	46	0.221		0.223	
1002	7	Personal Self - TSCS	46	0.053		0.052	
1002	8	Social Self - TSCS	46	0.190		0.190	
1002	9	Self critisum - TSCS	46	0.084		0.083	
1002	10	Self Perception TOTAL - Tenn Self-co	46	0.194		0.194	
1003	10	Self Esteem	125	-0.01		-0.01	
1005	1	Self Concept	61	0.203	0.3233	0.204	0.3374
1005	3	Self Esteem	37	0.444		0.471	
1007	1	Self Esteem - Bagen Construct	60	0.154	0.1269	0.154	0.1262
1007	2	Self Esteem - Coopersmith SEI	30	0.100		0.098	
1008	1	Self Esteem	128	0.050	0.1378	0.050	0.1392
1008	6	Global Self Worth	128	0.225		0.228	
1012	3	Self Confidence	93	0.078		0.078	
1013	2	Impulse Control	39	0.023	0.0914	0.023	0.0907
1013	3	Emotional Tone	39	0.049		0.049	
1013	4	Body Image	39	0.150		0.149	
1013	5	Social Relations	39	0.074		0.073	
1013	6	Morals	39	0.161		0.160	
1013	7	Sexual Attitudes	39	0.116		0.115	
1013	8	Family Relations	39	0.026		0.026	
1013	9	Mastery	39	0.093		0.092	
1013	10	Vocational Goals	39	0.180		0.179	
1013	11	Psycho-pathology	39	0.090		0.089	
1013	12	Superior Adjustment	39	0.044		0.044	
1018	1	Self Criticism	196	0.209	0.1144	0.211	0.1151
1018	2	Total Conflict	196	0.080		0.080	
1018	3	Total Self Concept	196	0.068		0.068	
1018	4	Dissatisfaction with family relation	196	0.101		0.101	
1020	1	Self Esteem	221	0.156		0.156	
1024	8	Physical Self - TSCS	52	0.038	0.0912	0.037	0.0928
1024	9	Moral/Ethical Self - TSCS	52	0.003		0.003	
1024	10	Personal Self - TSCS	52	0.087		0.086	
1024	11	Social Self - TSCS	52	0.391		0.409	
1024	12	Identity Self - TSCS	52	0.102		0.101	
1024	13	Self Satisfacition - TSCS	52	0.059		0.059	
1024	14	Behavior Self - TSCS	52	0.005		0.005	
1024	15	Self critisum - TSCS	52	0.059		0.059	
1024	16	Self Perception TOTAL - Tenn Self-co	52	0.077		0.076	
1025	10	Self Esteem - Rosenberg	60	0.254		0.258	
1026	4	Self Esteem - Coopersmith	70	0.396		0.416	
1027	1	Self Concept - Tenn Self Concept Sca	52	0.286		0.291	
1028	1	Self Esteem - Coopersmith	953	0.032		0.032	
1031	4	Self-Esteem Feel useless	196	0.047	0.0392	0.047	0.0391
1031	5	Self-Esteem No good at all.	196	0.061		0.061	
1031	6	Self-Esteem Do things as well as oth	196	0.027		0.027	
1031	7	Self-Esteem Would not change self.	196	0.021		0.021	

# Meta-Analysis of Cluster SLFCN

## Self Concept

1035	1	Self Concept - Tenn Self Concept Sca	43	0.188	0.2025	0.188	0.2026
1035	2	Self Concept - Tenn Self Concept Sca	34	0.217		0.217	
1039	3	Self Esteem - Rosenberg	263	0.195		0.198	
1041	3	Self Esteem - Rosenberg	123	0.248		0.253	
1045	62	Self-Esteem - TSCS	67	0.183	0.1089	0.184	0.1089
1045	63	Self-Esteem - TSCS	67	0.059		0.059	
1045	66	Total - TSCS	67	0.140		0.140	
1045	67	Total - TSCS	67	0.053		0.053	
1048	4	Self Esteem - Positive relationship	143	0.064	0.0988	0.063	0.0987
1048	5	Self Esteem - Negative relationship	87	0.134		0.134	
1049	10	Definition of Self (Conceptual Level	36	0.208		0.209	
1050	5	Self-Acceptance - CPI	38	0.189		0.189	
1051	3	Self Esteem	150	0.017		0.017	
1052	6	Total TST statements - Self-Concept/	173	0.419		0.446	
1055	9	Self Esteem (Rosenberg)	149	0.178		0.179	
1058	19	Self Concept (Rosenberg)	52	0.193		0.193	
1059	3	Self Esteem	182	0.055		0.055	
1062	2	Self Esteem	337	0.020		0.020	
1063	6	Acceptance (Perception of Self and S	64	0.000	0.1472	0.000	0.1481
1063	7	Athletic (Perception of Self and Sel	64	0.222		0.224	
1063	8	Appearance (Perception of Self and S	64	0.199		0.200	
1063	9	Job Competence (Perception of Self a	64	0.162		0.162	
1063	10	Romance (Perception of Self and Self	64	0.000		0.000	
1063	11	Conduct (Perception of Self and Self	64	0.204		0.205	
1063	12	Close Friend (Perception of Self and	64	0.235		0.238	
1063	13	Self Worth (Perception of Self and S	64	0.157		0.157	
1064	2	Self Esteem (Rosenberg)	40	-0.15		-0.15	
1067	11	Self-Esteem	874	0.034		0.034	
		N	=	32			
		Total Subjects	=	5205			
		Control Group	=	3362			
		Pregnant Group	=	1843			
		Weighted Effect Size Zr	=	0.12			
		STD	=	0.265			
		95% Confidence Int. LOWER	=	0.095			
		UPPER	=	0.150			
		STOFFER Method Zst	=	0.256			
		Zst p < value	=	0.005			
		Fail-Safe N Nfs	=	246			
		BESD Control Group	=	0.56			
		BESD Pregnant Group	=	0.44			
		Difference in BESD	=	0.12			
		Qt / CHISQ value	=	279.7			
		df	=	31			
		Significance p < value	=	0.01			



Meta-Analysis of Cluster SLFES							
Self Esteem							
STUDY	VAR		TOTAL				
NO	NO	VARIABLE	N	r	MEAN r	Zr	MEAN Zr
1001	5	Self Esteem	119	0.900		1.470	
1003	10	Self Esteem	125	-0.01		-0.01	
1005	3	Self Esteem	37	0.444		0.471	
1007	1	Self Esteem - Bagen Construct	60	0.154	0.1269	0.154	0.1262
1007	2	Self Esteem - Coopersmith SEI	30	0.100		0.098	
1008	1	Self Esteem	128	0.050		0.050	
1020	1	Self Esteem	221	0.156		0.156	
1025	10	Self Esteem - Rosenberg	60	0.254		0.258	
1026	4	Self Esteem - Coopersmith	70	0.396		0.416	
1028	1	Self Esteem - Coopersmith	953	0.032		0.032	
1031	4	Self-Esteem Feel useless	196	0.047	0.0392	0.047	0.0391
1031	5	Self-Esteem No good at all.	196	0.061		0.061	
1031	6	Self-Esteem Do things as well as oth	196	0.027		0.027	
1031	7	Self-Esteem Would not change self.	196	0.021		0.021	
1039	3	Self Esteem - Rosenberg	263	0.195		0.198	
1041	3	Self Esteem - Rosenberg	123	0.248		0.253	
1045	62	Self-Esteem - TSCS	67	0.183	0.1214	0.184	0.1215
1045	63	Self-Esteem - TSCS	67	0.059		0.059	
1048	4	Self Esteem - Positive relationship	143	0.064	0.0988	0.063	0.0987
1048	5	Self Esteem - Negative relationship	87	0.134		0.134	
1050	5	Self-Acceptance - CPI	38	0.189		0.189	
1051	3	Self Esteem	150	0.017		0.017	
1055	9	Self Esteem (Rosenberg)	149	0.178		0.179	
1058	19	Self Concept (Rosenberg)	52	0.193		0.193	
1059	3	Self Esteem	182	0.055		0.055	
1062	2	Self Esteem	337	0.020		0.020	
1063	6	Acceptance (Perception of Self and S	64	0.000	0.0784	0.000	0.0784
1063	13	Self Worth (Perception of Self and S	64	0.157		0.157	
1064	2	Self Esteem (Rosenberg)	40	-0.15		-0.15	
1067	11	Self-Esteem	874	0.034		0.034	

Meta-Analysis of Cluster SLFES							
Self Esteem							
		N	=	23			
		Total Subjects	=	4451			
		Control Group	=	3010			
		Pregnant Group	=	1441			
		Weighted Effect Size Zr	=	0.11			
		STD	=	0.31			
		95% Confidence Int. LOWER	=	0.08			
		UPPER	=	####			
		STOFFER Method Zst	=	1.81			
		Zst p < value	=	####			
		Fail-Safe N Nfs	=	113			
		BESD Control Group	=	0.56			
		BESD Pregnant Group	=	0.45			
		Difference in BESD	=	0.11			
		Qt / CHISQ value	=	258			
		df	=	22			
		Significance p < value	=	0.01			

## Meta-Analysis of Cluster SOCA

### Social Responsibility

STUDY	VAR		TOTAL				
NO	NO	VARIABLE	N	r	MEAN r	Zr	MEAN Zr
1008	3	Social Acceptance	128	0.076	0.0482	0.076	0.0481
1008	5	Behavioral Conduct	128	0.020		0.020	
1010	26	Social Responsibility Scale	100	0.482		0.523	
1013	5	Social Relations	39	0.074	0.0852	0.073	0.0844
1013	6	Morals	39	0.161		0.160	
1013	7	Sexual Attitudes	39	0.116		0.115	
1013	8	Family Relations	39	0.026		0.026	
1013	11	Psycho-pathology	39	0.090		0.089	
1013	12	Superior Adjustment	39	0.044		0.044	
1025	11	Responsibility	60	0.054	0.2435	0.054	0.2567
1025	12	Responsibility toward pregnancy	60	0.433		0.460	
1039	5	Spare Time - Social Adjustment Self-	263	0.093	0.0873	0.093	0.0876
1039	6	Family - Social Adjustment Self-Repo	263	0.028		0.028	
1039	7	Partner - Social Adjustment Self-Rep	263	0.141		0.141	
1041	4	Sense of Control/Responsibility - Pe	123	0.061	0.1052	0.061	0.1055
1041	5	Anxiety State/Trait Anxiety Inventor	123	0.064		0.064	
1041	8	Social Support Inventory - Social su	123	0.075		0.075	
1041	9	Network Strenght - Strength of socia	123	0.123		0.123	
1041	10	Conflict with parents - frequency of	123	0.203		0.205	
1043	6	Contranormative attitudes	410	0.170	0.1252	0.171	0.1258
1043	7	Delinquent behavior	410	0.063		0.063	
1043	8	Violent behavior	410	0.114		0.115	
1043	9	Trouble with authorities	410	0.156		0.157	
1043	10	Perceived rejection for ascribed cha	410	0.128		0.129	
1043	11	Awareness of deviant patterns	410	0.120		0.121	
1046	1	L scale MMPI GI vs GIII	2075	0.040	0.061	0.040	0.0612
1046	2	L scale MMPI GII vs GIII	2068	0.034		0.034	
1046	3	F scale MMPI GI vs GIII	2075	0.116		0.117	
1046	4	F scale MMPI GII vs GIII	2068	0.168		0.170	
1046	5	K scale MMPI GI vs GIII	2075	0.021		0.021	
1046	6	K scale MMPI GII vs GIII	2068	0.025		0.025	
1046	7	Hs scale MMPI GI vs GIII	2075	0.000		0.000	
1046	8	Hs scale MMPI GII vs GIII	2068	0.017		0.017	
1046	9	D scale MMPI GI vs GIII	2075	0.031		0.031	
1046	10	D scale MMPI GII vs GIII	2068	0.079		0.079	
1046	11	Hy scale MMPI GI vs GIII	2075	0.024		0.024	
1046	12	Hy scale MMPI GII vs GIII	2068	0.055		0.055	
1046	13	Pd scale MMPI GI vs GIII	2075	0.099		0.099	
1046	14	Pd scale MMPI GII vs GIII	2068	0.157		0.158	
1046	15	Mf scale MMPI GI vs GIII	2075	0.005		0.005	
1046	16	Mf scale MMPI GII vs GIII	2068	0.019		0.019	
1046	17	Pa scale MMPI GI vs GIII	2075	0.019		0.019	
1046	18	Pa scale MMPI GI vs GIII	2068	0.083		0.083	
1046	19	Pt scale MMPI GI vs GIII	2075	0.007		0.007	
1046	20	Pt scale MMPI GI vs GIII	2068	0.094		0.094	
1046	21	Sc scale MMPI GI vs GIII	2075	0.070		0.070	
1046	22	Sc scale MMPI GI vs GIII	2068	0.159		0.161	
1046	23	Ma scale MMPI GI vs GIII	2075	0.115		0.115	
1046	24	Ma scale MMPI GI vs GIII	2068	0.125		0.125	
1046	25	Si scale MMPI GI vs GIII	2075	0.005		0.005	
1046	26	Si scale MMPI GI vs GIII	2068	0.019		0.019	
1050	19	Human Nature - Good - VOS	38	0.139	0.2237	0.138	0.2475

Meta-Analysis of Cluster SOCA						
Social Responsibility						
1050	20	Human Nature - Evil - VOS	38	0.154		0.153
1050	21	Human Nature - Good/Evil - VOS	38	0.161		0.160
1050	22	Temporal - Past - VOS	38	0.178		0.177
1050	23	Temporal - Present - VOS	38	0.196		0.196
1050	24	Temporal - Future - VOS	38	0.048		0.047
1050	25	Relational - Collateral - VOS	38	0.475		0.510
1050	26	Relational - Lineal - VOS	38	0.087		0.086
1050	27	Relational - Individual - VOS	38	0.873		1.333
1050	28	Man-Nature - Submissive - VOS	38	0.463		0.494
1050	29	Man-Nature - Dominat - VOS	38	0.083		0.082
1050	30	Man-Nature - Harmony - VOS	38	0.440		0.467
1050	31	Activity - Being - VOS	38	0.159		0.158
1050	32	Activity - Being-IN-Becoming - VOS	38	0.259		0.262
1050	33	Activity - Doing - VOS	38	0.032		0.032
1050	34	Respect for Authority-Human - VOS	38	0.219		0.220
1050	35	Self-Sufficiency - VOS	38	0.254		0.257
1050	36	Human Nature-Evil - VOS	38	0.000		0.000
1050	37	Respect for Authority-God - VOS	38	0.346		0.357
1050	38	Present Centeredness - VOS	38	0.107		0.105
1050	39	Impulsitivty - VOS	38	0.009		0.009
1050	40	Man Superior to Nature - VOS	38	0.132		0.131
1050	41	Man in Harmony with Nature - Vos	38	0.335		0.344
1050	42	Control over Immediate Gratification	38	0.220		0.221
1052	14	Social Group	167	0.530		0.589
1055	9	Self Esteem (Rosenberg)	149	0.178	0.157	0.179 0.1579
1055	10	Social Support (Total Functional)	149	0.161		0.162
1055	11	Social Support (Total Network)	149	0.153		0.154
1055	12	Social Support (Total Loss)	149	0.136		0.137
1056	6	Employment HX part time.	36	0.302	0.2054	0.308 0.2083
1056	8	ETOH consumption	36	0.038		0.038
1056	9	Driving a Car	36	0.108		0.107
1056	10	Voting	36	0.237		0.238
1056	11	Registered voter	36	0.341		0.351
1058	9	Social Support & premarital sex (sup	52	0.030	0.073	0.029 0.0734
1058	10	Social Support & contraception (supp	52	0.003		0.003
1058	11	Social Support & pregnancy (support	52	0.266		0.270
1058	12	Social Support & abortion (support g	52	0.047		0.047
1058	13	Social Support & adoption (support g	52	0.012		0.012
1058	17	Psychosocial competence	52	0.079		0.079
1059	13	Social Support - Trust with Informat	182	0.185	0.0964	0.187 0.097
1059	14	Social Support - Care NO matter what	182	0.012		0.012
1059	15	Social Support - Accepts Best and Wo	182	0.092		0.092
1064	1	Satisfaction with social support	40	0.332		0.340
1065	1	Interpersonal Trust (Rotter IT Scale	64	0.143	0.1303	0.143 0.132
1065	3	Psychosocial competence	64	0.029		0.029
1065	14	Formal Class (Sex Education)	64	0.094		0.094
1065	15	Formal Class (Assertiveness)	64	0.045		0.045
1065	16	Formal Class (Get along with outhers	64	0.344		0.356
1065	17	Formal Class (Marriage and Family Re	64	0.127		0.127

Meta-Analysis of Cluster SOCA							
Social Responsibility							
		N	=	16			
		Total Subjects	=	3940			
		Control Group	=	3029			
		Pregnant Group	=	911			
		Weighted Effect Size Zr	=	0.09			
		STD	=	0.177			
		95% Confidence Int. LOWER	=	0.06			
		UPPER	=	0.12			
		STOFFER Method Zst	=	2.25			
		Zst p < value	=	0.012			
		Fail-Safe N Nfs	=	56			
		BESD Control Group	=	0.545			
		BESD Pregnant Group	=	0.455			
		Difference in BESD	=	0.09			
		Qt / CHISQ value	=	79.2			
		df	=	15			
		Significance p < value	=	0.01			

Appendix F

Study Characteristics

Appendix F - RESULTS									
TABLE F1a									
STUDY CHARACTERISTICS						PUBLICATION			
VARIABLE	TOTAL	STUDIES	MEAN	MEAN	FORM		Thesis		
	SUBJECTS	IN MA	PUBLCN	NUMBER	Journal		Disrtn		
CATEGORY		K	YEAR	AUTHORS	n	%	n	%	
MADATA - TOTAL SAMPLE OF STUDIES	12106	68	1984	1.9	42	62%	26	38%	
Academic Performance	1944	18	1987	1.7	8	44%	10	56%	
Anxiety	764	8	1982	1.6	6	75%	2	25%	
Parental Communication	883	9	1984	1.7	3	33%	6	67%	
Parenting Beliefs	2873	11	1986	2.4	7	64%	4	36%	
Religious Activity	2843	11	1982	1.9	5	45%	6	55%	
Contraception Use	1311	10	1983	2	5	50%	5	50%	
Father in Home	906	9	1984	1.3	3	33%	6	67%	
Dating Relationship	3049	12	1982	2.4	7	58%	5	42%	
Dependency	567	4	1982	2	3	75%	1	25%	
Depression	985	6	1977	2.3	5	83%	1	17%	
Educational Expectations	2449	9	1987	2	4	44%	5	56%	
Ego Strenght	3328	27	1984	1.8	14	52%	13	48%	
Family Dynamics	6333	38	1985	1.7	20	53%	18	47%	
Future Orientation	3814	14	1986	2.1	7	50%	7	50%	
School Grades	1018	8	1987	2	4	50%	4	50%	
Sexual Knowledge	1480	11	1983	2.3	7	64%	4	36%	
Living Arrangements	3574	14	1982	1.8	5	36%	9	64%	
Locus of Control	1386	15	1986	1.6	7	47%	8	53%	
Role Identity	377	5	1982	1.2	2	40%	3	60%	
Menstruation Onset	678	5	1980	2.6	3	60%	2	40%	
Occupational Expectations	1594	6	1985	2.2	4	67%	2	33%	
Parental Relationship	4676	28	1984	1.9	14	50%	14	50%	
Peers Relationship	2883	14	1986	2.7	11	79%	3	21%	
Pregnant Role Model	701	7	1992	2.1	4	57%	3	43%	
Father Relationship	2129	20	1984	1.7	8	40%	12	60%	
Mother Relationship	3493	23	1984	1.9	11	48%	12	52%	
Sexual Activity	5312	27	1986	2.2	15	56%	12	44%	
Sibling Relationship	2826	14	1984	2.3	10	71%	4	29%	
Self-concept	5205	32	1986	1.5	15	47%	17	53%	
Self-esteem	4451	23	1986	1.6	10	43%	13	57%	
Social Responsibility	3940	16	1986	1.8	6	38%	10	63%	

**TABLE F1b**  
**STUDY CHARACTERISTICS**

VARIABLE		REFERENCE SOURCE																	
CATEGORY	STUDIES	CINAHL		ERIC		Medline		PsychLit		REF List		DAI							
ABV	K	n	%	n	%	n	%	n	%	n	%	n	%	n	%				
MADATA (All Studies)	68	6	9%	4	6%	3	4%	4	6%	26	38%	25	37%						
Academic Performance	18	1	6%	1	6%	1	6%	3	17%	2	11%	10	56%						
Anxiety	8	1	13%	0	0%	0	0%	0	0%	5	63%	2	25%						
Parental Communication	9	1	11%	0	0%	0	0%	0	0%	7	78%	8	89%						
Parenting Beliefs	11	1	9%	0	0%	0	0%	1	9%	7	64%	8	73%						
Religious Activity	11	0	0%	0	0%	0	0%	0	0%	5	45%	6	55%						
Contraception Use	10	0	0%	1	10%	0	0%	1	10%	4	40%	4	40%						
Father in Home	9	0	0%	1	11%	0	0%	0	0%	2	22%	6	67%						
Dating Relationship	12	0	0%	1	8%	0	0%	1	8%	5	42%	5	42%						
Dependency	4	0	0%	1	25%	0	0%	0	0%	2	50%	1	25%						
Depression	6	0	0%	0	0%	0	0%	0	0%	5	83%	1	17%						
Educational Expectations	9	1	11%	0	0%	0	0%	0	0%	3	33%	5	56%						
Ego Strenght	27	0	0%	1	4%	0	0%	3	11%	10	37%	13	48%						
Family Dynamics	38	2	5%	2	5%	1	3%	1	3%	14	37%	18	47%						
Future Orientation	14	1	7%	0	0%	1	7%	1	7%	4	29%	7	50%						
School Grades	8	1	13%	0	0%	0	0%	1	13%	2	25%	4	50%						
Sexual Knowledge	11	0	0%	1	9%	0	0%	1	9%	6	55%	3	27%						
Living Arrangements	14	0	0%	0	0%	0	0%	0	0%	5	36%	9	64%						
Locus of Control	15	1	7%	1	7%	1	7%	1	7%	3	20%	8	53%						
Role Identity	5	1	20%	0	0%	0	0%	0	0%	1	20%	3	60%						
Menstruation Onset	5	0	0%	0	0%	1	20%	0	0%	2	40%	2	40%						
Occupational Expectations	6	1	17%	0	0%	1	17%	0	0%	2	33%	2	33%						
Parental Relationship	28	2	7%	2	7%	1	4%	0	0%	9	32%	14	50%						
Peers Relationship	14	0	0%	1	7%	0	0%	3	21%	7	50%	3	21%						
Pregnant Role Model	7	0	0%	0	0%	1	14%	2	29%	1	14%	3	43%						
Father Relationship	20	1	5%	2	10%	0	0%	0	0%	5	25%	12	60%						
Mother Relationship	23	1	4%	1	4%	2	9%	0	0%	7	30%	12	52%						
Sexual Activity	27	1	4%	1	4%	1	4%	3	11%	10	37%	11	41%						
Sibling Relationship	14	0	0%	1	7%	2	14%	2	14%	5	36%	4	29%						
Self-concept	32	4	13%	2	6%	1	3%	1	3%	8	25%	16	50%						
Self-esteem	23	3	13%	2	9%	0	0%	1	4%	5	22%	12	52%						
Social Responsibility	16	0	0%	0	0%	1	6%	1	6%	4	25%	10	63%						



TABLE F1c																
STUDY CHARACTERISTICS																
VARIABLE		STUDY FIELD										Public				
CATEGORY	STUDIES	Nursing		Socology		Medicine		Psych		Education		Health				
ABV	K	n	%	n	%	n	%	n	%	n	%	n	%	n	%	
MADATA (All Studies)	68	9	13%	7	10%	10	15%	33	49%	7	10%	2	3%			
Academic Performance	18	3	17%	3	17%	0	0%	10	56%	1	6%	1	6%			
Anxiety	8	1	13%	2	25%	2	25%	3	38%	0	0%	0	0%			
Parental Communication	9	0	0%	2	22%	0	0%	7	78%	0	0%	0	0%			
Parenting Beliefs	11	1	9%	3	27%	3	27%	3	27%	1	9%	0	0%			
Religious Activity	11	2	18%	3	27%	3	27%	2	18%	0	0%	1	9%			
Contraception Use	10	0	0%	1	10%	2	20%	6	60%	1	10%	0	0%			
Father in Home	9	0	0%	2	22%	1	11%	5	56%	1	11%	0	0%			
Dating Relationship	12	1	8%	0	0%	5	42%	5	42%	1	8%	0	0%			
Dependency	4	0	0%	0	0%	1	25%	3	75%	0	0%	0	0%			
Depression	6	0	0%	1	17%	3	50%	2	33%	0	0%	0	0%			
Educational Expectations	9	0	0%	2	22%	1	11%	5	56%	0	0%	1	11%			
Ego Strenght	27	2	7%	3	11%	6	22%	13	48%	2	7%	1	4%			
Family Dynamics	38	6	16%	4	11%	6	16%	19	50%	3	8%	0	0%			
Future Orientation	14	1	7%	3	21%	2	14%	6	43%	1	7%	1	7%			
School Grades	8	1	13%	2	25%	0	0%	3	38%	1	13%	1	13%			
Sexual Knowledge	11	1	9%	1	9%	3	27%	3	27%	2	18%	1	9%			
Living Arrangements	14	2	14%	2	14%	4	29%	4	29%	2	14%	0	0%			
Locus of Control	15	2	13%	3	20%	0	0%	7	47%	2	13%	1	7%			
Role Identity	5	0	0%	0	0%	0	0%	5	100%	0	0%	0	0%			
Menstruation Onset	5	0	0%	0	0%	2	40%	2	40%	0	0%	1	20%			
Occupational Expectations	6	0	0%	1	17%	1	17%	4	67%	0	0%	0	0%			
Parental Relationship	28	1	4%	3	11%	4	14%	18	64%	2	7%	0	0%			
Peers Relationship	14	2	14%	2	14%	4	29%	5	36%	0	0%	1	7%			
Pregnant Role Model	7	1	14%	1	14%	0	0%	4	57%	0	0%	1	14%			
Father Relationship	20	1	5%	3	15%	2	10%	4	20%	1	5%	0	0%			
Mother Relationship	23	2	9%	3	13%	3	13%	14	61%	1	4%	0	0%			
Sexual Activity	27	2	7%	4	15%	8	30%	9	33%	3	11%	1	4%			
Sibling Relationship	14	2	14%	2	14%	3	21%	5	36%	1	7%	1	7%			
Self-concept	32	3	9%	3	9%	3	9%	16	50%	6	19%	1	3%			
Self-esteem	23	2	9%	3	13%	3	13%	12	52%	2	9%	1	4%			
Social Responsibility	16	2	13%	3	19%	2	13%	7	44%	2	13%	0	0%			

TABLE F1d																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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TABLE F1f

## STUDY CHARACTERISTICS

VARIABLE																	
CATEGORY	STUDIES	STUDY SETTING															
ABV	K	Hospital				Clinic		Home		L-T Fac		Univ.		Unknown		Other	
		n	%			n	%	n	%	n	%	n	%	n	%	n	%
MADATA (All Studies)	68	4	6%			27	40%			3	4%	1	1%	2	3%	1	1%
Academic Performance	18	3	17%			3	17%			0	0%	10	56%	1	6%	1	6%
Anxiety	8	1	13%			4	50%			0	0%	0	0%	0	0%	3	38%
Parental Communication	9	1	11%			4	44%			1	11%	0	0%	1	11%	0	0%
Parenting Beliefs	11	2	18%			4	36%			0	0%	0	0%	1	9%	0	0%
Religious Activity	11	2	18%			2	18%			0	0%	0	0%	0	0%	1	9%
Contraception Use	10	2	20%			4	40%			0	0%	0	0%	1	10%	0	0%
Father in Home	9	1	11%			2	22%			0	0%	0	0%	1	11%	0	0%
Dating Relationship	12	1	8%			1	8%			0	0%	0	0%	8	67%	0	0%
Dependency	4	0	0%			2	50%			0	0%	0	0%	0	0%	0	0%
Depression	6	1	17%			0	0%			0	0%	0	0%	0	0%	0	0%
Educational Expectations	9	0	0%			4	44%			1	11%	0	0%	1	11%	0	0%
Ego Strenght	27	3	11%			8	30%			2	7%	1	4%	1	4%	1	4%
Family Dynamics	38	2	5%			13	34%			1	3%	0	0%	2	5%	2	5%
Future Orientation	14	0	0%			5	36%			1	7%	0	0%	2	14%	1	7%
School Grades	8	0	0%			2	25%			0	0%	0	0%	0	0%	0	0%
Sexual Knowledge	11	2	18%			4	36%			0	0%	0	0%	0	0%	0	0%
Living Arrangements	14	1	7%			4	29%			0	0%	0	0%	1	7%	1	7%
Locus of Control	15	1	7%			6	40%			0	0%	0	0%	0	0%	1	7%
Role Identity	5	0	0%			2	40%			0	0%	0	0%	0	0%	0	0%
Menstruation Onset	5	0	0%			2	40%			0	0%	0	0%	0	0%	0	0%
Occupational Expectations	6	0	0%			4	67%			0	0%	0	0%	1	17%	0	0%
Parental Relationship	28	2	7%			8	29%			1	4%	1	4%	2	7%	1	4%
Peers Relationship	14	0	0%			6	43%			0	0%	0	0%	1	7%	1	7%
Pregnant Role Model	7	0	0%			4	57%			1	14%	0	0%	0	0%	0	0%
Father Relationship	20	2	10%			6	30%			1	5%	0	0%	2	10%	1	5%
Mother Relationship	23	2	9%			7	30%			1	4%	1	4%	1	4%	1	4%
Sexual Activity	27	4	15%			10	37%			0	0%	0	0%	1	4%	0	0%
Sibling Relationship	14	0	0%			5	36%			0	0%	0	0%	1	7%	1	7%
Self-concept	32	0	0%			13	41%			1	3%	1	3%	0	0%	2	6%
Self-esteem	23	0	0%			9	39%			1	4%	1	4%	0	0%	2	9%
Social Responsibility	16	1	6%			5	31%			0	0%	0	0%	0	0%	1	6%

**TABLE Flg**  
**STUDY CHARACTERISTICS**

VARIABLE CATEGORY	STUDIES	NURSING THEORY				NON-NURSING THEORY				STATISTICAL OBSERVATION TYPE									
		Yes		No		Yes		No		Chi-sq		Z-value		t-value		F-value		Other	
		n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
ABV	K	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
MADATA (All Studies)	68	2	3%	66	97%	36	53%	32	47%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Academic Performance	18	0	0%	18	100%	13	72%	5	28%	10	56%	1	6%	3	17%	3	17%	1	6%
Anxiety	8	0	0%	8	100%	2	25%	6	75%	1	13%	0	0%	5	63%	2	25%	0	0%
Parental Communication	9	0	0%	9	100%	7	78%	2	22%	6	67%	0	0%	2	22%	1	11%	0	0%
Parenting Beliefs	11	1	9%	10	91%	5	45%	6	55%	5	45%	1	9%	3	27%	2	18%	0	0%
Religious Activity	11	0	0%	11	100%	6	55%	5	45%	9	82%	0	0%	1	9%	1	9%	0	0%
Contraception Use	10	0	0%	10	100%	6	60%	4	40%	6	60%	1	10%	1	10%	1	10%	1	10%
Father in Home	9	0	0%	9	100%	6	67%	3	33%	5	56%	2	22%	0	0%	1	11%	1	11%
Dating Relationship	12	0	0%	12	100%	7	58%	5	42%	5	42%	2	17%	1	8%	1	8%	3	25%
Dependency	4	0	0%	4	100%	3	75%	1	25%	0	0%	0	0%	2	50%	1	25%	1	25%
Depression	6	0	0%	6	100%	2	33%	4	67%	2	33%	0	0%	2	33%	2	33%	0	0%
Educational Expectations	9	0	0%	9	100%	4	44%	5	56%	1	11%	0	0%	3	33%	4	44%	0	0%
Ego Strenght	27	0	0%	27	100%	19	70%	8	30%	5	19%	0	0%	10	37%	8	30%	4	15%
Family Dynamics	38	0	0%	38	100%	22	58%	16	42%	17	45%	2	5%	9	24%	5	13%	5	13%
Future Orientation	14	0	0%	14	100%	7	50%	7	50%	7	50%	1	7%	4	29%	2	14%	0	0%
School Grades	8	0	0%	8	100%	4	50%	4	50%	5	63%	0	0%	2	25%	1	13%	0	0%
Sexual Knowledge	11	0	0%	11	100%	5	45%	6	55%	6	55%	0	0%	4	36%	1	9%	0	0%
Living Arrangements	14	0	0%	14	100%	7	50%	7	50%	11	79%	2	14%	0	0%	0	0%	1	7%
Locus of Control	15	1	7%	14	93%	8	53%	7	47%	3	20%	0	0%	7	47%	3	20%	2	13%
Role Identity	5	0	0%	5	100%	2	40%	3	60%	0	0%	0	0%	4	80%	1	20%	0	0%
Menstruation Onset	5	0	0%	5	100%	2	40%	3	60%	3	60%	0	0%	0	0%	1	20%	1	20%
Occupational Expectations	6	0	0%	6	100%	3	50%	3	50%	4	67%	0	0%	2	33%	0	0%	0	0%
Parental Relationship	28	0	0%	28	100%	16	57%	12	43%	15	54%	2	7%	7	25%	3	11%	1	4%
Peers Relationship	14	0	0%	14	100%	8	57%	6	43%	8	57%	1	7%	0	0%	3	21%	2	14%
Pregnant Role Model	7	0	0%	7	100%	5	71%	2	29%	4	57%	0	0%	1	14%	1	14%	0	0%
Father Relationship	20	0	0%	20	100%	13	65%	7	35%	11	55%	2	10%	3	15%	3	15%	1	5%
Mother Relationship	23	0	0%	23	100%	13	57%	10	43%	11	48%	1	4%	8	35%	2	9%	1	4%
Sexual Activity	27	1	4%	26	96%	14	52%	13	48%	12	44%	1	4%	6	22%	5	19%	3	11%
Sibling Relationship	14	0	0%	14	100%	8	57%	6	43%	9	64%	2	14%	1	7%	1	7%	1	7%
Self-concept	32	1	3%	31	97%	16	50%	16	50%	2	6%	0	0%	19	59%	7	22%	4	13%
Self-esteem	23	1	4%	22	96%	11	48%	12	52%	2	9%	1	4%	10	43%	6	26%	4	17%
Social Responsibility	16	0	0%	16	100%	11	69%	5	31%	1	6%	0	0%	9	56%	6	38%	0	0%

TABLE Flh

## STUDY CHARACTERISTICS

VARIABLE		STATISTICAL TEST USED															
CATEGORY	STUDIES	Frequency,				ANOVA,				Multivar				QUALITY OF			
		Mean & SD		Chi-sq		MANN-WHIT		t		ANCOVA		Corr		MANOVA		STUDY	
ABV	K	n	%	n	%	n	%	n	%	n	%	n	%	n	%	MEAN	SD
MADATA (All Studies)	68	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.21	0.40
Academic Performance	18	9	50%	2	11%	0	0%	5	28%	1	6%	1	6%	0	0%	2.38	0.38
Anxiety	8	1	13%	0	0%	0	0%	7	88%	0	0%	0	0%	0	0%	2.35	0.32
Parental Communication	9	3	33%	3	33%	0	0%	5	56%	0	0%	0	0%	0	0%	2.30	0.43
Parenting Beliefs	11	5	45%	1	9%	0	0%	5	45%	0	0%	0	0%	0	0%	2.18	0.33
Religious Activity	11	9	82%	0	0%	0	0%	2	18%	0	0%	0	0%	0	0%	2.17	0.35
Contraception Use	10	7	70%	1	10%	0	0%	2	20%	0	0%	0	0%	0	0%	2.08	0.28
Father in Home	9	6	67%	1	11%	1	11%	1	11%	0	0%	0	0%	0	0%	2.38	0.31
Dating Relationship	12	8	67%	0	0%	0	0%	2	17%	0	0%	2	17%	0	0%	2.08	0.31
Dependency	4	0	0%	0	0%	1	25%	3	75%	0	0%	0	0%	0	0%	2.30	0.27
Depression	6	2	33%	0	0%	0	0%	4	67%	0	0%	0	0%	0	0%	2.40	0.25
Educational Expectations	9	6	67%	1	11%	0	0%	2	22%	0	0%	0	0%	0	0%	2.18	0.44
Ego Strenght	27	7	26%	2	7%	1	4%	15	56%	1	4%	0	0%	1	4%	2.14	0.33
Family Dynamics	38	15	39%	6	16%	1	3%	13	34%	0	0%	2	5%	1	3%	2.27	0.36
Future Orientation	14	8	57%	0	0%	0	0%	6	43%	0	0%	0	0%	0	0%	2.20	0.42
School Grades	8	3	38%	2	25%	0	0%	3	38%	0	0%	0	0%	0	0%	2.30	0.40
Sexual Knowledge	11	6	55%	0	0%	0	0%	4	36%	1	9%	0	0%	0	0%	2.14	0.29
Living Arrangements	14	11	79%	3	21%	0	0%	0	0%	0	0%	0	0%	0	0%	2.15	0.32
Locus of Control	15	2	13%	1	7%	1	7%	9	60%	0	0%	1	7%	1	7%	2.28	0.42
Role Identity	5	0	0%	0	0%	0	0%	5	###	0	0%	0	0%	0	0%	2.44	0.33
Menstruation Onset	5	3	60%	0	0%	1	20%	1	20%	0	0%	0	0%	0	0%	2.08	0.48
Occupational Expectations	6	4	67%	0	0%	0	0%	2	33%	0	0%	0	0%	0	0%	2.26	0.47
Parental Relationship	28	14	50%	4	14%	1	4%	9	32%	0	0%	0	0%	0	0%	2.25	0.34
Peers Relationship	14	10	71%	0	0%	0	0%	2	14%	0	0%	1	7%	1	7%	2.21	0.46
Pregnant Role Model	7	4	57%	0	0%	1	14%	2	29%	0	0%	0	0%	0	0%	2.21	0.43
Father Relationship	20	12	60%	2	10%	1	5%	5	25%	0	0%	0	0%	0	0%	2.32	0.35
Mother Relationship	23	11	48%	2	9%	1	4%	9	39%	0	0%	0	0%	0	0%	2.16	0.31
Sexual Activity	27	14	52%	1	4%	1	4%	10	37%	1	4%	0	0%	0	0%	2.10	0.34
Sibling Relationship	14	8	57%	3	21%	0	0%	2	14%	0	0%	1	7%	0	0%	2.21	0.36
Self-concept	32	2	6%	1	3%	1	3%	25	78%	0	0%	2	6%	1	3%	2.34	0.37
Self-esteem	23	3	13%	1	4%	1	4%	15	65%	0	0%	2	9%	1	4%	2.32	0.40
Social Responsibility	16	1	6%	0	0%	0	0%	15	94%	0	0%	0	0%	0	0%	2.29	0.36

Appendix G

Participant Characteristics

**Table G1 Participant Group Characteristics**

<b>N = 68</b>		<b>Comparison Group</b>		<b>Pregnant Group</b>	
		<b>Frequency</b>	<b>%</b>	<b>Frequency</b>	<b>%</b>
<b>Age</b>	Mean	16.4		16.8	
	STD	1.6		2.2	
	Maximum	23		27	
	Minimum	12		14	
<b>Ethnic</b>	White	10	14.7%	9	13.2%
	Black	14	20.6%	13	19.1%
	Hispanic	1	1.5%	1	1.5%
	Mixed Group	40	58.8%	43	63.2%
	Other	3	4.4%	2	2.9%
<b>Marital Status</b>	Single	50	73.5%	47	69.1%
	Married	0	0.0%	0	0.0%
	Mixed Group	6	8.8%	9	13.2%
	Other	12	17.6%	12	17.6%
<b>Family Income</b>	Low	38	55.9%	40	58.8%
	Middle	15	22.1%	14	20.6%
	High	0	0.0%	0	0.0%
	Unknown	15	22.1%	14	20.6%
<b>Educational Status</b>	6th to 9th Grade	11	16.2%	12	17.6%
	10th to 12 th	36	52.9%	34	50.0%
	High School Grad	1	1.5%	1	1.5%
	College or Tech	1	1.5%	0	0.0%
	Mixed Group	19	27.9%	21	30.9%

TABLE G2a																			
PREGNANT GROUP CHARACTERISTICS																			
VARIABLE	STUDIES				PREGNANT GROUP														
CATEGORY	IN MA	TOTAL	PG	MEAN	Ethnic								Mixed						
ABV	K	SUBS	SUBJECTS	AGE	White		Black		Hispanic		Grouping		Other						
MADATA (All Studies)	68	12106	3881	16.8	9	13%	13	19%	1	1%	43	63%	2	3%					
Academic Performance	18	1944	959	16.3	3	17%	4	22%	0	0%	11	61%	0	0%					
Anxiety	8	764	412	18.4	2	25%	0	0%	0	0%	6	75%	0	0%					
Parental Communication	9	883	426	15.8	2	22%	1	11%	0	0%	6	67%	0	0%					
Parenting Beliefs	11	2873	649	16.3	0	0%	3	27%	0	0%	8	73%	0	0%					
Religious Activity	11	2843	642	16	0	0%	1	9%	1	9%	9	82%	0	0%					
Contraception Use	10	1311	707	16.6	2	20%	0	0%	0	0%	8	80%	0	0%					
Father in Home	9	906	426	16.3	1	11%	2	22%	0	0%	6	67%	0	0%					
Dating Relationship	12	3049	803	15.9	1	8%	1	8%	0	0%	10	83%	0	0%					
Dependency	4	567	163	16.6	1	25%	0	0%	0	0%	3	75%	0	0%					
Depression	6	985	384	16.2	2	33%	0	0%	0	0%	6	100%	0	0%					
Educational Expectations	9	2449	778	16.1	1	11%	2	22%	1	11%	5	56%	0	0%					
Ego Strenght	27	3328	1587	16.4	4	15%	5	19%	0	0%	18	67%	0	0%					
Family Dynamics	38	6333	2086	16.2	5	13%	7	18%	0	0%	26	68%	0	0%					
Future Orientation	14	3814	1171	16.2	1	7%	3	21%	1	7%	9	64%	0	0%					
School Grades	8	1018	542	16.2	1	13%	1	13%	0	0%	6	75%	0	0%					
Sexual Knowledge	11	1480	764	16.2	1	9%	2	18%	0	0%	8	73%	0	0%					
Living Arrangements	14	3574	930	16	1	7%	1	7%	0	0%	12	86%	0	0%					
Locus of Control	15	1386	576	16.1	2	13%	4	27%	0	0%	8	53%	1	7%					
Role Identity	5	377	164	15.9	2	40%	0	0%	0	0%	3	60%	0	0%					
Menstruation Onset	5	678	334	16.3	2	40%	2	40%	0	0%	1	20%	0	0%					
Occupational Expectations	6	1594	394	15.5	1	17%	2	33%	1	17%	2	33%	0	0%					
Parental Relationship	28	4676	1501	16.6	5	18%	3	11%	0	0%	20	71%	0	0%					
Peers Relationship	14	2883	948	16	1	7%	4	29%	1	7%	8	57%	0	0%					
Pregnant Role Model	7	701	342	16.7	1	14%	4	57%	0	0%	2	29%	0	0%					
Father Relationship	20	2129	907	16.7	4	20%	2	10%	0	0%	14	70%	0	0%					
Mother Relationship	23	3493	1106	17	4	17%	4	17%	0	0%	15	65%	0	0%					
Sexual Activity	27	5312	1765	16.3	3	11%	7	26%	0	0%	17	63%	0	0%					
Sibling Relationship	14	2826	703	16.3	2	14%	4	29%	0	0%	8	57%	0	0%					
Self-concept	32	5205	1843	16.9	4	13%	5	16%	0	0%	21	66%	2	6%					
Self-esteem	23	4451	1441	16.5	3	13%	4	17%	0	0%	15	65%	1	4%					
Social Responsibility	16	3940	911	16.5	1	6%	4	25%	0	0%	11	69%	0	0%					



TABLE G3a

## COMPARISON GROUP CHARACTERISTICS

VARIABLE	STUDIES			COMPARISON GROUP										
CATEGORY	IN MA	TOTAL	CG	MEAN	Ethnic						Mixed			
ABV	K	SUBS	SUBJECTS	AGE	White		Black		Hispanic		Group		Other	
MADATA (All Studies)	68	12106	8225	16.4	10	15%	14	21%	1	1%	40	59%	2	3%
Academic Performance	18	1944	985	16.3	4	22%	4	22%	0	0%	10	56%	0	0%
Anxiety	8	764	352	16.8	2	25%	1	13%	0	0%	5	63%	0	0%
Parental Communication	9	883	457	15.8	2	22%	1	11%	0	0%	6	67%	0	0%
Parenting Beliefs	11	2873	2224	17	1	9%	3	27%	0	0%	7	64%	0	0%
Religious Activity	11	2843	2201	15.9	0	0%	1	9%	1	9%	9	82%	0	0%
Contraception Use	10	1311	604	16.4	2	20%	0	0%	0	0%	8	80%	0	0%
Father in Home	9	906	480	16.3	1	11%	2	22%	0	0%	6	67%	0	0%
Dating Relationship	12	3049	2246	15.9	2	17%	1	8%	0	0%	9	75%	0	0%
Dependency	4	567	404	16.1	1	25%	0	0%	0	0%	2	50%	1	25%
Depression	6	985	601	15.9	2	33%	1	17%	0	0%	3	50%	0	0%
Educational Expectations	9	2449	1671	16	1	11%	2	22%	1	11%	5	56%	0	0%
Ego Strenght	27	3328	1741	16.5	5	19%	5	19%	0	0%	15	56%	2	7%
Family Dynamics	38	6333	4247	16.1	5	13%	7	18%	0	0%	26	68%	0	0%
Future Orientation	14	3814	2643	16.1	2	14%	3	21%	1	7%	8	57%	0	0%
School Grades	8	1018	476	16.1	2	25%	1	13%	0	0%	5	63%	0	0%
Sexual Knowledge	11	1480	716	16.1	1	9%	2	18%	0	0%	8	73%	0	0%
Living Arrangements	14	3574	2644	16	1	7%	1	7%	0	0%	12	86%	0	0%
Locus of Control	15	1386	810	16.1	2	13%	4	27%	0	0%	8	53%	1	7%
Role Identity	5	377	213	15.9	2	40%	0	0%	0	0%	2	40%	1	20%
Menstruation Onset	5	678	344	16.1	2	40%	2	40%	0	0%	1	20%	0	0%
Occupational Expectations	6	1594	1200	15.7	1	17%	2	33%	1	17%	2	33%	0	0%
Parental Relationship	28	4676	3175	15.9	5	18%	3	11%	0	0%	20	71%	0	0%
Peers Relationship	14	2883	1935	15.9	1	7%	4	29%	1	7%	8	57%	0	0%
Pregnant Role Model	7	701	359	16.6	1	14%	4	57%	0	0%	2	29%	0	0%
Father Relationship	20	2129	1222	15.8	4	20%	2	10%	0	0%	14	70%	0	0%
Mother Relationship	23	3493	2387	16	4	17%	4	17%	0	0%	15	65%	0	0%
Sexual Activity	27	5312	3547	16.5	4	15%	7	26%	0	0%	16	59%	0	0%
Sibling Relationship	14	2826	2165	16.2	2	14%	4	29%	0	0%	8	57%	0	0%
Self-concept	32	5205	3362	16.2	5	16%	6	19%	0	0%	19	59%	2	6%
Self-esteem	23	4451	3010	16.2	3	13%	4	17%	0	0%	15	65%	1	4%
Social Responsibility	16	3940	3029	16.5	2	13%	4	25%	0	0%	10	63%	0	0%

TABLE G3b																	
COMPARISON GROUP CHARACTERISTICS																	
	STUDIES	COMPARISON GROUP						COMPARISON GROUP									
	IN MA	MARITAL STATUS				Mixed		FAMILY INCOME									
ABV/FILE	K	Single		Married		Group		Other		Low		Middle		Upper		Unknown	
MADATA (All Studies)	68	50	74%	0	0%	6	9%	12	18%	38	56%	15	22%	0	0%	15	22%
Academic Performance	18	13	72%	0	0%	3	17%	2	11%	8	44%	5	28%	0	0%	5	28%
Anxiety	8	5	63%	0	0%	2	25%	1	13%	4	50%	2	25%	0	0%	2	25%
Parental Communication	9	8	89%	0	0%	1	11%	0	0%	4	44%	5	56%	0	0%	0	0%
Parenting Beliefs	11	7	64%	0	0%	1	9%	3	27%	8	73%	0	0%	0	0%	3	27%
Religious Activity	11	8	73%	0	0%	3	27%	0	0%	8	73%	1	9%	0	0%	2	18%
Contraception Use	10	7	70%	0	0%	1	10%	2	20%	6	60%	2	20%	0	0%	2	20%
Father in Home	9	7	78%	0	0%	1	11%	1	11%	6	67%	2	22%	0	0%	1	11%
Dating Relationship	12	10	83%	0	0%	1	8%	1	8%	7	58%	2	17%	0	0%	3	25%
Dependency	4	3	75%	0	0%	0	0%	1	25%	3	75%	1	25%	0	0%	0	0%
Depression	6	4	67%	0	0%	1	17%	1	17%	4	67%	2	33%	0	0%	0	0%
Educational Expectations	9	8	89%	0	0%	0	0%	1	11%	4	44%	4	44%	0	0%	1	11%
Ego Strenght	27	19	70%	0	0%	4	15%	4	15%	16	59%	5	19%	0	0%	6	22%
Family Dynamics	38	28	74%	0	0%	5	13%	5	13%	23	61%	11	29%	0	0%	4	11%
Future Orientation	14	11	79%	0	0%	1	7%	2	14%	7	50%	3	21%	0	0%	4	29%
School Grades	8	7	88%	0	0%	0	0%	1	13%	2	25%	2	25%	0	0%	4	50%
Sexual Knowledge	11	6	55%	0	0%	1	9%	4	36%	6	55%	1	9%	0	0%	4	36%
Living Arrangements	14	10	71%	0	0%	2	14%	2	14%	9	64%	3	21%	0	0%	2	14%
Locus of Control	15	11	73%	0	0%	2	13%	2	13%	9	60%	2	13%	0	0%	4	27%
Role Identity	5	5	100%	0	0%	0	0%	0	0%	2	40%	3	60%	0	0%	0	0%
Menstruation Onset	5	4	80%	0	0%	0	0%	1	20%	2	40%	2	40%	0	0%	1	20%
Occupational Expectations	6	6	100%	0	0%	0	0%	0	0%	5	83%	1	17%	0	0%	0	0%
Parental Relationship	28	23	82%	0	0%	2	7%	3	11%	17	61%	9	32%	0	0%	2	7%
Peers Relationship	14	12	86%	0	0%	0	0%	2	14%	9	64%	2	14%	0	0%	3	21%
Pregnant Role Model	7	5	71%	0	0%	0	0%	2	29%	4	57%	1	14%	0	0%	2	29%
Father Relationship	20	16	80%	0	0%	2	10%	2	10%	11	55%	7	35%	0	0%	2	10%
Mother Relationship	23	19	83%	0	0%	2	9%	2	9%	15	65%	7	30%	0	0%	1	4%
Sexual Activity	27	19	70%	0	0%	2	7%	2	7%	16	59%	4	15%	0	0%	7	26%
Sibling Relationship	14	12	86%	0	0%	0	0%	2	14%	9	64%	3	21%	0	0%	2	14%
Self-concept	32	26	81%	0	0%	3	9%	3	9%	19	59%	6	19%	0	0%	7	22%
Self-esteem	23	19	83%	0	0%	2	9%	2	9%	15	65%	4	17%	0	0%	4	17%
Social Responsibility	16	10	63%	0	0%	3	19%	3	19%	9	56%	2	13%	0	0%	5	31%

TABLE G2c												
PREGNANT GROUP CHARACTERISTICS												
	STUDIES		PREGNANT GROUP									
	IN MA	EDUCATIONAL STATUS						College/		Mixed		
ABV/FILE	K	6th-9th		10th-12th		HS Grad		Tech		Group		
MADATA (All Studies)	68	12	18%	34	50%	1	1%	0	0%	21	31%	
Academic Performance	18	4	22%	10	56%	0	0%	0	0%	4	22%	
Anxiety	8	3	38%	2	25%	1	13%	0	0%	2	25%	
Parental Communication	9	3	33%	3	33%	0	0%	0	0%	3	33%	
Parenting Beliefs	11	2	18%	4	36%	0	0%	0	0%	5	45%	
Religious Activity	11	1	9%	3	27%	0	0%	0	0%	7	64%	
Contraception Use	10	1	10%	6	60%	0	0%	0	0%	3	30%	
Father in Home	9	3	33%	1	11%	0	0%	0	0%	5	56%	
Dating Relationship	12	1	8%	5	42%	0	0%	0	0%	6	50%	
Dependency	4	2	50%	2	50%	0	0%	0	0%	0	0%	
Depression	6	3	50%	2	33%	0	0%	0	0%	1	17%	
Educational Expectations	9	3	33%	4	44%	0	0%	0	0%	4	44%	
Ego Strenght	27	5	19%	13	48%	1	4%	0	0%	8	30%	
Family Dynamics	38	6	16%	20	53%	0	0%	0	0%	12	32%	
Future Orientation	14	2	14%	7	50%	0	0%	0	0%	5	36%	
School Grades	8	2	25%	5	63%	0	0%	0	0%	1	13%	
Sexual Knowledge	11	2	18%	8	73%	0	0%	0	0%	1	9%	
Living Arrangements	14	1	7%	7	50%	0	0%	0	0%	6	43%	
Locus of Control	15	1	7%	10	67%	0	0%	0	0%	4	27%	
Role Identity	5	3	60%	2	40%	0	0%	0	0%	0	0%	
Menstruation Onset	5	2	40%	3	60%	0	0%	0	0%	0	0%	
Occupational Expectations	6	2	33%	2	33%	0	0%	0	0%	2	33%	
Parental Relationship	28	8	29%	12	43%	0	0%	0	0%	8	29%	
Peers Relationship	14	2	14%	8	57%	0	0%	0	0%	4	29%	
Pregnant Role Model	7	0	0%	6	86%	0	0%	0	0%	1	14%	
Father Relationship	20	8	40%	6	30%	0	0%	0	0%	6	30%	
Mother Relationship	23	3	13%	13	57%	0	0%	0	0%	7	30%	
Sexual Activity	27	5	19%	14	52%	0	0%	0	0%	8	30%	
Sibling Relationship	14	1	7%	9	64%	0	0%	0	0%	4	29%	
Self-concept	32	4	13%	16	50%	0	0%	0	0%	12	38%	
Self-esteem	23	2	9%	14	61%	0	0%	0	0%	7	30%	
Social Responsibility	16	2	13%	11	69%	0	0%	0	0%	3	19%	

TABLE G3c												
COMPARISON GROUP CHARACTERISTICS												
	STUDIES	COMPARISON GROUP										
	IN MA	EDUCATIONAL STATUS				HS Grad		College/ Tech		Mixed Group		
ABV/FILE	K	6th-9th		10th-12th								
MADATA (All Studies)	68	11	16%	36	53%	1	1%	1	1%	19	28%	
Academic Performance	18	4	22%	11	61%	0	0%	0	0%	3	17%	
Anxiety	8	2	25%	3	38%	0	0%	1	13%	2	25%	
Parental Communication	9	2	22%	3	33%	1	11%	0	0%	3	33%	
Parenting Beliefs	11	1	9%	6	55%	0	0%	0	0%	4	36%	
Religious Activity	11	1	9%	3	27%	0	0%	0	0%	7	64%	
Contraception Use	10	2	20%	5	50%	0	0%	0	0%	3	30%	
Father in Home	9	2	22%	2	22%	0	0%	0	0%	5	56%	
Dating Relationship	12	1	8%	6	50%	0	0%	0	0%	5	42%	
Dependency	4	2	50%	2	50%	0	0%	0	0%	0	0%	
Depression	6	3	50%	2	33%	0	0%	0	0%	1	17%	
Educational Expectations	9	2	22%	5	56%	0	0%	0	0%	2	22%	
Ego Strenght	27	6	22%	13	48%	0	0%	1	4%	7	26%	
Family Dynamics	38	6	16%	20	53%	1	3%	0	0%	11	29%	
Future Orientation	14	3	21%	7	50%	0	0%	0	0%	4	29%	
School Grades	8	2	25%	6	75%	0	0%	0	0%	0	0%	
Sexual Knowledge	11	1	9%	9	82%	0	0%	0	0%	1	9%	
Living Arrangements	14	1	7%	7	50%	0	0%	0	0%	6	43%	
Locus of Control	15	2	13%	9	60%	0	0%	0	0%	4	27%	
Role Identity	5	2	40%	3	60%	0	0%	0	0%	0	0%	
Menstruation Onset	5	2	40%	3	60%	0	0%	0	0%	0	0%	
Occupational Expectations	6	2	33%	2	33%	0	0%	0	0%	2	33%	
Parental Relationship	28	7	25%	12	43%	1	4%	0	0%	8	29%	
Peers Relationship	14	3	21%	8	57%	0	0%	0	0%	3	21%	
Pregnant Role Model	7	1	14%	5	71%	0	0%	0	0%	1	14%	
Father Relationship	20	7	35%	7	35%	0	0%	0	0%	6	30%	
Mother Relationship	23	4	17%	12	52%	0	0%	0	0%	7	30%	
Sexual Activity	27	4	15%	16	59%	0	0%	0	0%	7	26%	
Sibling Relationship	14	3	21%	7	50%	0	0%	0	0%	4	29%	
Self-concept	32	4	13%	16	50%	1	3%	0	0%	11	34%	
Self-esteem	23	3	13%	12	52%	1	4%	0	0%	7	30%	
Social Responsibility	16	3	19%	11	69%	0	0%	0	0%	2	13%	

Appendix H

Cluster ANOVA Tables

&

Qt / Scheffe Tables

# Academic Performance Meta-Analysis

376

## ACPER ANOVA TABLE

STUDIES IN THE ANALYSIS; K = 18

MODERATOR VARIABLE	F RATIO	F PROB.	Cochrans C p =	Homogeniety	SIGNIFANCE
PUBYR	0.099	0.907	0.007	HETEROG	SEE Qt ANALYSIS
PUBFORM	0.015	0.905	0.048	HETEROG	SEE Qt ANALYSIS
JOURTYP	0.015	0.905	0.048	HETEROG	SEE Qt ANALYSIS
SOURCE	0.306	0.900	0.026	HETEROG	SEE Qt ANALYSIS
AUTHOR	0.305	0.821	0.021	HETEROG	SEE Qt ANALYSIS
STUDYFLD	0.085	0.986	0.003	HETEROG	SEE Qt ANALYSIS
RESTYPE	0.465	0.711	0.068	HOMOG	NTGSD 0.05
FUNDING	0.174	0.842	0.000	HETEROG	SEE Qt ANALYSIS
DESIGN	0.001	0.979	0.147	HOMOG	NTGSD 0.05
SAMPMTHD	7.065	0.007	0.802	HOMOG	SEE Scheffe Analysis
CGSMSZ	1.076	0.315	0.275	HOMOG	NTGSD 0.05
PGSMSZ	0.074	0.789	0.095	HOMOG	NTGSD 0.05
SAMSIZT	1.483	0.241	0.684	HOMOG	NTGSD 0.05
QUALSTD	0.647	0.538	0.435	HOMOG	NTGSD 0.05
CGAGE	0.464	0.505	0.105	HOMOG	NTGSD 0.05
CGETH	3.999	0.041	0.079	HOMOG	SEE Scheffe Analysis
CGMAR	1.498	0.255	0.206	HOMOG	NTGSD 0.05
CGFAMS	0.875	0.437	0.025	HETEROG	SEE Qt ANALYSIS
CGED	0.870	0.439	0.178	HOMOG	NTGSD 0.05
PGAGE	0.267	0.613	0.095	HOMOG	NTGSD 0.05
PGETH	3.556	0.055	0.028	HETEROG	SEE Qt ANALYSIS
PGMAR	1.488	0.257	0.333	HOMOG	NTGSD 0.05
PGFAMS	0.875	0.437	0.025	HETEROG	SEE Qt ANALYSIS
PGED	0.286	0.755	0.102	HOMOG	NTGSD 0.05
SETTING	2.672	0.095	0.014	HETEROG	SEE Qt ANALYSIS
NSGTHRY	ONLY ONE GROUP			NA	NA
NONSGTH	0.015	0.906	0.018	HETEROG	SEE Qt ANALYSIS
STAND	ONLY ONE GROUP			NA	NA
STATUSD	1.096	0.399	0.640	HOMOG	NTGSD 0.05
OBTYP	2.714	0.088	0.004	HETEROG	SEE Qt ANALYSIS

NTGSD 0.05 = NO TWO GROUPS ARE SIGNIFICANTLY DIFFERENT AT THE 0.05 LEVEL

HCNP = Tests for homogeneity of variance cannot be performed.

Only one group has a computed variance.

ONLY ONE GROUP = Fewer than two non-empty groups; ANOVA cannot be performed.

UNKNOWN = Homogeneity of variance not known.

HOMOG = Cochrans C (p GT 0.05) indicates variance Homogenous at 0.05 level;

ANOVA is appropriate.

HETEROG = Cochrans C (p LT 0.05) indicates variance is Heterogenous at 0.05 level.

SEE Scheffe Analysis = See associated Scheffe analysis table for results.

SEE Qt ANALYSIS = See associated Qt analysis table for results.

# Qt / SCHEFFE Analysis Table

## ACPER VARIABLES

K = 18

QT = 182.27

Publication Year	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) LOW THRU 1979	1	0.141	Qb1&2 =	10.99	p < .05
(2) 1980 THRU 1989	10	0.1435	Qb1&3 =	171.71	p < .05
(3) 1990 THRU HIGH	7	0.0677	Qb2&3 =	0.44	NSD .05

Publication Form	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Journal	8	0.1249	Qb1&2 =	-0.08	NSD .05
(2) Dissertation	10	0.1051			

Journal Type	Ki	MEAN	Zr	ANALYSIS	SIGF
(2) Speciality	8	0.1249	Qb2&3 =	-0.08	NSD .05
(3) NA/	10	0.1051			

Source	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) CINAL	1	0.052	Qb1&2 =	182.26	p < .05
(2) ERIC	1	0.494	Qb1&3 =	181.27	p < .05
(3) MEDLINE	1	-0.006	Qb1&4 =	181.44	p < .05
(4) PsychLit	3	0.013	Qb1&5 =	177.03	p < .05
(5) REF List	2	0.21	Qb1&6 =	18.19	p < .05
(6) DAI	10	0.105	Qb2&3 =	181.26	p < .05
			Qb2&4 =	181.44	p < .05
			Qb2&5 =	177.03	p < .05
			Qb2&6 =	18.18	p < .05
			Qb3&4 =	180.44	p < .05
			Qb3&5 =	176.04	p < .05
			Qb3&6 =	17.19	p < .05
			Qb4&5 =	176.21	p < .05
			Qb4&6 =	17.37	p < .05
			Qb5&6 =	12.96	p < .05

# Academic Performance Meta-Analysis

378

Author	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) 1	11	0.0797	Qb1&2	= 9.68	p < .05
(2) 2	4	0.259	Qb1&3	= 16.94	p < .05
(3) 3	1	-0.006	Qb1&4	= 17.69	p < .05
(4) 4	2	0.071	Qb2&3	= 173.00	p < .05
(5) 5	0	EMPTY	Qb2&4	= 173.75	p < .05
			Qb3&4	= 181.02	p < .05

Study Field	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Nursing	3	0.0767	Qb1&2	= 175.23	p < .05
(2) Sociology	3	0.129	Qb1&4	= 10.68	p < .05
(3) Medicine	0	EMPTY	Qb1&5	= 175.70	p < .05
(4) Psychology	10	0.108	Qb1&6	= 175.70	p < .05
(5) Education	1	0.308	Qb2&4	= 16.77	p < .05
(6) Public Health/	1	0.044	Qb2&5	= 181.80	p < .05
			Qb2&6	= 181.79	p < .05
			Qb4&5	= 17.25	p < .05
			Qb4&6	= 17.24	p < .05
			Qb5&6	= 182.27	p < .05

Funding	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) UNKNOWN	13	0.105	Qb1&2	= 8.05	p < .05
(2) NONE	2	0.245	Qb1&3	= 8.94	p < .05
(3) Other/	3	0.0647	Qb2&3	= 180.86	p < .05

Sampling Method	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Matched	2	0.1805	SCHEFFFE 1&2		p < .05
(2) Random and matched	1	1.025	SCHEFFFE 1&3		NSD .05
(3) Convenience/	15	0.0443	SCHEFFFE 2&3		p < .05

Comparison Group Ethnic	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) White	4	0.4697	SCHEFFFE 1&2		NSD .05
(2) Black	4	0.0328	SCHEFFFE 1&3		NSD .05
(3) Other/Unknown	0	EMPTY	SCHEFFFE 1&4		p < .05
(4) Mixed group/	10	0.004	SCHEFFFE 2&3		NSD .05
			SCHEFFFE 2&4		NSD .05
			SCHEFFFE 3&4		NSD .05

Comparison Group Family Inc	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low	8	0.0065	Qb1&2	= 17.82	p < .05
(2) Middle	5	0.2548	Qb1&3	= 140.99	p < .05
(3) Unknown	5	0.1448	Qb2&3	= 33.60	p < .05

Pregnant Group Ethnic	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) White	3	0.5237	Qb1&2	= 130.75	p < .05
(2) Black	4	0.0328	Qb1&4	= 48.94	p < .05
(3) Other/Unknown	0	EMPTY	Qb2&4	= 99.76	p < .05
(4) Mixed group/	11	0.0316			



# Academic Performance Meta-Analysis

379

Pregnant Group Family Income	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low	8	0.0065	Qb1&2 = 17.82	p < .05
(2) Middle	5	0.2548	Qb1&3 = 140.99	p < .05
(3) Unknown/	5	0.1448	Qb2&3 = 33.60	p < .05

Setting	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Hospital	2	0.1245	Qb1&2 = 182.03	p < .05
(2) Clinic	4	0.0188	Qb1&4 = 103.19	p < .05
(3) School/Community	0	EMPTY	Qb1&6 = 178.41	p < .05
(4) Other	8	0.2213	Qb2&4 = 103.00	p < .05
(5) Long Term Facility	0	EMPTY	Qb2&6 = 178.22	p < .05
(6) University	2	-0.4175	Qb4&6 = 99.38	p < .05

Other/NonNursing Theory	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Yes	13	0.1078	Qb1&2 = -0.02	NSD .05
(2) No/	5	0.1296		

Observation Type	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Chi-Square	10	0.0654	Qb1&2 = 133.27	p < .05
(2) Z-value	1	-0.55	Qb1&3 = 127.24	p < .05
(3) t-value	3	0.118	Qb1&4 = 77.64	p < .05
(4) F-value	3	0.3693	Qb1&5 = 133.27	p < .05
(5) Other/	1	0.0915	Qb2&3 = 176.23	p < .05
			Qb2&4 = 126.63	p < .05
			Qb2&5 = 182.26	p < .05
			Qb3&4 = 120.60	p < .05
			Qb3&5 = 176.23	p < .05
			Qb4&5 = 126.62	p < .05

# Anxiety Meta-Analysis

## ANX ANOVA TABLE

STUDIES IN THE ANALYSIS; K = 8

MODERATOR	F	F	Cochrans C	Homogeniety	SIGNIFANCE
VARIABLE	RATIO	PROB.	p =		
PUBYR	1.388	0.332	0.386	HOMOG	NTGSD 0.05
PUBFORM	0.329	0.587	0.583	HOMOG	NTGSD 0.05
JOURTYP	0.329	0.587	0.583	HOMOG	NTGSD 0.05
SOURCE	0.618	0.576	0.572	HOMOG	NTGSD 0.05
AUTHOR	0.213	0.816	0.489	HOMOG	NTGSD 0.05
STUDYFLD	1.138	0.435	0.513	HOMOG	NTGSD 0.05
RESTYPE	2.213	0.187	0.071	HOMOG	NTGSD 0.05
FUNDING	1.207	0.415	HCNP	UNKNOWN	SEE Qt ANALYSIS
DESIGN	0.001	0.974	HCNP	UNKNOWN	SEE Qt ANALYSIS
SAMPMTHD	0.166	0.852	HCNP	UNKNOWN	SEE Qt ANALYSIS
CGSMSZ	ILY One Group			NA	NA
PGSMSZ	ILY One Group			NA	NA
SAMSIZE	1.663	0.245	0.029	HETEROG	SEE Qt ANALYSIS
QUALSTD	5.613	0.053	0.078	HOMOG	NTGSD 0.05
CGAGE	0.044	0.841	0.660	HOMOG	NTGSD 0.05
CGETH	0.178	0.842	0.093	HOMOG	NTGSD 0.05
CGMAR	1.440	0.321	0.064	HOMOG	NTGSD 0.05
CGFAMS	0.472	0.649	0.349	HOMOG	NTGSD 0.05
CGED	2.588	0.190	0.084	HOMOG	NTGSD 0.05
PGAGE	0.381	0.560	HCNP	UNKNOWN	SEE Qt ANALYSIS
PGETH	0.243	0.640	0.120	HOMOG	NTGSD 0.05
PGMAR	1.440	0.321	0.064	HOMOG	NTGSD 0.05
PGFAMS	0.472	0.649	0.349	HOMOG	NTGSD 0.05
PGED	1.965	0.261	0.239	HOMOG	NTGSD 0.05
SETTING	0.625	0.573	0.009	HETEROG	SEE Qt ANALYSIS
NSGTHRY	ONLY ONE GROUP			NA	NA
NONSGTH	0.329	0.587	0.583	HOMOG	NTGSD 0.05
STAND	2.769	0.147	0.015	HETEROG	SEE Qt ANALYSIS
STATUSD	0.001	0.974	HCNP	UNKNOWN	SEE Qt ANALYSIS
OBTYPE	0.333	0.732	0.002	HETEROG	SEE Qt ANALYSIS

NTGSD 0.05 = NO TWO GROUPS ARE SIGNIFICANTLY DIFFERENT AT THE 0.05 LEVEL

HCNP = Tests for homogeneity of variance cannot be performed.

Only one group has a computed variance.

ONLY One Group = Fewer than two non-empty groups; ANOVA cannot be performed.

UNKNOWN = Homogeneity of variance not known.

HOMOG = Cochrans C (p GT 0.05) indicates variance Homogenous at 0.05 level;

ANOVA is appropriate.

HETEROG = Cochrans C (p LT 0.05) indicates variance is Heterogenous at 0.05 level.

SEE Scheffe Analysis = See associated Scheffe analysis table for results.

SEE Qt ANALYSIS = See associated Qt analysis table for results.

NA = ONLY ONE GROUP ANOVA NOT APPROPRIATE

# Parental Communication Meta-Analysis

## APCOM ANOVA TABLE

STUDIES IN THE ANALYSIS; K = 9

MODERATOR VARIABLE	F RATIO	F PROB.	Cochrans C p =	Homogeneity	SIGNIFANCE
PUBYR	1.031	0.412	0.046	HETEROG	SEE Qt ANALYSIS
PUBFORM	1.790	0.223	0.002	HETEROG	SEE Qt ANALYSIS
JOURTYP	1.790	0.223	0.002	HETEROG	SEE Qt ANALYSIS
SOURCE	14.783	0.005	0.012	HETEROG	SEE Qt ANALYSIS
AUTHOR	17.096	0.005	HCNP	UNKNOWN	SEE Qt ANALYSIS
STUDYFLD	0.406	0.545	0.011	HETEROG	SEE Qt ANALYSIS
RESTYPE	25.863	0.002	0.604	HOMOG	NTGSD 0.05
FUNDING	21.279	0.004	HCNP	UNKNOWN	SEE Qt ANALYSIS
DESIGN	1.285	0.294	HCNP	UNKNOWN	SEE Qt ANALYSIS
SAMPMTHD	ONLY ONE GROUP			NA	NA
CGSMSZ	0.181	0.683	HCNP	UNKNOWN	SEE Qt ANALYSIS
PGSMSZ	ONLY ONE GROUP			NA	NA
SAMSIZT	1.210	0.308	0.122	HOMOG	NTGSD 0.05
QUALSTD	0.496	0.632	0.027	HETEROG	SEE Qt ANALYSIS
CGAGE	1.587	0.248	0.088	HOMOG	NTGSD 0.05
CGETH	6.518	0.031	0.013	HETEROG	SEE Qt ANALYSIS
CGMAR	0.020	0.891	HCNP	UNKNOWN	SEE Qt ANALYSIS
CGFAMS	1.417	0.273	0.104	HOMOG	NTGSD 0.05
CGED	1.201	0.375	0.567	HOMOG	NTGSD 0.05
PGAGE	1.587	0.248	0.088	HOMOG	NTGSD 0.05
PGETH	6.518	0.031	0.013	HETEROG	SEE Qt ANALYSIS
PGMAR	0.020	0.891	HCNP	UNKNOWN	SEE Qt ANALYSIS
PGFAMS	1.417	0.273	0.104	HOMOG	NTGSD 0.05
PGED	0.267	0.775	0.027	HETEROG	SEE Qt ANALYSIS
SETTING	0.098	0.958	0.057	HOMOG	NTGSD 0.05
NSGTHRY	ONLY ONE GROUP			NA	NA
NONSGTH	1.092	0.331	0.263	HOMOG	NTGSD 0.05
STAND	ONLY ONE GROUP			NA	NA
STATUSD	1.734	0.255	0.060	HOMOG	NTGSD 0.05
OBTYPE	0.178	0.841	0.012	HETEROG	SEE Qt ANALYSIS

NTGSD 0.05 = NO TWO GROUPS ARE SIGNIFICANTLY DIFFERENT AT THE 0.05 LEVEL

HCNP = Tests for homogeneity of variance cannot be performed.

Only one group has a computed variance.

ONLY ONE GROUP = Fewer than two non-empty groups; ANOVA cannot be performed.

UNKNOWN = Homogeneity of variance not known.

HOMOG = Cochrans C (p GT 0.05) indicates variance Homogenous at 0.05 level; ANOVA is appropriate.

HETEROG = Cochrans C (p LT 0.05) indicates variance is Heterogenous at 0.05 level.

SEE Scheffe Analysis = See associated Scheffe analysis table for results.

SEE Qt ANALYSIS = See associated Qt analysis table for results.

# Qt / Scheffe Analysis Table

## APCOM VARIABLES

K = 9

QT = 260.62

Publication Year	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) LOW THRU 1979	2	0.377		Qb1&2 = 248.54	p < .05
(2) 1980 THRU 1989	4	0.019		Qb1&3 = 97.01	p < .05
(3) 1990 THRU HIGH	3	0.620		Qb2&3 = 87.25	p < .05
Publication Form	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Journal	3	0.634		Qb1&2 = 109.70	p < .05
(2) Dissertation	6	0.131			
Journal Type	Ki	MEAN	Zr	ANALYSIS	SIGF
(2) Speciality	3	0.634		Qb2&3 = 109.70	p < .05
(3) NA	6	0.131			
Source	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) CINAL	1	1.653		Qb1&5 = 253.51	p < .05
(2) ERIC	0	EMPTY		Qb1&6 = 254.56	p < .05
(3) MEDLINE	0	EMPTY		Qb5&6 = 247.44	p < .05
(4) PsychLit	0	EMPTY			
(5) REF List	2	0.125			
(6) DAI	6	0.131			
Author	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) 1	6	0.194		Qb1&2 = 252.53	p < .05
(2) 2	1	0.162		Qb1&3 = 252.54	p < .05
(3) 3	1	1.653		Qb1&4 = 252.54	p < .05
(4) 4	1	-0.286		Qb2&3 = 260.62	p < .05
(5) 5	0	EMPTY		Qb2&4 = 260.61	p < .05
				Qb3&4 = 260.62	p < .05
Study Field	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Nursing	0	EMPTY		Qb2&4 = 10.48	NSD .05
(2) Sociology	2	0.069			
(3) Medicine	0	EMPTY			
(4) Psychology	7	0.3646			
(5) Education	0	EMPTY			
(6) Public Health	0	EMPTY			
Funding	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) UNKNOWN	6	0.194		Qb1&2 = 252.53	p < .05
(2) NONE	1	0.162		Qb1&3 = 252.54	p < .05
(3) Other	1	1.653		Qb1&4 = 252.54	p < .05
(4) Federal	1	-0.286		Qb2&3 = 260.62	p < .05
(5) Foundation	0	EMPTY		Qb2&4 = 260.61	p < .05
				Qb3&4 = 260.62	p < .05

# Parental Communication Meta-Analysis

383

Design	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Descriptive	1	-0.286		Qb1&2 = 21.06	p < .05
(2) Correlational	8	0.372			

Comparison Group Sample Size	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 99	8	0.328		Qb1&2 = 23.59	p < .05
(2) 100 thru 299	1	0.063			
(3) 300 thru High	0	EMPTY			

Quality of Study	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 1.99	2	0.349		Qb1&2 = 75.47	p < .05
(2) 2 thru 2.49	3	0.719		Qb1&3 = 254.78	p < .05
(3) 2.5 thru 3	4	0.193		Qb2&3 = 72.92	p < .05

Comparison Group Ethnic	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) White	2	1.094		Qb1&2 = 245.99	p < .05
(2) Black	1	0.323		Qb1&4 = 234.94	p < .05
(3) Other/Unknown	0	EMPTY		Qb2&4 = 249.56	p < .05
(4) Mixed group	6	0.030			

Comparison Group Marital Stat	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Single or Never Married	8	0.309		Qb1&2 = 0.95	NSD .05
(2) Mixed group	1	0.219			
(3) Other	0	EMPTY			

Pregnant Group Ethnic	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) White	2	1.094		Qb1&2 = 245.99	p < .05
(2) Black	1	0.323		Qb1&4 = 234.94	p < .05
(3) Other/Unknown	0	EMPTY		Qb2&4 = 249.56	p < .05
(4) Mixed group	6	0.030			

Pregnant Group Marital Status	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Single or Never Married	8	0.309		Qb1&2 = 0.95	NSD .05
(2) Mixed group	1	0.219			
(3) Other	0	EMPTY			

Pregnant Group Ed Status	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) 6th to 9th grade	3	0.214		Qb1&2 = 62.03	p < .05
(2) 10th to 12th Grade	3	0.510		Qb1&3 = 253.81	p < .05
(3) Mixed group/	3	0.173		Qb2&3 = 60.88	p < .05
(4) High School Graduate	0	EMPTY			
(5) Some College/Technical	0	EMPTY			

Observation Type	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Chi-Square	6	0.309		Qb1&3 = 7.65	NSD .05
(2) Z-value	0	EMPTY		Qb1&4 = 8.12	NSD .05
(3) t-value	2	0.429		Qb3&4 = 260.14	p < .05
(4) F-value	1	-0.024			
(5) Other	0	EMPTY			

# Parenting Beliefs Meta-Analysis

## BPAP ANOVA TABLE

STUDIES IN THE ANALYSIS; K = 11

MODERATOR VARIABLE	F RATIO	F PROB.	Cochrans C p =	Homogeneity	SIGNIFICANCE
PUBYR	1.625	0.234	0.235	HOMOG	NTGSD 0.05
PUBFORM	0.194	0.670	0.025	HETEROG	SEE Qt ANALYSIS
JOURTYP	0.194	0.670	0.025	HETEROG	SEE Qt ANALYSIS
SOURCE	0.116	0.948	0.041	HETEROG	SEE Qt ANALYSIS
AUTHOR	0.464	0.645	0.001	HETEROG	SEE Qt ANALYSIS
STUDYFLD	2.915	0.110	0.115	HOMOG	NTGSD 0.05
RESTYPE	0.282	0.837	0.004	HETEROG	SEE Qt ANALYSIS
FUNDING	0.443	0.665	HCNP	UNKNOWN	SEE Qt ANALYSIS
DESIGN	0.568	0.470	0.109	HOMOG	NTGSD 0.05
SAMPMTHD	ONLY ONE GROUP			NA	NA
CGSMSZ	0.100	0.761	HCNP	UNKNOWN	SEE Qt ANALYSIS
PGSMSZ	1.321	0.280	HCNP	UNKNOWN	SEE Qt ANALYSIS
SAMSIQT	0.048	0.833	0.457	HOMOG	NTGSD 0.05
QUALSTD	0.210	0.815	0.083	HOMOG	NTGSD 0.05
CGAGE	0.654	0.440	0.014	HETEROG	SEE Qt ANALYSIS
CGETH	0.725	0.513	0.072	HOMOG	NTGSD 0.05
CGMAR	5.996	0.026	0.231	HOMOG	SEE Scheffe Analysis
CGFAMS	0.099	0.761	0.641	HOMOG	NTGSD 0.05
CGED	0.648	0.548	0.186	HOMOG	NTGSD 0.05
PGAGE	0.138	0.719	0.276	HOMOG	NTGSD 0.05
PGETH	0.484	0.504	0.098	HOMOG	NTGSD 0.05
PGMAR	0.446	0.656	0.039	HOMOG	NTGSD 0.05
PGFAMS	0.099	0.761	0.641	HOMOG	NTGSD 0.05
PGED	0.933	0.432	0.001	HETEROG	SEE Qt ANALYSIS
SETTING	3.204	0.093	0.314	HOMOG	NTGSD 0.05
NSGTHRY	0.328	0.581	HCNP	UNKNOWN	SEE Qt ANALYSIS
NONGTH	0.221	0.649	0.064	HOMOG	NTGSD 0.05
STAND	0.095	0.765	0.181	HOMOG	NTGSD 0.05
STATUSD	0.232	0.798	0.278	HOMOG	NTGSD 0.05
OBTYPE	0.724	0.569	0.554	HOMOG	NTGSD 0.05

NTGSD 0.05 = NO TWO GROUPS ARE SIGNIFICANTLY DIFFERENT AT THE 0.05 LEVEL

HCNP = Tests for homogeneity of variance cannot be performed.

Only one group has a computed variance.

ONLY ONE GROUP = Fewer than two non-empty groups; ANOVA cannot be performed.

UNKNOWN = Homogeneity of variance not known.

HOMOG = Cochrans C (p GT 0.05) indicates variance Homogenous at 0.05 level; ANOVA is appropriate.

HETEROG = Cochrans C (p LT 0.05) indicates variance is Heterogenous at 0.05 level.

SEE Scheffe Analysis = See associated Scheffe analysis table for results.

SEE Qt ANALYSIS = See associated Qt analysis table for results.

# Qt / Scheffe Analysis Table

## BPAR VARIABLES

K = 11

QT = 34.82

Publication Form	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Journal	7	0.150		Qb1&2 =	9.65 p < .05
(2) Dissertation	4	0.209			

Journal Type	Ki	MEAN	Zr	ANALYSIS	SIGF
(2) Speciality	7	0.150		Qb2&3 =	9.65 p < .05
(3) NA	4	0.209			

Source	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) CINAHL	1	0.056		Qb1&4 =	34.82 p < .05
(2) ERIC	0	EMPTY		Qb1&5 =	24.08 p < .05
(3) MEDLINE	0	EMPTY		Qb1&6 =	21.11 p < .05
(4) PsychLit	1	0.187		Qb4&5 =	24.08 p < .05
(5) REF List	5	0.162		Qb4&6 =	21.11 p < .05
(6) DAI	4	0.209		Qb5&6 =	10.37 p < .05

Author	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) 1	5	0.174		Qb1&3 =	13.65 p < .05
(2) 2	0	EMPTY		Qb1&4 =	13.06 p < .05
(3) 3	3	0.084		Qb3&4 =	33.85 p < .05
(4) 4	3	0.254			
(5) 5	0	EMPTY			

Research Type	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Independent research	2	0.046		Qb1&2 =	31.30 p < .05
(2) Funded research	4	0.173		Qb1&3 =	21.09 p < .05
(3) Dissertation	4	0.209		Qb1&4 =	34.80 p < .05
(4) Unknown	1	0.259		Qb2&3 =	17.61 p < .05
				Qb2&4 =	31.32 p < .05
				Qb3&4 =	21.11 p < .05

Funding	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) UNKNOWN	6	0.132		Qb1&2 =	17.66 p < .05
(2) NONE	1	0.392		Qb1&3 =	17.66 p < .05
(3) Other	1	0.187		Qb1&4 =	17.65 p < .05
(4) Federal	1	0.317		Qb1&5 =	17.56 p < .05
(5) Foundation	2	0.098		Qb2&3 =	34.82 p < .05
				Qb2&4 =	34.81 p < .05
				Qb2&5 =	34.72 p < .05
				Qb3&4 =	34.81 p < .05
				Qb3&5 =	34.72 p < .05
				Qb4&5 =	34.71 p < .05

# Parenting Beliefs Meta-Analysis

386

Comparison Group	Sample Size	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 99		8	0.179	Qb1&2 = 11.86	p < .05
(2) 100 thru 299		1	0.259	Qb1&3 = 11.76	p < .05
(3) 300 thru High		2	0.098	Qb2&3 = 34.72	p < .05
Pregnant Group	Sample Size	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 99		10	0.163	Qb1&2 = 11.05	p < .05
(2) 100 thru 299		1	0.205		
(3) 300 thru High		0	EMPTY		
Comparison Group	Age	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 15.99		3	0.254	Qb1&2 = 6.81	p < .05
(2) 16 thru High		8	0.141		
Comparison Group	Marital Stat	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Single or Never Married		7	0.241	SCHEFFE 1&2	NSD .05
(2) Mixed group		1	-0.294	SCHEFFE 1&3	p < .05
(3) Other		3	0.165	SCHEFFE 2&3	NSD .05
Pregnant Group	Ed Status	Ki	MEAN Zr	ANALYSIS	SIGF
(1) 6th to 9th grade		2	0.046	Qb1&2 = 33.70	p < .05
(2) 10th to 12th Grade		4	0.274	Qb1&3 = 11.04	p < .05
(3) Mixed group/		5	0.140	Qb2&3 = 9.95	p < .05
(4) High School Graduate		0	EMPTY		
(5) Some College/Technical		0	EMPTY		
Nursing Theory		Ki	MEAN Zr	ANALYSIS	SIGF
(1) Yes		1	0.056	Qb1&2 = 0.44	NSD .05
(2) No		10	0.183		



# Religious Activity Meta-Analysis

## CHRRCH ANOVA TABLE

STUDIES IN THE ANALYSIS; K = 11

MODERATOR VARIABLE	F RATIO	F PROB.	Cochrans C p =	Homogeniety	SIGNIFANCE
PUBYR	0.342	0.720	0.540	HOMOG	NTGSD 0.05
PUBFORM	2.761	0.131	0.149	HOMOG	NTGSD 0.05
JOURTYP	2.761	0.131	0.149	HOMOG	NTGSD 0.05
SOURCE	2.761	0.131	0.149	HOMOG	NTGSD 0.05
AUTHOR	1.073	.3866	0.598	HOMOG	NTGSD 0.05
STUDYFLD	0.968	0.489	0.717	HOMOG	NTGSD 0.05
RESTYPE	8.906	0.009	0.637	HOMOG	SEE Scheffe Analysis
FUNDING	2.189	0.199	HCNP	UNKNOWN	SEE Qt ANALYSIS
DESIGN	0.089	0.773	0.627	HOMOG	NTGSD 0.05
SAMPMTHD	2.780	0.130	HCNP	UNKNOWN	SEE Qt ANALYSIS
CGSMSZ	0.096	0.766	0.003	HETEROG	SEE Qt ANALYSIS
PGSMSZ	0.000	1.000	HCNP	UNKNOWN	SEE Qt ANALYSIS
SAMSIPT	0.298	0.602	0.460	HOMOG	NTGSD 0.05
QUALSTD	0.618	0.563	0.560	HOMOG	NTGSD 0.05
CGAGE	0.201	0.665	0.128	HOMOG	NTGSD 0.05
CGETH	1.123	0.317	HCNP	UNKNOWN	SEE Qt ANALYSIS
CGMAR	2.714	0.134	0.220	HOMOG	NTGSD 0.05
CGFAMS	1.841	0.220	0.392	HOMOG	NTGSD 0.05
CGED	1.384	0.305	0.152	HOMOG	NTGSD 0.05
PGAGE	0.017	0.900	0.094	HOMOG	NTGSD 0.05
PGETH	1.123	0.313	HCNP	UNKNOWN	SEE Qt ANALYSIS
PGMAR	2.229	0.170	0.210	HOMOG	NTGSD 0.05
PGFAMS	1.841	0.220	0.392	HOMOG	NTGSD 0.05
PGED	1.384	0.305	0.152	HOMOG	NTGSD 0.05
SETTING	1.452	0.297	0.078	HOMOG	NTGSD 0.05
NSGTHRY	ONLY ONE GROUP			NA	NA
NONSGTH	7.159	0.025	0.186	HOMOG	NTGSD 0.05
STAND	0.051	0.827	0.908	HOMOG	NTGSD 0.05
STATUSD	1.816	0.211	0.001	HETEROG	SEE Qt ANALYSIS
OBTYPE	0.823	0.473	HCNP	UNKNOWN	SEE Qt ANALYSIS

NTGSD 0.05 = NO TWO GROUPS ARE SIGNIFICANTLY DIFFERENT AT THE 0.05 LEVEL

HCNP = Tests for homogeneity of variance cannot be performed.

Only one group has a computed variance.

ONLY ONE GROUP = Fewer than two non-empty groups; ANOVA cannot be performed.

UNKNOWN = Homogeneity of variance not known.

HOMOG = Cochrans C (p GT 0.05) indicates variance Homogenous at 0.05 level;

ANOVA is appropriate.

HETEROG = Cochrans C (p LT 0.05) indicates variance is Heterogenous at 0.05 level.

SEE Scheffe Analysis = See associated Scheffe analysis table for results.

SEE Qt ANALYSIS = See associated Qt analysis table for results.

# Religious Activity Meta-Analysis

388

## Qt / Scheffe Analysis Table

### CHRRH VARIABLES

K = 11

QT = 29.15

Research Type	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Independent research	3	0.062		SCHEFFE 1&2	NSD .05
(2) Funded research	4	0.047		SCHEFFE 1&3	p < .05
(3) Dissertation	4	0.361		SCHEFFE 2&3	p < .05
(4) Unknown	0	EMPTY			

Funding	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) UNKNOWN	6	0.274		Qb1&2 = 16.28	p < .05
(2) NONE	1	-0.012		Qb1&4 = 17.28	p < .05
(3) Other	0	EMPTY		Qb1&5 = 12.49	p < .05
(4) Federal	1	0.114		Qb2&4 = 28.15	p < .05
(5) Foundation	3	0.078		Qb2&5 = 23.37	p < .05
				Qb4&5 = 24.36	p < .05

Sampling Method	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Matched	0	EMPTY		Qb2&3 = 6.73	p < .05
(2) Random and matched	1	-0.109			
(3) Convenience	10	0.193			

Comparison Group Sample Size	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 99	7	0.194		Qb1&2 = 3.17	NSD .05
(2) 100 thru 299	2	0.140		Qb1&3 = 3.43	NSD .05
(3) 300 thru High	3	0.091		Qb2&3 = 28.87	p < .05

Pregnant Group Sample Size	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 99	10	0.165		Qb1&2 = 0.63	NSD .05
(2) 100 thru 299	1	0.165			
(3) 300 thru High	0	EMPTY			

Comparison Group Ethnic	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) White	0	EMPTY		Qb2&3 = 29.16	p < .05
(2) Black	1	0.353		Qb2&4 = 2.61	NSD .05
(3) Other/Unknown	1	0.165		Qb3&4 = 2.61	NSD .05
(4) Mixed group	9	0.107			

Pregnant Group Ethnic	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) White	0	EMPTY		Qb2&3 = 29.16	p < .05
(2) Black	1	0.353		Qb2&4 = 2.61	NSD .05
(3) Other/Unknown	1	0.165		Qb3&4 = 2.61	NSD .05
(4) Mixed group	9	0.107			

# Religious Activity Meta-Analysis

389

Statistic Used	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Frequency, percentage, means, variance	9	0.200	Qb1&3 =	1.00 NSD .05
(2) Chi-square, Fisher's Exact, McNemar	0	EMPTY		
(3) ANOVA, t	2	0.010		
(4) ANCOVA	0	EMPTY		
(5) Multivariate correlation, r2, etc.	0	EMPTY		
(6) Other	0	EMPTY		

Observation Type	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Chi-Square	9	0.200	Qb1&3 =	0.05 NSD .05
(2) Z-value	0	EMPTY	Qb1&4 =	1.04 NSD .05
(3) t-value	1	-0.012	Qb3&4 =	28.15 p < .05
(4) F-value	1	0.032		
(5) Other	0	EMPTY		

# Contraception Use Meta-Analysis

## CONUSE ANOVA TABLE

STUDIES IN THE ANALYSIS; K = 10

MODERATOR VARIABLE	F RATIO	F PROB.	Cochrans C p =	Homogeneity	SIGNIFANCE
PUBYR	1.863	0.225	0.059	HOMOG	NTGSD 0.05
PUBFORM	0.556	0.477	0.026	HETEROG	SEE Qt ANALYSIS
JOURTYP	0.556	0.477	0.026	HETEROG	SEE Qt ANALYSIS
SOURCE	0.159	0.920	0.020	HETEROG	SEE Qt ANALYSIS
AUTHOR	0.481	0.637	0.000	HETEROG	SEE Qt ANALYSIS
STUDYFLD	0.144	0.869	0.151	HOMOG	NTGSD 0.05
RESTYPE	0.880	0.456	0.030	HETEROG	SEE Qt ANALYSIS
FUNDING	0.069	0.935	0.246	HOMOG	NTGSD 0.05
DESIGN	0.477	0.509	0.120	HOMOG	NTGSD 0.05
SAMPMTHD	0.872	0.378	HCNP	UNKNOWN	SEE Qt ANALYSIS
CGSMSZ	0.001	0.983	HCNP	UNKNOWN	SEE Qt ANALYSIS
PGSMSZ	0.015	0.906	0.002	HETEROG	SEE Qt ANALYSIS
SAMSIQT	1.431	0.271	0.167	HOMOG	NTGSD 0.05
QUALSTD	1.850	0.226	0.094	HOMOG	NTGSD 0.05
CGAGE	0.436	0.528	0.019	HETEROG	SEE Qt ANALYSIS
CGETH	0.323	0.585	0.475	HOMOG	NTGSD 0.05
CGMAR	5.156	0.042	0.017	HETEROG	SEE Qt ANALYSIS
CGFAMS	0.142	0.870	0.200	HOMOG	NTGSD 0.05
CGED	0.550	0.600	0.043	HETEROG	SEE Qt ANALYSIS
PGAGE	0.068	0.802	0.000	HETEROG	SEE Qt ANALYSIS
PGETH	0.323	0.585	0.475	HOMOG	NTGSD 0.05
PGMAR	5.156	0.042	0.017	HETEROG	SEE Qt ANALYSIS
PGFAMS	0.142	0.870	0.200	HOMOG	NTGSD 0.05
PGED	0.678	0.538	0.012	HETEROG	SEE Qt ANALYSIS
SETTING	31.887	0.000	0.200	HOMOG	SEE Scheffe Analysis
NSGTHRY	ONLY ONE GROUP			NA	NA
NONSGTH	0.589	0.465	0.049	HETEROG	SEE Qt ANALYSIS
STAND	0.018	0.898	0.001	HETEROG	SEE Qt ANALYSIS
STATUSD	0.028	0.972	0.002	HETEROG	SEE Qt ANALYSIS
OBTYPE	14.176	0.007	HCNP	UNKNOWN	SEE Qt ANALYSIS

NTGSD 0.05 = NO TWO GROUPS ARE SIGNIFICANTLY DIFFERENT AT THE 0.05 LEVEL

HCNP = Tests for homogeneity of variance cannot be performed.

Only one group has a computed variance.

ONLY ONE GROUP = Fewer than two non-empty groups; ANOVA cannot be performed.

UNKNOWN = Homogeneity of variance not known.

HOMOG = Cochrans C (p GT 0.05) indicates variance Homogenous at 0.05 level;

ANOVA is appropriate.

HETEROG = Cochrans C (p LT 0.05) indicates variance is Heterogenous at 0.05 level.

SEE Scheffe Analysis = See associated Scheffe analysis table for results.

SEE Qt ANALYSIS = See associated Qt analysis table for results.

# Contraception Use Meta-Analysis

391

## Qt / Scheffe Analysis Table CONU VARIABLES

K = 10

QT = 169.53

Publication Form	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Journal	5	0.253		Qb1&2 =	7.73 p < .05
(2) Dissertation	5	-0.003			
Journal Type	Ki	MEAN	Zr	ANALYSIS	SIGF
(2) Speciality	5	0.253		Qb2&3 =	7.73 p < .05
(3) NA	5	-0.003			
Source	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) CINAHL	0	EMPTY		Qb2&4 =	168.54 p < .05
(2) ERIC	1	0.001		Qb2&5 =	146.09 p < .05
(3) MEDLINE	0	EMPTY		Qb2&6 =	30.47 p < .05
(4) PsychLit	1	0.120		Qb4&5 =	147.09 p < .05
(5) REF List	4	0.286		Qb4&6 =	31.48 p < .05
(6) DAI	4	-0.005		Qb5&6 =	9.02 NSD .05
Author	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) 1	6	0.016		Qb1&2 =	30.06 p < .05
(2) 2	1	0.597		Qb1&4 =	29.38 p < .05
(3) 3	0	EMPTY		Qb2&4 =	168.86 p < .05
(4) 4	3	0.184			
(5) 5	0	EMPTY			
Research Type	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Independent research	3	0.405		Qb1&2 =	143.94 p < .05
(2) Funded research	3	0.184		Qb1&3 =	13.79 p < .05
(3) Dissertation	4	-0.131		Qb2&3 =	38.02 p < .05
(4) Unknown	0	EMPTY			
Sampling Method	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Matched	1	0.597		Qb1&3 =	26.34 p < .05
(2) Random and matched	0	EMPTY			
(3) Convenience	9	0.072			
Comparison Group Sample Size	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 99	9	0.126		Qb1&2 =	1.30 NSD .05
(2) 100 thru 299	1	0.113			
(3) 300 thru High	0	EMPTY			
Pregnant Group Sample Size	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 99	8	0.114		Qb1&2 =	0.15 NSD .05
(2) 100 thru 299	2	0.168			
(3) 300 thru High	0	EMPTY			

# Contraception Use Meta-Analysis

392

Comparison Group Age	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 15.99	4	0.265		Qb1&2 = 1.92	NSD .05
(2) 16 thru High	6	0.031			

Comparison Group Marital Stat	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Single or Never Married	7	0.259		Qb1&2 = 141.75	p < .05
(2) Mixed group	1	0.658		Qb1&3 = 79.62	p < .05
(3) Other	2	-0.614		Qb2&3 = 107.38	p < .05

Comparison Group Ed Status	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) 6th to 9th grade	2	0.313		Qb1&2 = 139.49	p < .05
(2) 10th to 12th Grade	5	0.216		Qb1&3 = 33.37	p < .05
(3) Mixed group/	3	-0.153		Qb2&3 = 10.57	p < .05
(4) High School Graduate	0	EMPTY			
(5) Some College/Technical	0	EMPTY			

Pregnant Group Age	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 15.99	2	0.217		Qb1&2 = 1.10	NSD .05
(2) 16 thru High	8	0.102			

Pregnant Group Marital Status	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Single or Never Married	7	0.259		Qb1&2 = 141.75	p < .05
(2) Mixed group	1	0.658		Qb1&3 = 79.62	p < .05
(3) Other	2	-0.614		Qb2&3 = 107.38	p < .05

Pregnant Group Ed Status	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) 6th to 9th grade	1	0.505		Qb1&2 = 142.17	p < .05
(2) 10th to 12th Grade	6	0.200		Qb1&3 = 36.99	p < .05
(3) Mixed group/	3	-0.153		Qb2&3 = 9.63	p < .05
(4) High School Graduate	0	EMPTY			
(5) Some College/Technical	0	EMPTY			

Setting	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Hospital	2	0.628		SCHEFFE 1&2	NSD .05
(2) Clinic	4	0.219		SCHEFFE 1&3	NSD .05
(3) School/Community	0	EMPTY		SCHEFFE 1&4	NSD .05
(4) Other	3	0.001		SCHEFFE 1&6	p < .05
(5) Long Term Facility	0	EMPTY		SCHEFFE 2&3	NSD .05
(6) University	1	-1.229		SCHEFFE 2&4	NSD .05
(7) Unknown	0	EMPTY		SCHEFFE 2&6	p < .05
				SCHEFFE 3&4	NSD .05
				SCHEFFE 3&6	p < .05
				SCHEFFE 4&6	p < .05

Other/NonNursing Theory	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Yes	6	0.017		Qb1&2 = 8.15	p < .05
(2) No	4	0.286			

# Contraception Use Meta-Analysis

393

Standard Instrument	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Yes	2	0.172	Qb1&2 =	1.08 NSD .05
(2) No	8	0.113		

Statistic Used	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Frequency, percentage, means, variance	7	0.154	Qb1&3 =	4.86 NSD .05
			Qb1&4 =	5.67 NSD .05
(2) Chi-square, Fisher's Exact, McNemar	0	EMPTY	Qb3&4 =	168.72 p < .05
(3) ANOVA, t	2	0.061		
(4) ANCOVA	1	0.048		
(5) Multivariate correlation, r2, etc.	0	EMPTY		
(6) Other	0	EMPTY		

Observation Type	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Chi-Square	6	0.384	Qb1&2 =	128.06 p < .05
(2) Z-value	1	-1.229	Qb1&3 =	127.07 p < .05
(3) t-value	1	0.001	Qb1&4 =	128.07 p < .05
(4) F-value	1	0.120	Qb1&5 =	128.07 p < .05
(5) Other	0	EMPTY	Qb2&3 =	168.52 p < .05
			Qb2&4 =	169.52 p < .05
			Qb2&5 =	169.52 p < .05
			Qb3&4 =	168.54 p < .05
			Qb3&5 =	168.53 p < .05
			Qb4&5 =	169.53 p < .05

# Father in Home Meta-Analysis

394

## DADH ANOVA TABLE

STUDIES IN THE ANALYSIS; K = 9

MODERATOR VARIABLE	F RATIO	F PROB.	Cochrans C p =	Homogeneity	SIGNIFANCE
PUBYR	0.235	0.798	0.121	HOMOG	NTGSD 0.05
PUBFORM	0.096	0.766	0.244	HOMOG	NTGSD 0.05
JOURTYP	0.096	0.766	0.244	HOMOG	NTGSD 0.05
SOURCE	0.164	0.853	0.325	HOMOG	NTGSD 0.05
AUTHOR	0.180	0.684	HCNP	UNKNOWN	SEE Qt ANALYSIS
STUDYFLD	0.104	0.903	0.416	HOMOG	NTGSD 0.05
RESTYPE	0.507	0.694	0.207	HOMOG	NTGSD 0.05
FUNDING	ONLY ONE GROUP			NA	NA
DESIGN	0.212	0.659	0.372	HOMOG	NTGSD 0.05
SAMPMTHD	0.011	0.918	0.384	HOMOG	NTGSD 0.05
CGSMSZ	0.001	0.976	0.591	HOMOG	NTGSD 0.05
PGSMSZ	0.382	0.556	HCNP	UNKNOWN	SEE Qt ANALYSIS
SAMSIZT	0.096	0.766	0.244	HOMOG	NTGSD 0.05
QUALSTD	0.820	0.484	0.082	HOMOG	NTGSD 0.05
CGAGE	0.096	0.766	0.244	HOMOG	NTGSD 0.05
CGETH	1.929	0.225	0.100	HOMOG	NTGSD 0.05
CGMAR	6.187	0.035	HCNP	UNKNOWN	SEE Qt ANALYSIS
CGFAMS	0.213	0.814	0.000	HETEROG	SEE Qt ANALYSIS
CGED	0.281	0.765	0.000	HETEROG	SEE Qt ANALYSIS
PGAGE	0.096	0.766	0.244	HOMOG	NTGSD 0.05
PGETH	1.929	0.225	0.100	HOMOG	NTGSD 0.05
PGMAR	6.187	0.035	HCNP	UNKNOWN	SEE Qt ANALYSIS
PGFAMS	0.213	0.814	0.000	HETEROG	SEE Qt ANALYSIS
PGED	0.141	0.871	0.041	HETEROG	SEE Qt ANALYSIS
SETTING	3.683	0.097	0.350	HOMOG	NTGSD 0.05
NSGTHRY	ONLY ONE GROUP			NA	NA
NONSGTH	0.096	0.766	0.244	HOMOG	NTGSD 0.05
STAND	0.001	0.976	0.591	HOMOG	NTGSD 0.05
STATUSD	0.119	0.945	HCNP	UNKNOWN	SEE Qt ANALYSIS
OBTYPE	3.810	0.099	0.184	HOMOG	NTGSD 0.05

NTGSD 0.05 = NO TWO GROUPS ARE SIGNIFICANTLY DIFFERENT AT THE 0.05 LEVEL

HCNP = Tests for homogeneity of variance cannot be performed.

Only one group has a computed variance.

ONLY ONE GROUP = Fewer than two non-empty groups; ANOVA cannot be performed.

UNKNOWN = Homogeneity of variance not known.

HOMOG = Cochrans C (p GT 0.05) indicates variance Homogenous at 0.05 level; ANOVA is appropriate.

HETEROG = Cochrans C (p LT 0.05) indicates variance is Heterogenous at 0.05 level.

SEE Scheffe Analysis = See associated Scheffe analysis table for results.

SEE Qt ANALYSIS = See associated Qt analysis table for results.



# Qt / Scheffe Analysis Table

## DADH VARIABLES

K = 9

QT = 46.69

Author	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) 1	8	-0.038		Qb1&4 =	1.73 NSD .05
(2) 2	0	EMPTY			
(3) 3	0	EMPTY			
(4) 4	1	-0.175			
(5) 5	0	EMPTY			
Pregnant Group Sample Size	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 99	8	-0.031		Qb1&2 =	8.48 p < .05
(2) 100 thru 299	1	-0.228			
(3) 300 thru High	0	EMPTY			
Comparison Group Marital Stat	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Single or Never Married	7	-0.106		Qb1&2 =	24.89 p < .05
(2) Mixed group	1	-0.292		Qb1&3 =	24.89 p < .05
(3) Other	1	0.557		Qb2&3 =	46.70 p < .05
Comparison Group Family Inc	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low	6	-0.978		Qb1&2 =	9.53 p < .05
(2) Middle	2	0.000		Qb1&3 =	9.53 p < .05
(3) Unknown	1	0.110		Qb2&3 =	46.68 p < .05
Comparison Group Ed Status	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) 6th to 9th grade	2	-0.202		Qb1&2 =	46.46 p < .05
(2) 10th to 12th Grade	2	0.000		Qb1&3 =	12.92 p < .05
(3) Mixed group/	5	-0.015		Qb2&3 =	13.15 p < .05
(4) High School Graduate	0	EMPTY			
(5) Some College/Technical	0	EMPTY			
Pregnant Group Marital Status	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Single or Never Married	7	-0.106		Qb1&2 =	24.89 p < .05
(2) Mixed group	1	-0.292		Qb1&3 =	24.89 p < .05
(3) Other	1	0.557		Qb2&3 =	46.70 p < .05
Pregnant Group Family Income	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low	6	-0.978		Qb1&2 =	9.53 p < .05
(2) Middle	2	0.000		Qb1&3 =	9.53 p < .05
(3) Unknown	1	0.110		Qb2&3 =	46.68 p < .05
Pregnant Group Ed Status	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) 6th to 9th grade	3	-0.134		Qb1&2 =	44.59 p < .05
(2) 10th to 12th Grade	1	0.000		Qb1&3 =	11.05 p < .05
(3) Mixed group/	5	-0.015		Qb2&3 =	13.15 p < .05
(4) High School Graduate	0	EMPTY			
(5) Some College/Technical	0	EMPTY			

# Father in Home Meta-Analysis

396

Statistic Used	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Frequency, percentage, means, variance	6	-0.098	Qb1&2 =	9.53 NSD .05
			Qb1&3 =	9.53 NSD .05
(2) Chi-square, Fisher's Exact, McNemar	1	0.000	Qb1&4 =	9.53 NSD .05
			Qb2&3 =	46.68 p < .05
(3) ANOVA, t	1	0.110	Qb2&4 =	46.69 p < .05
(4) ANCOVA	1	0.000	Qb3&4 =	46.68 p < .05
(5) Multivariate correlation, r2, etc.	0	EMPTY		
(6) Other	0	EMPTY		

# Dating Relationship Meta-Analysis

397

## DATE ANOVA TABLE

STUDIES IN THE ANALYSIS; K = 12

MODERATOR VARIABLE	F RATIO	F PROB.	Cochrans C p =	Homogeneity	SIGNIFANCE
PUBYR	2.783	0.115	0.146	HOMOG	NTGSD 0.05
PUBFORM	0.025	0.878	0.125	HOMOG	NTGSD 0.05
JOURTYP	0.025	0.878	0.125	HOMOG	NTGSD 0.05
SOURCE	0.472	0.710	0.048	HETEROG	SEE Qt ANALYSIS
AUTHOR	0.058	0.981	0.144	HOMOG	NTGSD 0.05
STUDYFLD	0.086	0.918	0.287	HOMOG	NTGSD 0.05
RESTYPE	0.573	0.583	0.094	HOMOG	NTGSD 0.05
FUNDING	1.072	0.348	HCNP	UNKNOWN	SEE Qt ANALYSIS
DESIGN	0.026	0.874	0.255	HOMOG	NTGSD 0.05
SAMPMTHD	0.424	0.530	HCNP	UNKNOWN	SEE Qt ANALYSIS
CGSMSZ	0.067	0.802	0.809	HOMOG	NTGSD 0.05
PGSMSZ	1.921	0.196	0.008	HETEROG	SEE Qt ANALYSIS
SAMSIZT	0.391	0.549	0.812	HOMOG	NTGSD 0.05
QUALSTD	0.001	0.999	0.267	HOMOG	NTGSD 0.05
CGAGE	3.030	0.112	0.819	HOMOG	NTGSD 0.05
CGETH	0.797	0.480	0.782	HOMOG	NTGSD 0.05
CGMAR	3.466	0.077	HCNP	UNKNOWN	SEE Qt ANALYSIS
CGFAMS	0.745	0.502	0.676	HOMOG	NTGSD 0.05
CGED	4.983	0.035	0.613	HOMOG	SEE Scheffe Analysis
PGAGE	0.010	0.924	0.447	HOMOG	NTGSD 0.05
PGETH	0.757	0.497	HCNP	UNKNOWN	SEE Qt ANALYSIS
PGMAR	1.502	0.274	0.167	HOMOG	NTGSD 0.05
PGFAMS	0.745	0.502	0.676	HOMOG	NTGSD 0.05
PGED	2.009	0.190	0.452	HOMOG	NTGSD 0.05
SETTING	2.058	0.195	HCNP	UNKNOWN	SEE Qt ANALYSIS
NSGTHRY	ONLY ONE GROUP			NA	NA
NONSGTH	0.404	0.539	0.082	HOMOG	NTGSD 0.05
STAND	0.025	0.878	0.809	HOMOG	NTGSD 0.05
STATUSD	2.489	0.138	0.129	HOMOG	NTGSD 0.05
OBTYPE	0.855	0.521	0.156	HOMOG	NTGSD 0.05

NTGSD 0.05 = NO TWO GROUPS ARE SIGNIFICANTLY DIFFERENT AT THE 0.05 LEVEL

HCNP = Tests for homogeneity of variance cannot be performed.

Only one group has a computed variance.

ONLY ONE GROUP = Fewer than two non-empty groups; ANOVA cannot be performed.

UNKNOWN = Homogeneity of variance not known.

HOMOG = Cochrans C (p GT 0.05) indicates variance Homogenous at 0.05 level; ANOVA is appropriate.

HETEROG = Cochrans C (p LT 0.05) indicates variance is Heterogenous at 0.05 level.

SEE Scheffe Analysis = See associated Scheffe analysis table for results.

SEE Qt ANALYSIS = See associated Qt analysis table for results.

# Dating Relationship Meta-Analysis

398

## Qt / Scheffe Analysis Table

### DATE VARIABLES

K = 12

QT = 100.01

Source	Ki	MEAN Zr	ANALYSIS	SIGF
(1) CINAL	0	EMPTY	Qb2&4 = 100.01	p < .05
(2) ERIC	1	-0.129	Qb2&5 = 86.52	p < .05
(3) MEDLINE	0	EMPTY	Qb2&6 = 51.79	p < .05
(4) PsychLit	1	-0.393	Qb4&5 = 86.52	p < .05
(5) REF List	5	0.007	Qb4&6 = 51.80	p < .05
(6) DAI	5	-0.041	Qb5&6 = 38.30	p < .05

Funding	Ki	MEAN Zr	ANALYSIS	SIGF
(1) UNKNOWN	6	-0.162	Qb1&2 = 69.02	p < .05
(2) NONE	1	0.244	Qb1&4 = 69.00	p < .05
(3) Other	0	EMPTY	Qb1&5 = 61.48	p < .05
(4) Federal	2	0.138	Qb2&4 = 100.00	p < .05
(5) Foundation	3	-0.010	Qb2&5 = 92.48	p < .05
			Qb4&5 = 92.46	p < .05

Sampling Method	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Matched	0	EMPTY	Qb2&3 = 4.82	NSD .05
(2) Random and matched	1	-0.244		
(3) Convenience	11	-0.041		

Pregnant Group Sample Size	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 99	10	-0.108	Qb1&2 = 22.02	p < .05
(2) 100 thru 299	2	0.193		
(3) 300 thru High	0	EMPTY		

Comparison Group Marital Stat	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Single or Never Married	10	0.024	Qb1&2 = 29.10	p < .05
(2) Mixed group	1	-0.428		
(3) Other	1	-0.506		

Comparison Group Ed Status	Ki	MEAN Zr	ANALYSIS	SIGF
(1) 6th to 9th grade	1	-0.244	SCHEFFE 1&2	NSD .05
(2) 10th to 12th Grade	6	0.144	SCHEFFE 1&3	NSD .05
(3) Mixed group/	5	-0.263	SCHEFFE 2&3	p < .05
(4) High School Graduate	0	EMPTY		
(5) Some College/Technical	0	EMPTY		

Pregnant Group Ethnic	Ki	MEAN Zr	ANALYSIS	SIGF
(1) White	1	-0.129	Qb1&2 = 100.01	p < .05
(2) Black	1	-0.393	Qb1&4 = 37.23	p < .05
(3) Other/Unknown	0	EMPTY	Qb2&4 = 37.23	p < .05
(4) Mixed group	10	-0.017		

# Dating Relationship Meta-Analysis

399

Setting	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Hospital	1	-0.428	Qb1&2 = 100.00	p < .05
(2) Clinic	1	0.126	Qb1&4 = 31.13	p < .05
(3) School/Community	0	EMPTY	Qb1&6 = 100.00	p < .05
(4) Other	8	0.031	Qb2&4 = 31.14	p < .05
(5) Long Term Facility	0	EMPTY	Qb2&6 = 100.01	p < .05
(6) University	1	-0.506	Qb4&6 = 31.14	p < .05
(7) Unknown	0	EMPTY		

# Dependency Meta-Analysis

## DPNCY ANOVA TABLE

STUDIES IN THE ANALYSIS; K = 4

MODERATOR VARIABLE	F RATIO	F PROB.	Cochrans C p =	Homogeneity	SIGNIFANCE
PUBYR	0.349	0.768	HCNP	UNKNOWN	SEE Qt ANALYSIS
PUBFORM	0.402	0.591	HCNP	UNKNOWN	SEE Qt ANALYSIS
JOURTYP	0.402	0.591	HCNP	UNKNOWN	SEE Qt ANALYSIS
SOURCE	0.349	0.768	HCNP	UNKNOWN	SEE Qt ANALYSIS
AUTHOR	0.260	0.811	HCNP	UNKNOWN	SEE Qt ANALYSIS
STUDYFLD	0.142	0.742	HCNP	UNKNOWN	SEE Qt ANALYSIS
RESTYPE	1.002	0.422	0.145	HOMOG	NTGSD 0.05
FUNDING	0.402	0.591	HCNP	UNKNOWN	SEE Qt ANALYSIS
DESIGN	0.242	0.671	HCNP	UNKNOWN	SEE Qt ANALYSIS
SAMPMTHD	204.962	0.049	HCNP	UNKNOWN	SEE Qt ANALYSIS
CGSMSZ	ONLY ONE GROUP			NA	NA
PGSMSZ	ONLY ONE GROUP			NA	NA
SAMSIZT	ONLY ONE GROUP			NA	NA
QUALSTD	0.157	0.730	0.443	HOMOG	NTGSD 0.05
CGAGE	0.402	0.591	HCNP	UNKNOWN	SEE Qt ANALYSIS
CGETH	0.001	0.977	HCNP	UNKNOWN	SEE Qt ANALYSIS
CGMAR	0.142	0.742	HCNP	UNKNOWN	SEE Qt ANALYSIS
CGFAMS	0.242	0.671	HCNP	UNKNOWN	SEE Qt ANALYSIS
CGED	1.002	0.422	0.145	HOMOG	NTGSD 0.05
PGAGE	ONLY ONE GROUP			NA	NA
PGETH	0.242	0.671	HCNP	UNKNOWN	SEE Qt ANALYSIS
PGMAR	0.142	0.742	HCNP	UNKNOWN	SEE Qt ANALYSIS
PGFAMS	0.242	0.671	HCNP	UNKNOWN	SEE Qt ANALYSIS
PGED	1.002	0.422	0.145	HOMOG	NTGSD 0.05
SETTING	0.205	0.729	HCNP	UNKNOWN	SEE Qt ANALYSIS
NSGTHRY	ONLY ONE GROUP			NA	NA
NONSGTH	230.213	0.004	HCNP	UNKNOWN	SEE Qt ANALYSIS
STAND	ONLY ONE GROUP			NA	NA
STATUSD	230.213	0.004	HCNP	UNKNOWN	SEE Qt ANALYSIS
OBTYPE	2.539	0.357	HCNP	UNKNOWN	SEE Qt ANALYSIS

NTGSD 0.05 = NO TWO GROUPS ARE SIGNIFICANTLY DIFFERENT AT THE 0.05 LEVEL

HCNP = Tests for homogeneity of variance cannot be performed.

Only one group has a computed variance.

ONLY ONE GROUP = Fewer than two non-empty groups; ANOVA cannot be performed.

UNKNOWN = Homogeneity of variance not known.

HOMOG = Cochrans C (p GT 0.05) indicates variance Homogenous at 0.05 level;

ANOVA is appropriate.

HETEROG = Cochrans C (p LT 0.05) indicates variance is Heterogenous at 0.05 level.

SEE Scheffe Analysis = See associated Scheffe analysis table for results.

SEE Qt ANALYSIS = See associated Qt analysis table for results.

# Qt / Scheffe Analysis Table

## DPNCY VARIABLES

K = 4

QT = 8.31

Publication Year	Ki	MEAN Zr	ANALYSIS	SIGF
(1) LOW THRU 1979	2	0.265	Qb1&2 =	0.51 NSD .05
(2) 1980 THRU 1989	1	0.048	Qb1&3 =	0.51 NSD .05
(3) 1990 THRU HIGH	1	0.023	Qb2&3 =	8.30 p < .05

Publication Form	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Journal	3	0.192	Qb1&2 =	0.26 NSD .05
(2) Dissertation	1	0.023		

Journal Type	Ki	MEAN Zr	ANALYSIS	SIGF
(2) Speciality	3	0.192	Qb2&3 =	0.26 NSD .05
(3) NA	1	0.023		

Source	Ki	MEAN Zr	ANALYSIS	SIGF
(1) CINAL	0	EMPTY	Qb2&5 =	0.51 NSD .05
(2) ERIC	1	0.048	Qb2&6 =	8.30 NSD .05
(3) MEDLINE	0	EMPTY	Qb5&6 =	0.51 NSD .05
(4) PsychLit	0	EMPTY		
(5) REF List	2	0.265		
(6) DAI	1	0.023		

Author	Ki	MEAN Zr	ANALYSIS	SIGF
(1) 1	1	0.023	Qb1&2 =	3.45 NSD .05
(2) 2	2	0.254	Qb1&3 =	8.31 NSD .05
(3) 3	1	0.070	Qb2&3 =	3.46 NSD .05
(4) 4	0	EMPTY		
(5) 5	0	EMPTY		

Study Field	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Nursing	0	EMPTY	Qb4&5 =	2.03 NSD .05
(2) Sociology	0	EMPTY		
(3) Medicine	0	EMPTY		
(4) Psychology	3	0.177		
(5) Education	1	0.070		
(6) Public Health	0	EMPTY		

Funding	Ki	MEAN Zr	ANALYSIS	SIGF
(1) UNKNOWN	3	0.192	Qb1&2 =	0.26 NSD .05
(2) NONE	1	0.023		
(3) Other	0	EMPTY		
(4) Federal	0	EMPTY		
(5) Foundation	0	EMPTY		

# Dependency Meta-Analysis

402

Design	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Descriptive	1	0.048	Qb1&2 =	0.23	NSD .05
(2) Correlational	3	0.184			
Sampling Method	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Matched	1	0.459	Qb1&2 =	8.31	p < .05
(2) Random and matched	1	0.070	Qb1&3 =	8.29	p < .05
(3) Convenience	2	0.036	Qb2&3 =	8.30	p < .05
Comparison Group Sample Size	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 99	3	0.177	Qb1&3 =	2.03	NSD .05
(2) 100 thru 299	0	EMPTY			
(3) 300 thru High	1	0.070			
Sample Size Total	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 99	3	0.177	Qb1&3 =	2.03	NSD .05
(2) 100 thru 299	0	EMPTY			
(3) 300 thru High	1	0.070			
Comparison Group Age	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 15.99	1	0.023	Qb1&2 =	0.26	NSD .05
(2) 16 thru High	3	0.192			
Comparison Group Marital Stat	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Single or Never Married	3	0.177	Qb1&3 =	2.03	NSD .05
(2) Mixed group	0	EMPTY			
(3) Other	1	0.070			
Comparison Group Ethnic	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) White	1	0.048	Qb1&4 =	8.24	p < .05
(2) Black	0	EMPTY			
(3) Other/Unknown	1	0.023			
(4) Mixed group	2	0.465			
Comparison Group Family Inc	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low	3	0.184	Qb1&2 =	0.23	NSD .05
(2) Middle	1	0.048			
Pregnant Group Ethnic	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) White	1	0.048	Qb1&4 =	0.23	NSD .05
(2) Black	0	EMPTY			
(3) Other/Unknown	0	EMPTY			
(4) Mixed group	3	0.184			
Pregnant Group Marital Status	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Single or Never Married	3	0.177	Qb1&3 =	2.03	NSD .05
(2) Mixed group	0	EMPTY			
(3) Other	1	0.070			



# Dependency Meta-Analysis

403

Pregnant Group Family Income	Ki	MEAN Zr	ANALYSIS		SIGF
(1) Low	3	0.184	Qb1&2 =	0.23	NSD .05
(2) Middle	1	0.048			
(3) Unknown	0	EMPTY			
Setting	Ki	MEAN Zr	ANALYSIS		SIGF
(1) Hospital	0	EMPTY	Qb2&4 =	4.29	NSD .05
(2) Clinic	2	0.241			
(3) School/Community	0	EMPTY			
(4) Other	1	0.070			
(5) Long Term Facility	0	EMPTY			
(6) University	0	EMPTY			
(7) Unknown	0	EMPTY			
Other/NonNursing Theory	Ki	MEAN Zr	ANALYSIS		SIGF
(1) Yes	3	0.047	Qb1&2 =	8.22	p < .05
(2) No	1	0.459			
Statistic Used	Ki	MEAN Zr	ANALYSIS		SIGF
(1) Frequency, percentage, means, variance	0	EMPTY	Qb3&4 =	8.22	NSD .05
(2) Chi-square, Fisher's Exact, McNemar	0	EMPTY			
(3) ANOVA, t	3	0.047			
(4) ANCOVA	1	0.459			
(5) Multivariate correlation, r2, etc.	0	EMPTY			
(6) Other	0	EMPTY			
Observation Type	Ki	MEAN Zr	ANALYSIS		SIGF
(1) Chi-Square	0	EMPTY	Qb3&4 =	8.30	NSD .05
(2) Z-value	0	EMPTY	Qb3&5 =	8.29	NSD .05
(3) t-value	2	0.036	Qb4&5 =	8.31	NSD .05
(4) F-value	1	0.070			
(5) Other	0	EMPTY			

# Depression Meta-Analysis

404

## DPSN ANOVA TABLE

STUDIES IN THE ANALYSIS; K = 6

MODERATOR VARIABLE	F RATIO	F PROB.	Cochrans C p =	Homogeniety	SIGNIFANCE
PUBYR	1.197	0.336	0.487	HOMOG	NTGSD 0.05
PUBFORM	7.755	0.050	HCNP	UNKNOWN	SEE Qt ANALYSIS
JOURTYP	7.755	0.050	HCNP	UNKNOWN	SEE Qt ANALYSIS
SOURCE	7.755	0.050	HCNP	UNKNOWN	SEE Qt ANALYSIS
AUTHOR	3.566	0.227	0.026	HETEROG	SEE Qt ANALYSIS
STUDYFLD	2.876	0.201	0.752	HOMOG	NTGSD 0.05
RESTYPE	0.102	0.766	0.599	HOMOG	NTGSD 0.05
FUNDING	ONLY ONE GROUP			NA	NA
DESIGN	0.106	0.761	0.608	HOMOG	NTGSD 0.05
SAMPMTHD	0.400	0.702	0.588	HOMOG	NTGSD 0.05
CGSMSZ	ONLY ONE GROUP			NA	NA
PGSMSZ	ONLY ONE GROUP			NA	NA
SAMSIPT	0.051	0.836	HCNP	UNKNOWN	SEE Qt ANALYSIS
QUALSTD	0.557	0.497	0.289	HOMOG	NTGSD 0.05
CGAGE	6.095	0.069	0.608	HOMOG	NTGSD 0.05
CGETH	0.441	0.679	0.274	HOMOG	NTGSD 0.05
CGMAR	1.052	0.451	HCNP	UNKNOWN	SEE Qt ANALYSIS
CGFAMS	0.545	0.501	0.286	HOMOG	NTGSD 0.05
CGED	0.795	0.529	0.000	HETEROG	SEE Qt ANALYSIS
PGAGE	6.095	0.069	0.608	HOMOG	NTGSD 0.05
PGETH	0.545	0.501	0.286	HOMOG	NTGSD 0.05
PGMAR	1.052	0.451	HCNP	UNKNOWN	SEE Qt ANALYSIS
PGFAMS	0.545	0.501	0.286	HOMOG	NTGSD 0.05
PGED	0.795	0.529	0.000	HETEROG	SEE Qt ANALYSIS
SETTING	0.652	0.465	HCNP	UNKNOWN	SEE Qt ANALYSIS
NSGTHRY	ONLY ONE GROUP			NA	NA
NONSGTH	0.379	0.572	0.234	HOMOG	NTGSD 0.05
STAND	ONLY ONE GROUP			NA	NA
STATUSD	0.106	0.761	0.608	HOMOG	NTGSD 0.05
OBTYPE	0.143	0.873	0.462	HOMOG	NTGSD 0.05

NTGSD 0.05 = NO TWO GROUPS ARE SIGNIFICANTLY DIFFERENT AT THE 0.05 LEVEL

HCNP = Tests for homogeneity of variance cannot be performed.

Only one group has a computed variance.

ONLY ONE GROUP = Fewer than two non-empty groups; ANOVA cannot be performed.

UNKNOWN = Homogeneity of variance not known.

HOMOG = Cochrans C (p GT 0.05) indicates variance Homogenous at 0.05 level;

ANOVA is appropriate.

HETEROG = Cochrans C (p LT 0.05) indicates variance is Heterogenous at 0.05 level.

SEE Scheffe Analysis = See associated Scheffe analysis table for results.

SEE Qt ANALYSIS = See associated Qt analysis table for results.

## Educational Expectations Meta-Analysis

## EDEX ANOVA TABLE

STUDIES IN THE ANALYSIS; K = 9

MODERATOR VARIABLE	F RATIO	F PROB.	Cochrans C p =	Homogeneity	SIGNIFANCE
PUBYR	3.435	0.106	0.255	HOMOG	NTGSD 0.05
PUBFORM	2.230	0.179	0.705	HOMOG	NTGSD 0.05
JOURTYP	2.230	0.179	0.705	HOMOG	NTGSD 0.05
SOURCE	1.093	0.394	0.922	HOMOG	NTGSD 0.05
AUTHOR	1.614	0.298	0.404	HOMOG	NTGSD 0.05
STUDYFLD	1.365	0.354	0.805	HOMOG	NTGSD 0.05
RESTYPE	0.055	0.947	0.052	HOMOG	NTGSD 0.05
FUNDING	0.219	0.811	0.085	HOMOG	NTGSD 0.05
DESIGN	5.015	0.060	0.547	HOMOG	NTGSD 0.05
SAMPMTHD	ONLY ONE GROUP			NA	NA
CGSMSZ	3.175	0.125	0.454	HOMOG	NTGSD 0.05
PGSMSZ	3.928	0.088	0.696	HOMOG	NTGSD 0.05
SAMSIZT	9.999	0.025	0.375	HOMOG	SEE Scheffe Analysis
QUALSTD	1.186	0.368	0.376	HOMOG	NTGSD 0.05
CGAGE	0.135	0.725	0.005	HETEROG	SEE Qt ANALYSIS
CGETH	0.013	0.987	0.610	HOMOG	NTGSD 0.05
CGMAR	0.529	0.491	HCNP	UNKNOWN	SEE Qt ANALYSIS
CGFAMS	0.535	0.611	0.732	HOMOG	NTGSD 0.05
CGED	0.543	0.607	0.494	HOMOG	NTGSD 0.05
PGAGE	0.135	0.725	0.005	HETEROG	NTGSD 0.05
PGETH	0.013	0.987	0.610	HOMOG	NTGSD 0.05
PGMAR	2.599	0.154	HCNP	UNKNOWN	SEE Qt ANALYSIS
PGFAMS	0.535	0.611	0.732	HOMOG	NTGSD 0.05
PGED	1.018	0.416	0.796	HOMOG	NTGSD 0.05
SETTING	1.180	0.370	0.343	HOMOG	NTGSD 0.05
NSGTHRY	ONLY ONE GROUP			NA	NA
NONSGTH	0.418	0.539	0.020	HETEROG	SEE Qt ANALYSIS
STAND	ONLY ONE GROUP			NA	NA
STATUSD	4.989	0.053	0.000	HETEROG	SEE Qt ANALYSIS
OBTYPE	0.015	0.986	HCNP	UNKNOWN	SEE Qt ANALYSIS

NTGSD 0.05 = NO TWO GROUPS ARE SIGNIFICANTLY DIFFERENT AT THE 0.05 LEVEL

HCNP = Tests for homogeneity of variance cannot be performed.

Only one group has a computed variance.

ONLY ONE GROUP = Fewer than two non-empty groups; ANOVA cannot be performed.

UNKNOWN = Homogeneity of variance not known.

HOMOG = Cochrans C (p GT 0.05) indicates variance Homogenous at 0.05 level;

ANOVA is appropriate.

HETEROG = Cochrans C (p LT 0.05) indicates variance is Heterogenous at 0.05 level.

SEE Scheffe Analysis = See associated Scheffe analysis table for results.

SEE Qt ANALYSIS = See associated Qt analysis table for results.

# Qt / Scheffe Analysis Table

## EDEX VARIABLES

K = 9

QT = 66.12

Sample Size Total	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 99	2	-0.155		SCHEFFE 1&2	p < .05
(2) 100 thru 299	5	0.340		SCHEFFE 1&3	p < .05
(3) 300 thru High	2	0.128		SCHEFFE 2&3	p < .05
Comparison Group Age	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 15.99	2	0.243		Qb1&2 = 0.27	NSD .05
(2) 16 thru High	7	0.165			
Comparison Group Marital Stat	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Single or Never Married	8	0.160		Qb1&3 = 45.03	p < .05
(2) Mixed group	0	EMPTY			
(3) Other	1	0.360			
Pregnant Group Marital Status	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Single or Never Married	7	0.100		Qb1&2 = 46.18	p < .05
(2) Mixed group	1	0.578		Qb1&3 = 46.17	p < .05
(3) Other	1	0.360		Qb2&3 = 66.12	p < .05
Other/NonNursing Theory	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Yes	4	0.119		Qb1&2 = 5.23	p < .05
(2) No	5	0.232			
Statistic Used	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Frequency, percentage, means, variance	6	0.260		Qb1&2 = 15.31	p < .05
				Qb1&3 = 15.31	p < .05
(2) Chi-square, Fisher's Exact, McNemar	1	-0.346		Qb2&3 = 66.11	p < .05
(3) ANOVA, t	2	0.213			
(4) ANCOVA	0	EMPTY			
(5) Multivariate correlation, r <sup>2</sup> , etc.	0	EMPTY			
(6) Other	0	EMPTY			
Observation Type	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Chi-Square	7	0.173		Qb1&3 = 0.00	NSD .05
(2) Z-value	0	EMPTY		Qb1&4 = 0.00	NSD .05
(3) t-value	1	0.214		Qb3&4 = 66.12	p < .05
(4) F-value	1	0.212			
(5) Other	0	EMPTY			

# Ego Strength Meta-Analysis

## EGOST ANOVA TABLE

STUDIES IN THE ANALYSIS; K = 27

MODERATOR VARIABLE	F RATIO	F PROB.	Cochrans C p =	Homogeneity	SIGNIFANCE
PUBYR	1.116	0.344	0.456	HOMOG	NTGSD 0.05
PUBFORM	0.180	0.675	0.188	HOMOG	NTGSD 0.05
JOURTYP	0.180	0.675	0.188	HOMOG	NTGSD 0.05
SOURCE	1.074	0.380	0.582	HOMOG	NTGSD 0.05
AUTHOR	1.167	0.344	0.365	HOMOG	NTGSD 0.05
STUDYFLD	0.800	0.538	0.232	HOMOG	NTGSD 0.05
RESTYPE	0.158	0.923	0.012	HETEROG	SEE Qt ANALYSIS
FUNDING	0.093	0.912	0.000	HETEROG	SEE Qt ANALYSIS
DESIGN	2.013	0.168	0.677	HOMOG	NTGSD 0.05
SAMPMTHD	0.015	0.985	0.301	HOMOG	NTGSD 0.05
CGSMSZ	1.545	0.226	0.627	HOMOG	NTGSD 0.05
PGSMSZ	0.001	0.980	0.000	HETEROG	SEE Qt ANALYSIS
SAMSIZT	0.168	0.686	0.853	HOMOG	NTGSD 0.05
QUALSTD	1.491	0.245	0.818	HOMOG	NTGSD 0.05
CGAGE	0.575	0.455	0.941	HOMOG	NTGSD 0.05
CGETH	3.124	0.063	0.092	HOMOG	NTGSD 0.05
CGMAR	0.691	0.511	0.086	HOMOG	NTGSD 0.05
CGFAMS	1.939	0.166	0.333	HOMOG	NTGSD 0.05
CGED	1.802	0.187	0.082	HOMOG	NTGSD 0.05
PGAGE	0.193	0.664	0.083	HOMOG	NTGSD 0.05
PGETH	2.923	0.073	0.086	HOMOG	NTGSD 0.05
PGMAR	0.690	0.511	0.045	HETEROG	SEE Qt ANALYSIS
PGFAMS	1.939	0.166	0.333	HOMOG	NTGSD 0.05
PGED	1.539	0.236	0.028	HETEROG	SEE Qt ANALYSIS
SETTING	0.019	0.996	0.153	HOMOG	NTGSD 0.05
NSGTHRY	ONLY ONE GROUP			NA	NA
NONSGTH	0.092	0.764	0.844	HOMOG	NTGSD 0.05
STAND	0.949	0.339	0.290	HOMOG	NTGSD 0.05
STATUSD	4.198	0.017	0.319	HOMOG	SEE Scheffe Analysis
OBTYPE	1.355	0.281	0.180	HOMOG	NTGSD 0.05

NTGSD 0.05 = NO TWO GROUPS ARE SIGNIFICANTLY DIFFERENT AT THE 0.05 LEVEL

HCNP = Tests for homogeneity of variance cannot be performed.

Only one group has a computed variance.

ONLY ONE GROUP = Fewer than two non-empty groups; ANOVA cannot be performed.

UNKNOWN = Homogeneity of variance not known.

HOMOG = Cochrans C (p GT 0.05) indicates variance Homogenous at 0.05 level;

ANOVA is appropriate.

HETEROG = Cochrans C (p LT 0.05) indicates variance is Heterogenous at 0.05 level.

SEE Scheffe Analysis = See associated Scheffe analysis table for results.

SEE Qt ANALYSIS = See associated Qt analysis table for results.

## Qt / Scheffe Analysis Table

## EGOST VARIABLES

K = 27

QT = 141.00

Research Type	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Independent research	9	0.066	Qb1&2 = 79.89	p < .05
(2) Funded research	5	0.016	Qb1&3 = 80.14	p < .05
(3) Dissertation	10	0.080	Qb1&4 = 39.91	p < .05
(4) Unknown	3	0.137	Qb2&3 = 113.37	p < .05
			Qb2&4 = 73.14	p < .05

Qb3&amp;4 = 73.39 p &lt; .05

Funding	Ki	MEAN Zr	ANALYSIS	SIGF
(1) UNKNOWN	18	0.079	Qb1&2 = 17.91	p < .05
(2) NONE	4	0.094	Qb1&3 = 18.49	p < .05
(3) Other	1	0.192	Qb1&4 = 17.98	p < .05
(4) Federal	2	0.070	Qb1&5 = 15.25	p < .05
(5) Foundation	2	-0.130	Qb2&3 = 140.42	p < .05
			Qb2&4 = 139.91	p < .05
			Qb2&5 = 137.18	p < .05
			Qb3&4 = 140.49	p < .05
			Qb3&5 = 137.75	p < .05
			Qb4&5 = 137.25	p < .05

Pregnant Group Sample Size	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 99	24	0.070	Qb1&2 = 2.59	NSD .05
(2) 100 thru 299	3	0.066		
(3) 300 thru High	0	EMPTY		

Pregnant Group Marital Status	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Single or Never Married	18	0.105	Qb1&2 = 13.09	p < .05
(2) Mixed group	5	0.029	Qb1&3 = 4.99	NSD .05
(3) Other	4	-0.040	Qb2&3 = 126.79	p < .05

Pregnant Group Ed Status	Ki	MEAN Zr	ANALYSIS	SIGF
(1) 6th to 9th grade	5	0.167	Qb1&2 = 61.77	p < .05
(2) 10th to 12th Grade	13	0.093	Qb1&3 = 50.08	p < .05
(3) Mixed group/	8	-0.050	Qb1&4 = 92.58	p < .05
(4) High School Graduate	1	0.234	Qb2&3 = 67.67	p < .05
(5) Some College/Technical	0	EMPTY	Qb2&4 = 110.17	p < .05
			Qb3&4 = 98.49	p < .05

# Ego Strength Meta-Analysis

409

Statistic Used	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Frequency, percentage, means, variance	7	-0.082	SCHEFFE 1&2 SCHEFFE 1&3	NSD .05 NSD .05
(2) Chi-square, Fisher's Exact, McNemar	2	0.362	SCHEFFE 1&4 SCHEFFE 1&6	NSD .05 NSD .05
(3) ANOVA, t	15	0.103	SCHEFFE 2&3	NSD .05
(4) ANCOVA	2	-0.165	SCHEFFE 2&4	NSD .05
(5) Multivariate correlation, r2, etc.	0	EMPTY	SCHEFFE 2&6 SCHEFFE 3&4	NSD .05 NSD .05
(6) Other	1	0.520	SCHEFFE 3&6 SCHEFFE 4&6	NSD .05 NSD .05

# Family Dynamics Meta-Analysis

## FAM ANOVA TABLE

STUDIES IN THE ANALYSIS; K = 38

MODERATOR VARIABLE	F RATIO	F PROB.	Cochrans C p =	Homogeniety	SIGNIFANCE
PUBYR	1.477	0.242	0.393	HOMOG	NTGSD 0.05
PUBFORM	1.743	0.195	0.200	HOMOG	NTGSD 0.05
JOURTYP	1.743	0.195	0.200	HOMOG	NTGSD 0.05
SOURCE	3.702	0.009	0.000	HETEROG	SEE Qt ANALYSIS
AUTHOR	1.346	0.276	0.001	HETEROG	SEE Qt ANALYSIS
STUDYFLD	0.684	0.568	0.029	HOMOG	NTGSD 0.05
RESTYPE	2.762	0.057	0.001	HETEROG	SEE Qt ANALYSIS
FUNDING	5.497	0.010	0.000	HETEROG	SEE Qt ANALYSIS
DESIGN	0.748	0.393	0.041	HETEROG	SEE Qt ANALYSIS
SAMPMTHD	0.456	0.637	0.000	HETEROG	SEE Qt ANALYSIS
CGSMSZ	0.418	0.523	0.000	HETEROG	SEE Qt ANALYSIS
PGSMSZ	0.113	0.738	0.000	HETEROG	SEE Qt ANALYSIS
SAMSIZT	0.001	0.980	0.400	HOMOG	NTGSD 0.05
QUALSTD	0.268	0.767	0.323	HOMOG	NTGSD 0.05
CGAGE	0.008	0.931	0.043	HETEROG	SEE Qt ANALYSIS
CGETH	1.776	0.184	0.004	HETEROG	SEE Qt ANALYSIS
CGMAR	1.686	0.200	0.007	HETEROG	SEE Qt ANALYSIS
CGFAMS	2.076	0.141	0.020	HETEROG	SEE Qt ANALYSIS
CGED	2.995	0.063	0.657	HOMOG	NTGSD 0.05
PGAGE	0.760	0.389	0.000	HETEROG	SEE Qt ANALYSIS
PGETH	1.776	0.184	0.004	HETEROG	SEE Qt ANALYSIS
PGMAR	1.954	0.157	0.005	HETEROG	SEE Qt ANALYSIS
PGFAMS	0.985	0.384	0.037	HETEROG	SEE Qt ANALYSIS
PGED	1.874	0.169	0.348	HOMOG	NTGSD 0.05
SETTING	3.238	0.035	0.333	HOMOG	SEE Scheffe Analysis
NSGTHRY	ONLY ONE GROUP			NA	NA
NONGTH	0.101	0.753	0.013	HETEROG	SEE Qt ANALYSIS
STAND	ONLY ONE GROUP			NA	NA
STATUSD	1.253	0.309	0.001	HETEROG	SEE Qt ANALYSIS
OBTYPE	2.137	0.117	0.061	HOMOG	NTGSD 0.05

NTGSD 0.05 = NO TWO GROUPS ARE SIGNIFICANTLY DIFFERENT AT THE 0.05 LEVEL

HCNP = Tests for homogeneity of variance cannot be performed.

Only one group has a computed variance.

ONLY ONE GROUP = Fewer than two non-empty groups; ANOVA cannot be performed.

UNKNOWN = Homogeneity of variance not known.

HOMOG = Cochrans C (p GT 0.05) indicates variance Homogenous at 0.05 level;

ANOVA is appropriate.

HETEROG = Cochrans C (p LT 0.05) indicates variance is Heterogenous at 0.05 level.

SEE Scheffe Analysis = See associated Scheffe analysis table for results.

SEE Qt ANALYSIS = See associated Qt analysis table for results.



## Qt / Scheffe Analysis Table

## FAM VARIABLES

K = 38

QT = 338.44

Source	Ki	MEAN Zr	ANALYSIS	SIGF
(1) CINAL	2	0.753	Qb1&2 = 288.58	p < .05
(2) ERIC	2	-0.001	Qb1&3 = 288.77	p < .05
(3) MEDLINE	1	0.619	Qb1&4 = 288.77	p < .05
(4) PsychLit	1	-0.083	Qb1&5 = 219.61	p < .05
(5) REF List	14	0.053	Qb1&6 = 202.95	p < .05
(6) DAI	18	0.005	Qb2&3 = 338.26	p < .05
			Qb2&4 = 338.25	p < .05
			Qb2&5 = 269.10	p < .05
			Qb2&6 = 252.43	p < .05
			Qb3&4 = 338.44	p < .05
			Qb3&5 = 269.29	p < .05
			Qb3&6 = 252.62	p < .05
			Qb4&5 = 269.28	p < .05
			Qb4&6 = 252.62	p < .05
			Qb5&6 = 183.46	p < .05

Author	Ki	MEAN Zr	ANALYSIS	SIGF
(1) 1	24	0.025	Qb1&2 = 197.44	p < .05
(2) 2	5	0.258	Qb1&3 = 58.99	p < .05
(3) 3	5	0.226	Qb1&4 = 213.66	p < .05
(4) 4	4	-0.036	Qb2&3 = 148.18	p < .05
(5) 5	0	EMPTY	Qb2&4 = 302.86	p < .05
			Qb3&4 = 164.41	p < .05

Research Type	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Independent research	15	0.119	Qb1&2 = 250.11	p < .05
(2) Funded research	7	-0.002	Qb1&3 = 209.92	p < .05
(3) Dissertation	11	-0.067	Qb1&4 = 128.83	p < .05
(4) Unknown	5	0.368	Qb2&3 = 247.02	p < .05
			Qb2&4 = 165.93	p < .05
			Qb3&4 = 125.74	p < .05

Funding	Ki	MEAN Zr	ANALYSIS	SIGF
(1) UNKNOWN	28	0.045	Qb1&2 = 183.17	p < .05
(2) NONE	2	0.204	Qb1&3 = 134.30	p < .05
(3) Other	2	0.753	Qb1&4 = 183.66	p < .05
(4) Federal	2	0.099	Qb1&5 = 170.06	p < .05
(5) Foundation	4	0.022	Qb2&3 = 287.96	p < .05
			Qb2&4 = 337.32	p < .05
			Qb2&5 = 323.72	p < .05
			Qb3&4 = 288.46	p < .05
			Qb3&5 = 274.86	p < .05
			Qb4&5 = 324.21	p < .05

# Family Dynamics Meta-Analysis

412

Design	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Descriptive	11	0.006	Qb1&2 = 2.44	NSD .05
(2) Correlational	27	0.104		
Sampling Method	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Matched	1	0.026	Qb1&2 = 338.03	p < .05
(2) Random and matched	3	-0.090	Qb1&3 = 18.49	p < .05
(3) Convenience	34	0.092	Qb2&3 = 18.08	p < .05
Comparison Group Sample Size	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 99	29	0.095	Qb1&2 = 16.65	p < .05
(2) 100 thru 299	6	-0.001	Qb1&3 = 22.76	p < .05
(3) 300 thru High	3	0.078	Qb2&3 = 317.57	p < .05
Pregnant Group Sample Size	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 99	35	0.0806	Qb1&2 = 2.25	NSD .05
(2) 100 thru 299	3	0.016		
(3) 300 thru High	0	EMPTY		
Comparison Group Age	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 15.99	12	0.069	Qb1&2 = 5.25	p < .05
(2) 16 thru High	26	0.079		
Comparison Group Ethnic	Ki	MEAN Zr	ANALYSIS	SIGF
(1) White	5	0.266	Qb1&2 = 187.47	p < .05
(2) Black	7	0.167	Qb1&4 = 90.68	p < .05
(3) Other/Unknown	0	EMPTY	Qb2&4 = 168.00	p < .05
(4) Mixed group	26	0.014		
Comparison Group Marital Stat	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Single or Never Married	28	0.129	Qb1&2 = 86.49	p < .05
(2) Mixed group	5	-0.109	Qb1&3 = 48.88	p < .05
(3) Other	5	-0.043	Qb2&3 = 256.85	p < .05
Comparison Group Family Inc	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low	23	0.009	Qb1&2 = 39.24	p < .05
(2) Middle	11	0.234	Qb1&3 = 180.00	p < .05
(3) Unknown	4	0.024	Qb2&3 = 160.00	p < .05
Pregnant Group Age	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 15.99	9	-0.005	Qb1&2 = 10.42	p < .05
(2) 16 thru High	29	0.100		
Pregnant Group Ethnic	Ki	MEAN Zr	ANALYSIS	SIGF
(1) White	5	0.266	Qb1&2 = 187.47	p < .05
(2) Black	7	0.167	Qb1&4 = 90.68	p < .05
(3) Other/Unknown	0	EMPTY	Qb2&4 = 168.00	p < .05
(4) Mixed group	26	0.014		

Pregnant Group Marital Status	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Single or Never Married	27	0.138	Qb1&2 = 87.95	p < .05
(2) Mixed group	5	-0.105	Qb1&3 = 48.88	p < .05
(3) Other	5	-0.043	Qb2&3 = 256.85	p < .05

Pregnant Group Family Income	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low	24	0.034	Qb1&2 = 30.88	p < .05
(2) Middle	10	0.196	Qb1&3 = 188.98	p < .05
(3) Unknown	4	0.024	Qb2&3 = 159.30	p < .05

Setting	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Hospital	2	-0.193	SCHEFFE 1&2	NSD .05
(2) Clinic	13	0.192	SCHEFFE 1&3	NSD .05
(3) School/Community	1	-0.340	SCHEFFE 1&4	NSD .05
(4) Other	18	0.089	SCHEFFE 1&6	NSD .05
(5) Long Term Facility	0	EMPTY	SCHEFFE 2&3	NSD .05
(6) University	2	-0.343	SCHEFFE 2&4	NSD .05
(7) Unknown	0	EMPTY	SCHEFFE 2&6	NSD .05
			SCHEFFE 3&4	NSD .05
			SCHEFFE 3&6	NSD .05
			SCHEFFE 4&6	NSD .05

Other/NonNursing Theory	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Yes	22	0.062	Qb1&2 = 1.31	NSD .05
(2) No	16	0.095		

Statistic Used	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Frequency, percentage, means, variance	15	0.034	Qb1&2 = 116.87	p < .05
			Qb1&3 = 208.59	p < .05
(2) Chi-square, Fisher's Exact, McNemar	6	0.320	Qb1&4 = 273.77	p < .05
			Qb1&5 = 273.77	p < .05
(3) ANOVA, t	13	0.015	Qb1&6 = 273.78	p < .05
(4) ANCOVA	1	-0.094	Qb2&3 = 116.35	p < .05
(5) Multivariate correlation, r <sup>2</sup> , etc.	2	-0.035	Qb2&4 = 181.53	p < .05
			Qb2&5 = 181.53	p < .05
(6) Other	1	0.067	Qb2&6 = 181.54	p < .05
			Qb3&4 = 273.26	p < .05
			Qb3&5 = 273.26	p < .05
			Qb3&6 = 273.26	p < .05
			Qb4&5 = 338.44	p < .05
			Qb4&6 = 338.44	p < .05
			Qb5&6 = 338.44	p < .05

# Future Orientation Meta-Analysis

## FUTRO ANOVA TABLE

Studies in the analysis; K = 14

MODERATOR VARIABLE	F RATIO	F PROB.	Cochrans C p =	Homogeniety	SIGNIFANCE
PUBYR	0.025	0.878	0.001	HETEROG	SEE Qt ANALYSIS
PUBFORM	1.680	0.219	0.011	HETEROG	SEE Qt ANALYSIS
JOURTYP	1.680	0.219	0.011	HETEROG	SEE Qt ANALYSIS
SOURCE	0.347	0.840	0.044	HETEROG	SEE Qt ANALYSIS
AUTHOR	0.675	0.587	0.005	HETEROG	SEE Qt ANALYSIS
STUDYFLD	0.447	0.772	0.003	HETEROG	SEE Qt ANALYSIS
RESTYPE	1.155	0.351	0.005	HETEROG	SEE Qt ANALYSIS
FUNDING	0.301	0.747	0.001	HETEROG	SEE Qt ANALYSIS
DESIGN	1.970	0.186	0.012	HETEROG	SEE Qt ANALYSIS
SAMPMTHD	ONLY ONE GROUP			NA	NA
CGSMSZ	1.942	0.194	0.025	HETEROG	SEE Qt ANALYSIS
PGSMSZ	1.848	0.199	0.037	HETEROG	SEE Qt ANALYSIS
SAMSIPT	4.356	0.067	0.003	HETEROG	SEE Qt ANALYSIS
QUALSTD	0.178	0.839	0.000	HETEROG	SEE Qt ANALYSIS
CGAGE	0.218	0.649	0.000	HETEROG	SEE Qt ANALYSIS
CGETH	0.214	0.811	0.001	HETEROG	SEE Qt ANALYSIS
CGMAR	2.599	0.119	0.000	HETEROG	SEE Qt ANALYSIS
CGFAMS	0.399	0.681	0.000	HETEROG	SEE Qt ANALYSIS
CGED	0.780	0.482	0.000	HETEROG	SEE Qt ANALYSIS
PGAGE	0.305	0.591	0.000	HETEROG	SEE Qt ANALYSIS
PGETH	0.181	0.837	0.011	HETEROG	SEE Qt ANALYSIS
PGMAR	2.566	0.122	0.000	HETEROG	SEE Qt ANALYSIS
PGFAMS	0.399	0.681	0.000	HETEROG	SEE Qt ANALYSIS
PGED	0.580	0.576	0.000	HETEROG	SEE Qt ANALYSIS
SETTING	1.839	0.209	0.001	HETEROG	SEE Qt ANALYSIS
NSGTHRY	ONLY ONE GROUP			NA	NA
NONSGTH	0.960	0.347	0.000	HETEROG	SEE Qt ANALYSIS
STAND	ONLY ONE GROUP			NA	NA
STATUSD	0.207	0.657	0.000	HETEROG	SEE Qt ANALYSIS
OBTYPE	33.989	0.000	0.036	HETEROG	SEE Qt ANALYSIS

NTGSD 0.05 = NO TWO GROUPS ARE SIGNIFICANTLY DIFFERENT AT THE 0.05 LEVEL

HCNP = Tests for homogeneity of variance cannot be performed.

Only one group has a computed variance.

ONLY ONE GROUP = Fewer than two non-empty groups; ANOVA cannot be performed.

UNKNOWN = Homogeneity of variance not known.

HOMOG = Cochrans C (p GT 0.05) indicates variance Homogenous at 0.05 level;

ANOVA is appropriate.

HETEROG = Cochrans C (p LT 0.05) indicates variance is Heterogenous at 0.05 level.

SEE Scheffe Analysis = See associated Scheffe analysis table for results.

SEE Qt ANALYSIS = See associated Qt analysis table for results.

## Qt / Scheffe Analysis Table

## FUTRO VARIABLES

K = 14

QT = 166.60

Publication Year	Ki	MEAN Zr	ANALYSIS	SIGF
(1) LOW THRU 1979	0	empty	Qb2&3 =	0.41 NSD .05
(2) 1980 THRU 1989	10	0.080		
(3) 1990 THRU HIGH	4	0.119		

Publication Form	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Journal	7	0.228	Qb1&2 =	3.50 NSD .05
(2) Dissertation	7	-0.045		

Journal Type	Ki	MEAN Zr	ANALYSIS	SIGF
(2) Speciality	7	0.228	Qb2&3 =	3.50 NSD .05
(3) NA	7	-0.045		

Source	Ki	MEAN Zr	ANALYSIS	SIGF
(1) CINAL	1	0.191	Qb1&3 =	166.60 p < .05
(2) ERIC	0	EMPTY	Qb1&4 =	166.60 p < .05
(3) MEDLINE	1	0.179	Qb1&5 =	116.82 p < .05
(4) PsychLit	1	0.126	Qb1&6 =	53.59 p < .05
(5) REF List	4	0.275	Qb3&4 =	166.61 p < .05
(6) DAI	7	-0.045	Qb3&5 =	116.83 p < .05
			Qb3&6 =	53.59 p < .05
			Qb4&5 =	116.83 p < .05
			Qb4&6 =	53.59 p < .05
			Qb5&6 =	3.82 NSD .05

Author	Ki	MEAN Zr	ANALYSIS	SIGF
(1) 1	7	-0.052	Qb1&2 =	55.03 p < .05
(2) 2	1	0.239	Qb1&3 =	54.81 p < .05
(3) 3	3	0.126	Qb1&4 =	41.22 p < .05
(4) 4	3	0.341	Qb2&3 =	166.37 p < .05
(5) 5	0	EMPTY	Qb2&4 =	152.78 p < .05
			Qb3&4 =	152.55 p < .05

Study Field	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Nursing	1	0.038	Qb1&2 = 150.75	p < .05
(2) Sociology	3	0.301	Qb1&3 = 166.59	p < .05
(3) Medicine	2	0.092	Qb1&4 = 55.87	p < .05
(4) Psychology	6	-0.062	Qb1&5 = 166.60	p < .05
(5) Education	1	0.360	Qb1&6 = 166.60	p < .05
(6) Public Health	1	0.092	Qb2&3 = 150.73	p < .05
			Qb2&4 = 40.01	p < .05
			Qb2&5 = 150.74	p < .05
			Qb2&6 = 150.75	p < .05
			Qb3&4 = 55.86	p < .05
			Qb3&5 = 166.58	p < .05
			Qb3&6 = 166.59	p < .05
			Qb4&5 = 55.87	p < .05
			Qb4&6 = 55.87	p < .05
			Qb5&6 = 166.60	p < .05

Research Type	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Independent research	3	0.308	Qb1&2 = 135.07	p < .05
(2) Funded research	5	0.174	Qb1&3 = 42.71	p < .05
(3) Dissertation	6	-0.087	Qb2&3 = 40.22	p < .05
(4) Unknown	0	EMPTY		

Funding	Ki	MEAN Zr	ANALYSIS	SIGF
(1) UNKNOWN	7	0.002	Qb1&2 = 18.49	p < .05
(2) NONE	2	0.197	Qb1&3 = 13.37	p < .05
(3) Other	3	0.226	Qb1&5 = 19.00	p < .05
(4) Federal	0	EMPTY	Qb2&3 = 160.43	p < .05
(5) Foundation	2	0.090	Qb2&5 = 166.06	p < .05
			Qb3&5 = 160.94	p < .05

Design	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Descriptive	2	0.449	Qb1&2 = 48.41	p < .05
(2) Correlational	12	0.032		

Comparison Group Sample Size	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 99	8	-0.030	Qb1&2 = 43.29	p < .05
(2) 100 thru 299	4	0.330	Qb1&3 = 61.82	p < .05
(3) 300 thru High	2	0.090	Qb2&3 = 148.05	p < .05

Pregnant Group Sample Size	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 99	10	0.002	Qb1&2 = 37.45	p < .05
(2) 100 thru 299	4	0.316		
(3) 300 thru High	0	EMPTY		

Sample Size Total	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 99	3	-0.328	Qb1&2 = 70.63	p < .05
(2) 100 thru 299	8	0.232	Qb1&3 = 99.99	p < .05
(3) 300 thru High	3	0.079	Qb2&3 = 130.03	p < .05

# Future Orientation Meta-Analysis

417

Quality of Study	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 1.99	6	0.425	Qb1&2 =	4.30	NSD .05
(2) 2 thru 2.49	3	0.175	Qb1&3 =	4.60	NSD .05
(3) 2.5 thru 3	5	0.148	Qb2&3 =	160.21	p < .05
Comparison Group Age	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 15.99	3	0.191	Qb1&2 =	1.19	NSD .05
(2) 16 thru High	11	0.064			
Comparison Group Ethnic	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) White	2	0.173	Qb1&2 =	162.46	p < .05
(2) Black	3	0.204	Qb1&3 =	166.51	p < .05
(3) Other/Unknown	0	EMPTY	Qb1&4 =	53.86	p < .05
(4) Mixed group	9	0.036	Qb2&3 =	162.56	p < .05
			Qb2&4 =	49.91	p < .05
			Qb3&4 =	53.96	p < .05
Comparison Group Marital Stat	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Single or Never Married	11	0.193	Qb1&2 =	124.77	p < .05
(2) Mixed group	1	0.038			
(3) Other	2	-0.439			
Comparison Group Family Inc	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low	7	-0.008	Qb1&2 =	20.38	p < .05
(2) Middle	3	0.220			
(3) Unknown	4	0.170			
Comparison Group Ed Status	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) 6th to 9th grade	3	0.175	Qb1&2 =	153.76	p < .05
(2) 10th to 12th Grade	7	0.179	Qb1&3 =	20.85	p < .05
(3) Mixed group/	4	-0.125	Qb2&3 =	9.17	NSD .05
(4) High School Graduate	0	EMPTY			
(5) Some College/Technical	0	EMPTY			
Pregnant Group Age	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 15.99	3	0.209	Qb1&2 =	1.94	NSD .05
(2) 16 thru High	11	0.060			
Pregnant Group Ethnic	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) White	1	0.191	Qb1&2 =	162.55	p < .05
(2) Black	3	0.204	Qb1&3 =	166.61	p < .05
(3) Other/Unknown	0	EMPTY	Qb1&4 =	53.52	p < .05
(4) Mixed group	10	0.048	Qb2&3 =	162.56	p < .05
			Qb2&4 =	49.47	p < .05
			Qb3&4 =	53.53	p < .05
Pregnant Group Marital Status	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Single or Never Married	9	0.159	Qb1&2 =	132.65	p < .05
(2) Mixed group	3	0.243	Qb1&3 =	37.60	p < .05
(3) Other	2	-0.439	Qb2&3 =	19.19	p < .05

# Future Orientation Meta-Analysis

418

Pregnant Group Family Income	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low	7	-0.008	Qb1&2 = 20.38	p < .05
(2) Middle	3	0.220	Qb1&3 = 8.37	p < .05
(3) Unknown	4	0.170	Qb2&3 = 154.42	p < .05

Pregnant Group Ed Status	Ki	MEAN Zr	ANALYSIS	SIGF
(1) 6th to 9th grade	2	0.200	Qb1&2 = 153.95	p < .05
(2) 10th to 12th Grade	7	0.175	Qb1&3 = 21.12	p < .05
(3) Mixed group/	5	-0.069	Qb2&3 = 8.52	NSD .05
(4) High School Graduate	0	EMPTY		
(5) Some College/Technical	0	EMPTY		

Setting	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Hospital	0	EMPTY	Qb2&3 = 150.77	p < .05
(2) Clinic	5	0.268	Qb2&4 = 148.09	p < .05
(3) School/Community	1	-0.273	Qb2&6 = 52.24	p < .05
(4) Other	5	0.144	Qb3&4 = 163.92	p < .05
(5) Long Term Facility	0	EMPTY	Qb3&6 = 68.07	p < .05
(6) University	2	-0.273	Qb4&6 = 65.38	p < .05
(7) Unknown	0	EMPTY		

Other/NonNursing Theory	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Yes	7	-0.014	Qb1&2 = 0.01	NSD .05
(2) No	7	0.197		

Statistic Used	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Frequency, percentage, means, variance	8	0.048	Qb1&3 = 0.06	NSD .05
(2) Chi-square, Fisher's Exact, McNemar	0	EMPTY		
(3) ANOVA, t	6	0.150		
(4) ANCOVA	0	EMPTY		
(5) Multivariate correlation, r2, etc.	0	EMPTY		
(6) Other	0	EMPTY		

Observation Type	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Chi-Square	7	0.231	Qb1&2 = 115.54	p < .05
(2) Z-value	1	-1.238	Qb1&3 = 113.67	p < .05
(3) t-value	4	0.141	Qb1&4 = 114.85	p < .05
(4) F-value	2	0.169	Qb2&3 = 164.74	p < .05
(5) Other	0	EMPTY	Qb2&4 = 165.93	p < .05
			Qb3&4 = 164.05	p < .05



# School Grades Meta-Analysis

## GRDS ANOVA TABLE

STUDIES IN THE ANALYSIS; K = 8

MODERATOR VARIABLE	F RATIO	F PROB.	Cochrans C p =	Homogeniety	SIGNIFANCE
PUBYR	0.047	0.835	0.246	HOMOG	NTGSD 0.05
PUBFORM	0.927	0.373	0.696	HOMOG	NTGSD 0.05
JOURTYP	0.927	0.373	0.696	HOMOG	NTGSD 0.05
SOURCE	0.438	0.738	0.296	HOMOG	NTGSD 0.05
AUTHOR	0.611	0.579	0.549	HOMOG	NTGSD 0.05
STUDYFLD	2.424	0.247	0.803	HOMOG	NTGSD 0.05
RESTYPE	1.193	0.377	0.828	HOMOG	NTGSD 0.05
FUNDING	1.362	0.337	0.693	HOMOG	NTGSD 0.05
DESIGN	6.038	0.049	HCNP	UNKNOWN	SEE Qt ANALYSIS
SAMPMTHD	0.495	0.508	HCNP	UNKNOWN	SEE Qt ANALYSIS
CGSMSZ	6.038	0.049	HCNP	UNKNOWN	SEE Qt ANALYSIS
PGSMSZ	0.303	0.602	0.142	HOMOG	NTGSD 0.05
SAMSIPT	1.824	0.226	0.275	HOMOG	NTGSD 0.05
QUALSTD	5.258	0.059	0.774	HOMOG	NTGSD 0.05
CGAGE	0.264	0.626	0.746	HOMOG	NTGSD 0.05
CGETH	2.547	0.173	0.361	HOMOG	NTGSD 0.05
CGMAR	6.038	0.049	HCNP	UNKNOWN	SEE Qt ANALYSIS
CGFAMS	0.161	0.856	0.516	HOMOG	NTGSD 0.05
CGED	0.052	0.828	0.598	HOMOG	NTGSD 0.05
PGAGE	0.061	0.813	0.733	HOMOG	NTGSD 0.05
PGETH	4.809	0.068	HCNP	UNKNOWN	SEE Qt ANALYSIS
PGMAR	3.849	0.097	HCNP	UNKNOWN	SEE Qt ANALYSIS
PGFAMS	0.161	0.856	0.516	HOMOG	NTGSD 0.05
PGED	0.606	0.581	0.209	HOMOG	NTGSD 0.05
SETTING	8.336	0.028	0.929	HOMOG	SEE Scheffe Analysis
NSGTHRY	ONLY ONE GROUP			NA	NA
NONSGTH	5.038	0.066	0.306	HOMOG	NTGSD 0.05
STAND	ONLY ONE GROUP			NA	NA
STATUSD	0.465	0.653	0.338	HOMOG	NTGSD 0.05
OBTYPE	0.127	0.883	0.877	HOMOG	NTGSD 0.05

NTGSD 0.05 = NO TWO GROUPS ARE SIGNIFICANTLY DIFFERENT AT THE 0.05 LEVEL

HCNP = Tests for homogeneity of variance cannot be performed.

Only one group has a computed variance.

ONLY ONE GROUP = Fewer than two non-empty groups; ANOVA cannot be performed.

UNKNOWN = Homogeneity of variance not known.

HOMOG = Cochrans C (p GT 0.05) indicates variance Homogenous at 0.05 level;

ANOVA is appropriate.

HETEROG = Cochrans C (p LT 0.05) indicates variance is Heterogenous at 0.05 level.

SEE Scheffe Analysis = See associated Scheffe analysis table for results.

SEE Qt ANALYSIS = See associated Qt analysis table for results.

## Qt / Scheffe Analysis Table

## GRDS VARIABLES

K = 8

QT = 22.10

Design	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Descriptive	1	0.044		Qb1&2 = 14.64	p < .05
(2) Correlational	7	0.317			
Sampling Method	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Matched	1	0.376		Qb1&3 = 1.24	NSD .05
(2) Random and matched	0	EMPTY			
(3) Convenience	7	0.270			
Comparison Group Sample Size	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 99	7	0.317		Qb1&2 = 14.64	p < .05
(2) 100 thru 299	1	0.044			
(3) 300 thru High	0	EMPTY			
Comparison Group Marital Stat	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Single or Never Married	7	0.317		Qb1&3 = 14.64	p < .05
(2) Mixed group	0	EMPTY			
(3) Other	1	0.044			
Pregnant Group Ethnic	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) White	1	0.185		Qb1&2 = 22.10	p < .05
(2) Black	1	0.044		Qb1&4 = 17.02	p < .05
(3) Other/Unknown	0	EMPTY		Qb2&4 = 17.02	p < .05
(4) Mixed group	6	0.339			
Pregnant Group Marital Status	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Single or Never Married	6	0.299		Qb1&2 = 17.48	p < .05
(2) Mixed group	1	0.425		Qb1&3 = 17.48	p < .05
(3) Other	1	0.044		Qb2&3 = 22.10	p < .05
Setting	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Hospital	0	EMPTY		ANOVA 2&4	p < .05
(2) Clinic	2	0.115		SCHEFFE TEST NA	
(3) School/Community	0	EMPTY			
(4) Other	6	0.339			
(5) Long Term Facility	0	EMPTY			
(6) University	0	EMPTY			
(7) Unknown	0	EMPTY			

## Sexual Knowledge Meta-Analysis

## KNOSC ANOVA TABLE

STUDIES IN THE ANALYSIS; K = 11

MODERATOR VARIABLE	F RATIO	F PROB.	Cochrans C p =	Homogeneity	SIGNIFANCE
PUBYR	0.150	0.863	1.000	HOMOG	NTGSD 0.05
PUBFORM	0.053	0.823	0.022	HETEROG	SEE Qt ANALYSIS
JOURTYP	0.053	0.823	0.022	HETEROG	SEE Qt ANALYSIS
SOURCE	0.418	0.746	0.022	HETEROG	SEE Qt ANALYSIS
AUTHOR	1.691	0.244	0.003	HETEROG	SEE Qt ANALYSIS
STUDYFLD	0.693	0.623	0.163	HOMOG	NTGSD 0.05
RETYPE	0.529	0.609	0.258	HOMOG	NTGSD 0.05
FUNDING	1.377	0.188	HCNP	UNKNOWN	SEE Qt ANALYSIS
DESIGN	0.145	0.712	0.453	HOMOG	NTGSD 0.05
SAMPMTHD	2.944	0.110	0.000	HETEROG	SEE Qt ANALYSIS
CGSMSZ	2.588	0.142	HCNP	UNKNOWN	SEE Qt ANALYSIS
PGSMSZ	2.588	0.142	HCNP	UNKNOWN	SEE Qt ANALYSIS
SAMSIPT	0.522	0.488	0.283	HOMOG	NTGSD 0.05
QUALSTD	0.007	0.993	0.237	HOMOG	NTGSD 0.05
CGAGE	0.047	0.833	0.565	HOMOG	NTGSD 0.05
CGETH	0.593	0.575	0.145	HOMOG	NTGSD 0.05
CGMAR	2.022	0.195	0.092	HOMOG	NTGSD 0.05
CGFAMS	1.640	0.253	0.261	HOMOG	NTGSD 0.05
CGED	0.970	0.420	HCNP	UNKNOWN	SEE Qt ANALYSIS
PGAGE	0.047	0.833	0.565	HOMOG	NTGSD 0.05
PGETH	0.593	0.575	0.145	HOMOG	NTGSD 0.05
PGMAR	2.022	0.195	0.092	HOMOG	NTGSD 0.05
PGFAMS	1.640	0.253	0.261	HOMOG	NTGSD 0.05
PGED	1.255	0.336	0.106	HOMOG	NTGSD 0.05
SETTING	0.627	0.559	0.762	HOMOG	NTGSD 0.05
NSGTHRY	ONLY ONE GROUP			NA	NA
NONSGTH	0.180	0.681	0.155	HOMOG	NTGSD 0.05
STAND	8.500	0.017	0.180	HOMOG	SEE Scheffe Analysis
STATUSD	0.748	0.504	0.040	HETEROG	SEE Qt ANALYSIS
OBTYPE	0.748	0.504	0.040	HETEROG	SEE Qt ANALYSIS

NTGSD 0.05 = NO TWO GROUPS ARE SIGNIFICANTLY DIFFERENT AT THE 0.05 LEVEL

HCNP = Tests for homogeneity of variance cannot be performed.

Only one group has a computed variance.

ONLY ONE GROUP = Fewer than two non-empty groups; ANOVA cannot be performed.

UNKNOWN = Homogeneity of variance not known.

HOMOG = Cochrans C (p GT 0.05) indicates variance Homogenous at 0.05 level;

ANOVA is appropriate.

HETEROG = Cochrans C (p LT 0.05) indicates variance is Heterogenous at 0.05 level.

SEE Scheffe Analysis = See associated Scheffe analysis table for results.

SEE Qt ANALYSIS = See associated Qt analysis table for results.

# Living Arrangements Meta-Analysis

422

## LAR ANOVA TABLE

STUDIES IN THE ANALYSIS; K = 14

MODERATOR VARIABLE	F RATIO	F PROB.	Cochrans C p =	Homogeniety	SIGNIFANCE
PUBYR	0.126	0.883	0.109	HOMOG	SEE Scheffe Analysis
PUBFORM	0.183	0.676	0.013	HETEROG	SEE Qt ANALYSIS
JOURTYP	0.183	0.676	0.013	HETEROG	SEE Qt ANALYSIS
SOURCE	0.183	0.676	0.013	HETEROG	SEE Qt ANALYSIS
AUTHOR	0.031	0.992	0.016	HETEROG	SEE Qt ANALYSIS
STUDYFLD	0.189	0.902	0.000	HETEROG	SEE Qt ANALYSIS
RESTYPE	0.246	0.862	0.004	HETEROG	SEE Qt ANALYSIS
FUNDING	0.322	0.584	0.062	HETEROG	SEE Qt ANALYSIS
DESIGN	0.011	0.919	0.044	HETEROG	SEE Qt ANALYSIS
SAMPMTHD	0.250	0.626	HCNP	HETEROG	SEE Qt ANALYSIS
CGSMSZ	0.430	0.527	0.000	HETEROG	SEE Qt ANALYSIS
PGSMSZ	0.273	0.611	HCNP	UNKNOWN	SEE Qt ANALYSIS
SAMSIQT	0.667	0.438	0.026	HETEROG	SEE Qt ANALYSIS
QUALSTD	1.075	0.375	0.000	HETEROG	SEE Qt ANALYSIS
CGAGE	0.354	0.563	0.036	HETEROG	SEE Qt ANALYSIS
CGETH	0.070	0.933	HCNP	UNKNOWN	SEE Qt ANALYSIS
CGMAR	3.022	0.090	0.000	HETEROG	SEE Qt ANALYSIS
CGFAMS	0.204	0.818	0.007	HETEROG	SEE Qt ANALYSIS
CGED	0.595	0.568	0.001	HETEROG	SEE Qt ANALYSIS
PGAGE	0.034	0.857	0.020	HETEROG	SEE Qt ANALYSIS
PGETH	0.070	0.933	HCNP	UNKNOWN	SEE Qt ANALYSIS
PGMAR	3.022	0.090	0.000	HETEROG	SEE Qt ANALYSIS
PGFAMS	0.204	0.818	0.007	HETEROG	SEE Qt ANALYSIS
PGED	0.595	0.568	0.001	HETEROG	SEE Qt ANALYSIS
SETTING	29.012	0.000	0.556	HOMOG	SEE Scheffe Analysis
NSGTHRY	ONLY ONE GROUP			NA	NA
NONSGTH	0.767	0.398	0.008	HETEROG	SEE Qt ANALYSIS
STAND	ONLY ONE GROUP			NA	NA
STATUSD	0.171	0.686	0.015	HETEROG	SEE Qt ANALYSIS
OBTYPE	8.506	0.014	0.000	HETEROG	SEE Qt ANALYSIS

NTGSD 0.05 = NO TWO GROUPS ARE SIGNIFICANTLY DIFFERENT AT THE 0.05 LEVEL

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UNKNOWN = Homogeneity of variance not known.

HOMOG = Cochrans C (p GT 0.05) indicates variance Homogenous at 0.05 level;

ANOVA is appropriate.

HETEROG = Cochrans C (p LT 0.05) indicates variance is Heterogenous at 0.05 level.

SEE Scheffe Analysis = See associated Scheffe analysis table for results.

SEE Qt ANALYSIS = See associated Qt analysis table for results.

## Qt / Scheffe Analysis Table

## LAR VARIABLES

K = 14

QT = 106.73

Publication Year	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) LOW THRU 1979	2	0.042		SCHEFFE 1&2	NSD .05
(2) 1980 THRU 1989	9	-0.017		SCHEFFE 1&3	NSD .05
(3) 1990 THRU HIGH	3	0.107		SCHEFFE 2&3	NSD .05

Publication Form	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Journal	5	0.073		Qb1&2 =	2.39 NSD .05
(2) Dissertation	9	-0.013			

Journal Type	Ki	MEAN	Zr	ANALYSIS	SIGF
(2) Speciality	5	0.073		Qb2&3 =	2.39 NSD .05
(3) NA	9	-0.013			

Source	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) CINAL	0	EMPTY		Qb5&6 =	2.39 NSD .05
(2) ERIC	0	EMPTY			
(3) MEDLINE	0	EMPTY			
(4) PsychLit	0	EMPTY			
(5) REF List	5	0.073			
(6) DAI	9	-0.013			

Author	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) 1	9	0.003		Qb1&2 =	9.10 NSD .05
(2) 2	1	0.049		Qb1&3 =	9.09 NSD .05
(3) 3	2	0.091		Qb1&4 =	0.76 NSD .05
(4) 4	2	-0.008		Qb2&3 =	106.73 p < .05
(5) 5	0	EMPTY		Qb2&4 =	98.40 p < .05
				Qb3&4 =	98.39 p < .05

Study Field	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Nursing	2	0.115		Qb1&2 =	106.50 p < .05
(2) Sociology	2	0.059		Qb1&3 =	97.83 p < .05
(3) Medicine	4	0.018		Qb1&4 =	11.74 p < .05
(4) Psychology	4	-0.102		Qb1&5 =	104.48 p < .05
(5) Education	2	0.052		Qb2&3 =	98.03 p < .05
(6) Public Health	0	EMPTY		Qb2&4 =	11.94 p < .05
				Qb2&5 =	104.68 p < .05
				Qb3&4 =	3.27 NSD .05
				Qb3&5 =	96.01 p < .05
				Qb4&5 =	9.92 NSD .05

Research Type	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Independent research	4	0.127		Qb1&2 = 95.75	p < .05
(2) Funded research	3	0.008		Qb1&3 = 14.79	p < .05
(3) Dissertation	6	-0.071		Qb1&4 = 103.10	p < .05
(4) Unknown	1	0.142		Qb2&3 = 11.05	p < .05
				Qb2&4 = 99.37	p < .05
				Qb3&4 = 18.41	p < .05

Funding	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) UNKNOWN	9	-0.013		Qb1&2 = 8.20	NSD .05
(2) NONE	2	0.169		Qb1&5 = 2.44	NSD .05
(3) Other	0	EMPTY		Qb2&5 = 97.78	p < .05
(4) Federal	0	EMPTY			
(5) Foundation	3	0.020			

Design	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Descriptive	4	0.034		Qb1&2 = 1.16	NSD .05
(2) Correlational	10	0.011			

Sampling Method	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Matched	0	EMPTY		Qb2&3 = 8.01	p < .05
(2) Random and matched	1	-0.157			
(3) Convenience	13	0.031			

Comparison Group Sample Size	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 99	10	-0.028		Qb1&2 = 10.81	p < .05
(2) 100 thru 299	2	0.171		Qb1&3 = 11.44	p < .05
(3) 300 thru High	2	0.005		Qb2&3 = 106.08	p < .05

Pregnant Group Sample Size	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 99	13	0.004		Qb1&2 = 5.98	NSD .05
(2) 100 thru 299	1	0.200			
(3) 300 thru High	0	EMPTY			

Sample Size Total	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 99	5	-0.136		Qb1&2 = 23.23	p < .05
(2) 100 thru 299	5	0.081		Qb1&3 = 31.10	p < .05
(3) 300 thru High	4	-0.028		Qb2&3 = 90.16	p < .05

Quality of Study	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 1.99	4	0.370		Qb1&2 = 0.97	NSD .05
(2) 2 thru 2.49	7	0.166		Qb1&3 = 15.65	p < .05
(3) 2.5 thru 3	3	0.135		Qb2&3 = 91.51	p < .05

Comparison Group Age	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 15.99	5	0.095		Qb1&2 = 0.12	
(2) 16 thru High	9	-0.025			

Comparison Group Ethnic	Ki	MEAN Zr	ANALYSIS	SIGF
(1) White	1	-0.050	Qb1&2 = 106.72	p < .05
(2) Black	1	0.142	Qb1&4 = 1.87	NSD .05
(3) Other/Unknown	0	EMPTY	Qb2&4 = 1.87	NSD .05
(4) Mixed group	12	0.013		

Comparison Group Marital Stat	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Single or Never Married	10	0.087	Qb1&2 = 88.95	p < .05
(2) Mixed group	2	0.160	Qb1&3 = 14.05	p < .05
	2	-0.473	Qb2&3 = 28.67	p < .05

Comparison Group Family Inc	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low	9	-0.030	Qb1&2 = 0.34	NSD .05
(2) Middle	3	0.096		
(3) Other	2	0.115		

Comparison Group Ed Status	Ki	MEAN Zr	ANALYSIS	SIGF
(1) 6th to 9th grade	1	-0.157	Qb1&2 = 102.47	p < .05
(2) 10th to 12th Grade	7	0.122	Qb1&3 = 13.32	p < .05
(3) Mixed group/	6	-0.075	Qb2&3 = 9.06	NSD .05
(4) High School Graduate	0	EMPTY		
(5) Some College/Technical	0	EMPTY		

Pregnant Group Age	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 15.99	4	0.046	Qb1&2 = 0.41	NSD .05
(2) 16 thru High	10	0.006		

Pregnant Group Ethnic	Ki	MEAN Zr	ANALYSIS	SIGF
(1) White	1	-0.050	Qb1&2 = 106.72	p < .05
(2) Black	1	0.142	Qb1&4 = 1.87	NSD .05
(3) Other/Unknown	0	EMPTY	Qb2&4 = 1.87	NSD .05
(4) Mixed group	12	0.013		

Pregnant Group Marital Status	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Single or Never Married	10	0.087	Qb1&2 = 88.95	p < .05
(2) Mixed group	2	0.160	Qb1&3 = 14.05	p < .05
(3) Other	2	-0.473	Qb2&3 = 28.67	p < .05

Pregnant Group Family Income	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low	9	-0.030	Qb1&2 = 0.34	NSD .05
(2) Middle	3	0.096	Qb1&3 = 2.49	NSD .05
(3) Unknown	2	0.115	Qb2&3 = 104.16	p < .05

Pregnant Group Ed Status	Ki	MEAN Zr	ANALYSIS	SIGF
(1) 6th to 9th grade	1	-0.157	Qb1&2 = 102.47	p < .05
(2) 10th to 12th Grade	7	0.122	Qb1&3 = 13.32	p < .05
(3) Mixed group/	6	-0.075	Qb2&3 = 9.06	NSD .05
(4) High School Graduate	0	EMPTY		
(5) Some College/Technical	0	EMPTY		

Setting	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Hospital	1		SCHEFFE 1&2	NSD .05
(2) Clinic	4		SCHEFFE 1&4	NSD .05
(3) School/Community	0	EMPTY	SCHEFFE 1&6	p < .05
(4) Other	7		SCHEFFE 2&4	NSD .05
(5) Long Term Facility	0	EMPTY	SCHEFFE 2&6	p < .05
(6) University	1		SCHEFFE 4&6	p < .05
(7) Unknown	0	EMPTY		

Other/NonNursing Theory	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Yes	7	-0.065	Qb1&2 = 3.09	NSD .05
(2) No	7	0.101		

Statistic Used	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Frequency, percentage, means, variance	11	-0.003	Qb1&2 = 2.04	NSD .05
(2) Chi-square, Fisher's Exact, McNemar	3	0.095		
(3) ANOVA, t	0	EMPTY		
(4) ANCOVA	0	EMPTY		
(5) Multivariate correlation, r2, etc.	0	EMPTY		
(6) Other	0	EMPTY		

Observation Type	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Chi-Square	11	0.102	Qb1&2 = 44.70	p < .05
(2) Z-value	2	-0.535	Qb1&5 = 88.55	p < .05
(3) t-value	0	EMPTY	Qb2&5 = 62.88	p < .05
(4) F-value	0	EMPTY		
(5) Other	1	0.004		



## Locus of Control Meta-Analysis

## LOC ANOVA TABLE

STUDIES IN THE ANALYSIS; K = 15

MODERATOR VARIABLE	F RATIO	F PROB.	Cochrans C p =	Homogeneity	SIGNIFANCE
PUBYR	1.839	0.201	0.026	HETEROG	SEE Qt ANALYSIS
PUBFORM	0.754	0.401	0.115	HOMOG	NTGSD 0.05
JOURTYP	0.754	0.401	0.115	HOMOG	NTGSD 0.05
SOURCE	0.180	0.963	0.615	HOMOG	NTGSD 0.05
AUTHOR	0.119	0.947	0.001	HETEROG	SEE Qt ANALYSIS
STUDYFLD	0.516	0.726	0.065	HOMOG	NTGSD 0.05
RESTYPE	0.291	0.753	0.010	HETEROG	SEE Qt ANALYSIS
FUNDING	0.052	0.950	0.010	HETEROG	SEE Qt ANALYSIS
DESIGN	0.014	0.908	0.089	HOMOG	NTGSD 0.05
SAMPMTHD	ONLY ONE GROUP			NA	NA
CGSMSZ	0.005	0.945	0.324	HOMOG	NTGSD 0.05
PGSMSZ	ONLY ONE GROUP			NA	NA
SAMSIZT	0.024	0.880	0.002	HETEROG	SEE Qt ANALYSIS
QUALSTD	1.250	0.321	0.260	HOMOG	NTGSD 0.05
CGAGE	0.130	0.724	0.015	HETEROG	SEE Qt ANALYSIS
CGETH	0.423	0.666	0.011	HETEROG	SEE Qt ANALYSIS
CGMAR	1.059	0.377	0.096	HOMOG	NTGSD 0.05
CGFAMS	0.720	0.507	0.209	HOMOG	NTGSD 0.05
CGED	0.033	0.968	0.279	HOMOG	NTGSD 0.05
PGAGE	0.007	0.936	0.025	HETEROG	SEE Qt ANALYSIS
PGETH	0.423	0.666	0.011	HETEROG	SEE Qt ANALYSIS
PGMAR	1.059	0.377	0.096	HOMOG	NTGSD 0.05
PGFAMS	0.720	0.507	0.209	HOMOG	NTGSD 0.05
PGED	0.059	0.943	0.558	HOMOG	NTGSD 0.05
SETTING	0.249	0.784	0.078	HOMOG	NTGSD 0.05
NSGTHRY	0.089	0.770	HCNP	UNKNOWN	SEE Qt ANALYSIS
NONSGTH	2.756	0.121	0.251	HOMOG	NTGSD 0.05
STAND	4.098	0.064	0.168	HOMOG	NTGSD 0.05
STATUSD	1.863	0.200	0.196	HOMOG	NTGSD 0.05
OBTYPE	1.222	0.335	0.013	HETEROG	SEE Qt ANALYSIS

NTGSD 0.05 = NO TWO GROUPS ARE SIGNIFICANTLY DIFFERENT AT THE 0.05 LEVEL

HCNP = Tests for homogeneity of variance cannot be performed.

Only one group has a computed variance.

ONLY ONE GROUP = Fewer than two non-empty groups; ANOVA cannot be performed.

UNKNOWN = Homogeneity of variance not known.

HOMOG = Cochrans C (p GT 0.05) indicates variance Homogenous at 0.05 level;

ANOVA is appropriate.

HETEROG = Cochrans C (p LT 0.05) indicates variance is Heterogenous at 0.05 level.

SEE Scheffe Analysis = See associated Scheffe analysis table for results.

SEE Qt ANALYSIS = See associated Qt analysis table for results.

## Qt / Scheffe Analysis Table.

## LOC VARIABLES

K = 15

QT = 75.50

Publication Year	Ki	MEAN Zr	ANALYSIS	SIGF
(1) LOW THRU 1979	3	0.015	Qb1&2 = 60.65	p < .05
(2) 1980 THRU 1989	7	0.168	Qb1&3 = 23.34	p < .05
(3) 1990 THRU HIGH	5	-0.137	Qb2&3 = 23.47	p < .05

Author	Ki	MEAN Zr	ANALYSIS	SIGF
(1) 1	10	0.018	Qb1&2 = 5.76	p < .05
(2) 2	2	0.103	Qb1&3 = 6.66	p < .05
(3) 3	2	0.114	Qb1&4 = 6.97	p < .05
(4) 4	1	-0.075	Qb2&3 = 73.98	p < .05
(5) 5	0	EMPTY	Qb2&4 = 74.29	p < .05
			Qb3&4 = 75.20	p < .05

Research Type	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Independent research	5	-0.015	Qb1&2 = 11.82	p < .05
(2) Funded research	4	-0.011	Qb1&3 = 7.21	p < .05
(3) Dissertation	6	0.109	Qb2&3 = 61.25	p < .05
(4) Unknown	0	EMPTY		

Funding	Ki	MEAN Zr	ANALYSIS	SIGF
(1) UNKNOWN	9	0.066	Qb1&2 = 6.22	NSD .05
(2) NONE	2	-0.006	Qb1&3 = 4.63	NSD .05
(3) Other	2	0.010	Qb1&4 = 6.39	NSD .05
(4) Federal	1	0.046	Qb1&5 = 6.39	NSD .05
(5) Foundation	1	0.139	Qb2&3 = 73.56	p < .05
			Qb2&4 = 75.32	p < .05
			Qb2&5 = 75.32	p < .05
			Qb3&4 = 73.73	p < .05
			Qb3&5 = 73.73	p < .05
			Qb4&5 = 75.49	p < .05

Sample Size Total	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 99	8	0.047	Qb1&2 = -75.53	NSD .05
(2) 100 thru 299	7	0.023		
(3) 300 thru High	0	EMPTY		

Comparison Group Age	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 15.99	5	-0.003	Qb1&2 = 1.81	NSD .05
(2) 16 thru High	10	0.055		

Comparison Group Ethnic	Ki	MEAN Zr	ANALYSIS	SIGF
(1) White	2	-0.035	Qb1&2 = 29.46	p < .05
(2) Black	4	-0.092	Qb1&4 = 59.91	p < .05
(3) Other/Unknown	0	EMPTY	Qb1&5 = 72.79	p < .05
(4) Mixed group	8	0.066	Qb2&4 = 19.29	p < .05
			Qb2&5 = 32.17	p < .05
			Qb4&5 = 62.62	p < .05

Pregnant Group Age	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 15.99	5	0.045	Qb1&2 = 0.11	NSD .05
(2) 16 thru High	10	0.031		

Pregnant Group Ethnic	Ki	MEAN Zr	ANALYSIS	SIGF
(1) White	2	-0.035	Qb1&2 = 29.46	p < .05
(2) Black	4	-0.092	Qb1&4 = 59.91	p < .05
(3) Other/Unknown	0	EMPTY	Qb1&5 = 72.79	p < .05
(4) Mixed group	8	0.066	Qb2&4 = 19.29	p < .05
			Qb2&5 = 32.17	p < .05
			Qb4&5 = 62.62	p < .05

Nursing Theory	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Yes	1	-0.050	Qb1&2 = -0.01	NSD .05
(2) No	14	0.042		

Observation Type	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Chi-Square	3	0.027	Qb1&3 = 59.54	p < .05
(2) Z-value	0	EMPTY	Qb1&4 = 28.06	p < .05
(3) t-value	7	0.130	Qb1&5 = 63.73	p < .05
(4) F-value	3	-0.186	Qb3&4 = 27.23	p < .05
(5) Other	1	0.034	Qb3&5 = 62.91	p < .05
			Qb4&5 = 31.42	p < .05

# Role Identity Meta-Analysis

## MAFE ANOVA TABLE

STUDIES IN THE ANALYSIS; K = 5

MODERATOR VARIABLE	F RATIO	F PROB.	Cochrans C p =	Homogeniety	SIGNIFANCE
PUBYR	5.012	0.166	HCNP	UNKNOWN	SEE Qt ANALYSIS
PUBFORM	0.775	0.444	0.213	HOMOG	NTGSD 0.05
JOURTYP	0.775	0.444	0.213	HOMOG	NTGSD 0.05
SOURCE	5.529	0.153	HCNP	UNKNOWN	SEE Qt ANALYSIS
AUTHOR	14.576	0.032	HCNP	UNKNOWN	SEE Qt ANALYSIS
STUDYFLD	ONLY ONE GROUP			NA	NA
RESTYPE	5.529	0.153	HCNP	UNKNOWN	SEE Qt ANALYSIS
FUNDING	0.146	0.873	HCNP	UNKNOWN	SEE Qt ANALYSIS
DESIGN	ONLY ONE GROUP			NA	NA
SAMPMTHD	10.231	0.089	HCNP	UNKNOWN	SEE Qt ANALYSIS
CGSMSZ	ONLY ONE GROUP			NA	NA
PGSMSZ	ONLY ONE GROUP			NA	NA
SAMSIQT	2.921	0.186	0.068	HOMOG	NTGSD 0.05
QUALSTD	6.970	0.078	0.168	HOMOG	NTGSD 0.05
CGAGE	0.340	0.601	0.581	HOMOG	NTGSD 0.05
CGETH	6.632	0.124	0.626	HOMOG	NTGSD 0.05
CGMAR	ONLY ONE GROUP			NA	NA
CGFAMS	0.775	0.444	0.213	HOMOG	NTGSD 0.05
CGED	2.921	0.186	0.068	HOMOG	NTGSD 0.05
PGAGE	1.022	0.386	HCNP	UNKNOWN	SEE Qt ANALYSIS
PGETH	2.921	0.186	0.068	HOMOG	NTGSD 0.05
PGMAR	ONLY ONE GROUP			NA	NA
PGFAMS	0.775	0.444	0.213	HOMOG	NTGSD 0.05
PGED	6.970	0.078	0.168	HOMOG	NTGSD 0.05
SETTING	0.775	0.444	0.213	HOMOG	NTGSD 0.05
NSGTHRY	ONLY ONE GROUP			NA	NA
NONSGTH	1.271	0.342	0.248	HOMOG	NTGSD 0.05
STAND	ONLY ONE GROUP			NA	NA
STATUSD	ONLY ONE GROUP			NA	NA
OBTYPE	1.023	0.386	HCNP	UNKNOWN	SEE Qt ANALYSIS

NTGSD 0.05 = NO TWO GROUPS ARE SIGNIFICANTLY DIFFERENT AT THE 0.05 LEVEL

HCNP = Tests for homogeneity of variance cannot be performed.

Only one group has a computed variance.

ONLY ONE GROUP = Fewer than two non-empty groups; ANOVA cannot be performed.

UNKNOWN = Homogeneity of variance not known.

HOMOG = Cochrans C (p GT 0.05) indicates variance Homogenous at 0.05 level;

ANOVA is appropriate.

HETEROG = Cochrans C (p LT 0.05) indicates variance is Heterogenous at 0.05 level.

SEE Scheffe Analysis = See associated Scheffe analysis table for results.

SEE Qt ANALYSIS = See associated Qt analysis table for results.

## Qt / Scheffe Analysis Table.

## MAFE VARIABLES

K = 5

QT = 79.62

Publication Year	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) LOW THRU 1979	1	1.440		Qb1&2 = 70.50	p < .05
(2) 1980 THRU 1989	3	0.324		Qb1&3 = 79.62	p < .05
(3) 1990 THRU HIGH	1	0.406		Qb2&3 = 70.49	p < .05

Source	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) CINAL	1	0.221		Qb1&5 = 79.62	p < .05
(2) ERIC	0	EMPTY		Qb1&6 = 69.48	p < .05
(3) MEDLINE	0	EMPTY		Qb5&6 = 69.48	p < .05
(4) PsychLit	0	EMPTY			
(5) REF List	1	1.441			
(6) DAI	3	0.386			

Author	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) 1	4	0.345		Qb1&2 = 69.21	p < .05
(2) 2	1	1.441			
(3) 3	0	EMPTY			
(4) 4	0	EMPTY			
(5) 5	0	EMPTY			

Research Type	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Independent research	3	0.386		Qb1&2 = 69.48	p < .05
(2) Funded research	1	0.221		Qb1&4 = 69.48	p < .05
(3) Dissertation	0	EMPTY		Qb2&4 = 79.62	p < .05
(4) Unknown	1	1.441			

Funding	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) UNKNOWN	3	0.642		Qb1&2 = 10.16	p < .05
(2) NONE	1	0.673		Qb1&3 = 10.15	p < .05
(3) Other	1	0.221		Qb2&3 = 79.62	p < .05
(4) Federal	0	EMPTY			
(5) Foundation	0	EMPTY			

Sampling Method	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Matched	1	1.441		Qb1&2 = 79.62	p < .05
(2) Random and matched	1	0.078		Qb1&3 = 73.80	p < .05
(3) Convenience	3	0.433		Qb2&3 = 73.79	p < .05

Pregnant Group Age	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 15.99	1	0.078		Qb1&2 = 18.38	p < .05
(2) 16 thru High	4	0.685			

Observation Type	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Chi-Square	0	EMPTY	Qb3&4 = 18.38	p < .05
(2) Z-value	0	EMPTY		
(3) t-value	4	0.685		
(4) F-value	0	EMPTY		
(5) Other	1	0.078		

# Menstruation Onset Meta-Analysis

## MENSTU ANOVA TABLE

STUDIES IN THE ANALYSIS; K = 5

MODERATOR	F	F	Cochrans C	Homogeniety	SIGNIFANCE
VARIABLE	RATIO	PROB.	p =		
PUBYR	2.309	0.302	0.040	HETEROG	SEE Qt ANALYSIS
PUBFORM	6.018	0.091	0.502	HOMOG	NTGSD 0.05
JOURTYP	6.018	0.091	0.502	HOMOG	NTGSD 0.05
SOURCE	2.674	0.272	0.537	HOMOG	NTGSD 0.05
AUTHOR	2.674	0.272	0.537	HOMOG	NTGSD 0.05
STUDYFLD	3.875	0.205	0.059	HOMOG	NTGSD 0.05
RESTYPE	4.225	0.340	HCNP	UNKNOWN	SEE Qt ANALYSIS
FUNDING	0.036	0.867	HCNP	UNKNOWN	SEE Qt ANALYSIS
DESIGN	6.018	0.091	0.502	HOMOG	NTGSD 0.05
SAMPMTHD	0.485	0.673	0.029	HETEROG	SEE Qt ANALYSIS
CGSMSZ	0.000	0.991	HCNP	UNKNOWN	SEE Qt ANALYSIS
PGSMSZ	0.000	0.991	HCNP	UNKNOWN	SEE Qt ANALYSIS
SAMSIQT	0.380	0.581	0.733	HOMOG	NTGSD 0.05
QUALSTD	1.892	0.257	0.943	HOMOG	NTGSD 0.05
CGAGE	0.395	0.574	0.284	HOMOG	NTGSD 0.05
CGETH	2.122	0.320	0.757	HOMOG	NTGSD 0.05
CGMAR	0.000	0.991	HCNP	UNKNOWN	SEE Qt ANALYSIS
CGFAMS	3.875	0.205	0.059	HOMOG	NTGSD 0.05
CGED	0.395	0.574	0.284	HOMOG	NTGSD 0.05
PGAGE	0.395	0.574	0.284	HOMOG	NTGSD 0.05
PGETH	2.122	0.320	0.757	HOMOG	NTGSD 0.05
PGMAR	0.000	0.991	HCNP	UNKNOWN	SEE Qt ANALYSIS
PGFAMS	3.875	0.205	0.059	HOMOG	NTGSD 0.05
PGED	0.395	0.574	0.284	HOMOG	NTGSD 0.05
SETTING	0.395	0.574	0.284	HOMOG	NTGSD 0.05
NSGTHRY	ONLY ONE GROUP			NA	NA
NONSGTH	6.018	0.091	0.502	HOMOG	NTGSD 0.05
STAND	ONLY ONE GROUP			NA	NA
STATUSD	6.486	0.134	HCNP	UNKNOWN	SEE Qt ANALYSIS
OBTYP	12.646	0.071	HCNP	UNKNOWN	SEE Qt ANALYSIS

NTGSD 0.05 = NO TWO GROUPS ARE SIGNIFICANTLY DIFFERENT AT THE 0.05 LEVEL

HCNP = Tests for homogeneity of variance cannot be performed.

Only one group has a computed variance.

ONLY ONE GROUP = Fewer than two non-empty groups; ANOVA cannot be performed.

UNKNOWN = Homogeneity of variance not known.

HOMOG = Cochrans C (p GT 0.05) indicates variance Homogenous at 0.05 level;

ANOVA is appropriate.

HETEROG = Cochrans C (p LT 0.05) indicates variance is Heterogenous at 0.05 level.

SEE Scheffe Analysis = See associated Scheffe analysis table for results.

SEE Qt ANALYSIS = See associated Qt analysis table for results.

## QT / Scheffe Analysis Table

## MENSTU VARIABLES

K = 5

QT = 17.46

Publication Year	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) LOW THRU 1979	2	-0.125		Qb1&2 = 9.84	p < .05
(2) 1980 THRU 1989	2	0.219		Qb1&3 = 17.34	p < .05
(3) 1990 THRU HIGH	1	0.116		Qb2&3 = 9.96	p < .05

Research Type	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Independent research	1	0.380		Qb1&2 = 15.19	p < .05
(2) Funded research	2	-0.022		Qb1&3 = 17.45	p < .05
(3) Dissertation	1	0.116		Qb1&4 = 17.45	p < .05
(4) Unknown	1	-0.148		Qb2&3 = 15.20	p < .05
				Qb2&4 = 15.19	p < .05
				Qb3&4 = 17.45	p < .05

Funding	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) UNKNOWN	3	0.116		Qb1&3 = 4.22	NSD .05
(2) NONE	0	EMPTY		Qb1&5 = 4.22	NSD .05
(3) Other	1	0.058		Qb3&5 = 17.45	p < .05
(4) Federal	0	EMPTY			
(5) Foundation	1	0.102			

Sampling Method	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Matched	1	-0.148		Qb1&2 = 4.63	NSD .05
(2) Random and matched	2	0.139		Qb1&3 = 17.28	p < .05
(3) Convenience	2	0.087		Qb2&3 = 4.46	NSD .05

Comparison Group Sample Size	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 99	4	0.017		Qb1&2 = 0.02	NSD .05
(2) 100 thru 299	1	0.058			
(3) 300 thru High	0	EMPTY			

Pregnant Group Sample Size	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 99	4	0.017		Qb1&2 = 0.02	NSD .05
(2) 100 thru 299	1	0.058			
(3) 300 thru High	0	EMPTY			

Comparison Group Marital Status	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Single or Never Married	4	0.062		Qb1&3 = 0.02	NSD .05
(2) Mixed group	0	EMPTY			
(3) Other	1	0.058			

Pregnant Group Marital Status	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Single or Never Married	4	0.062		Qb1&3 = 0.02	NSD .05
(2) Mixed group	0	EMPTY			
(3) Other	1	0.058			



Statistic Used	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Frequency, percentage, means, variance	3	-0.064	Qb1&3 = 13.34	p < .05
			Qb1&4 = 13.35	p < .05
(2) Chi-square, Fisher's Exact, McNemar	0	EMPTY	Qb3&4 = 17.45	p < .05
(3) ANOVA, t	1	0.380		
(4) ANCOVA	1	0.116		
(5) Multivariate correlation, r2, etc.	0	EMPTY		
(6) Other	0	EMPTY		

Observation Type	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Chi-Square	3	-0.064	Qb1&4 = 13.34	p < .05
(2) Z-value	0	EMPTY	Qb1&5 = 13.35	p < .05
(3) t-value	0	EMPTY	Qb4&5 = 17.45	p < .05
(4) F-value	1	0.380		
(5) Other	1	0.116		

## Occupational Expectations Meta-Analysis

## OCEX ANOVA TABLE

STUDIES IN THE ANALYSIS; K = 6

MODERATOR VARIABLE	F RATIO	F PROB.	Cochrans C p =	Homogeniety	SIGNIFANCE
PUBYR	1.448	0.295	HCNP	UNKNOWN	SEE Qt ANALYSIS
PUBFORM	0.698	0.451	0.673	HOMOG	NTGSD 0.05
JOURTYP	0.698	0.451	0.673	HOMOG	NTGSD 0.05
SOURCE	0.252	0.856	0.339	HOMOG	NTGSD 0.05
AUTHOR	7.977	0.063	0.480	HOMOG	NTGSD 0.05
STUDYFLD	8.640	0.057	HCNP	UNKNOWN	SEE Qt ANALYSIS
RESTYPE	1.488	0.356	0.126	HOMOG	NTGSD 0.05
FUNDING	0.072	0.805	HCNP	UNKNOWN	SEE Qt ANALYSIS
DESIGN	21.207	0.010	HCNP	UNKNOWN	SEE Qt ANALYSIS
SAMPMTHD	ONLY ONE GROUP			NA	NA
CGSMSZ	3.280	0.168	0.285	HOMOG	NTGSD 0.05
PGSMSZ	21.207	0.010	HCNP	UNKNOWN	SEE Qt ANALYSIS
SAMSIZT	1.665	0.287	0.515	HOMOG	NTGSD 0.05
QUALSTD	0.012	0.988	0.022	HETEROG	SEE Qt ANALYSIS
CGAGE	0.003	0.958	HCNP	UNKNOWN	SEE Qt ANALYSIS
CGETH	0.539	0.631	0.425	HOMOG	NTGSD 0.05
CGMAR	ONLY ONE GROUP			NA	NA
CGFAMS	0.003	0.958	HCNP	UNKNOWN	SEE Qt ANALYSIS
CGED	0.658	0.580	0.208	HOMOG	NTGSD 0.05
PGAGE	0.002	0.965	0.018	HETEROG	SEE Qt ANALYSIS
PGETH	0.539	0.631	0.425	HOMOG	NTGSD 0.05
PGMAR	21.207	0.010	HCNP	UNKNOWN	SEE Qt ANALYSIS
PGFAMS	0.003	0.958	HCNP	UNKNOWN	SEE Qt ANALYSIS
PGED	0.658	0.580	0.208	HOMOG	NTGSD 0.05
SETTING	0.134	0.879	HCNP	UNKNOWN	SEE Qt ANALYSIS
NSGTHRY	ONLY ONE GROUP			NA	NA
NONGTH	0.458	0.536	0.057	HOMOG	NTGSD 0.05
STAND	ONLY ONE GROUP			NA	NA
STATUSD	0.053	0.829	0.002	HETEROG	SEE Qt ANALYSIS
OBTYPE	0.053	0.829	0.002	HETEROG	SEE Qt ANALYSIS

NTGSD 0.05 = NO TWO GROUPS ARE SIGNIFICANTLY DIFFERENT AT THE 0.05 LEVEL

HCNP = Tests for homogeneity of variance cannot be performed.

Only one group has a computed variance.

ONLY ONE GROUP = Fewer than two non-empty groups; ANOVA cannot be performed.

UNKNOWN = Homogeneity of variance not known.

HOMOG = Cochrans C (p GT 0.05) indicates variance Homogenous at 0.05 level; ANOVA is appropriate.

HETEROG = Cochrans C (p LT 0.05) indicates variance is Heterogenous at 0.05 level.

SEE Scheffe Analysis = See associated Scheffe analysis table for results.

SEE Qt ANALYSIS = See associated Qt analysis table for results.

# Qt / Scheffe Analysis Table

## OCEX VARIABLES

K = 6

QT = 31.06

Publication Year	Ki	MEAN Zr	ANALYSIS	SIGF
(1) LOW THRU 1979	5	0.233	Qb2&3 = 1.17	NSD .05
(2) 1980 THRU 1989	1	0.024		
(3) 1990 THRU HIGH				

Study Field	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Nursing	0	EMPTY	Qb2&4 = 29.64	p < .05
(2) Sociology	1	0.509	Qb2&5 = 31.06	p < .05
(3) Medicine	0	EMPTY	Qb5&4 = 29.65	p < .05
(4) Psychology	4	0.145		
(5) Education	1	0.102		
(6) Public Health	0	EMPTY		

Funding	Ki	MEAN Zr	ANALYSIS	SIGF
(1) UNKNOWN	4	0.230	Qb1&3 = 14.66	p < .05
(2) NONE	0	EMPTY	Qb1&5 = 14.66	p < .05
(3) Other	1	0.169	Qb3&5 = 31.06	p < .05
(4) Federal	0	EMPTY		
(5) Foundation	1	0.218		

Design	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Descriptive	1	0.509	Qb1&2 = 27.90	p < .05
(2) Correlational	5	0.136		

Pregnant Group Sample Size	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 99	5	0.136	Qb1&2 = 27.90	p < .05
(2) 100 thru 299	1	0.509		
(3) 300 thru High				

Quality of Study	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 1.99	3	0.212	Qb1&3 = -0.03	NSD .05
(2) 2 thru 2.49	0	EMPTY		
(3) 2.5 thru 3	3	0.185		

Comparison Group Age	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 15.99	1	0.208	Qb1&2 = 0.09	NSD .05
(2) 16 thru High	5	0.197		

Comparison Group Family Inc	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low	5	0.197	Qb1&2 = 0.09	NSD .05
(2) Middle	1	0.208		

Pregnant Group Marital Status	Ki	MEAN	Zr	ANALYSIS		SIGF
(1) Single or Never Married	5	0.136		Qb1&2 =	27.90	p < .05
(2) Mixed group	1	0.509				
(3) Other	0	EMPTY				

Pregnant Group Family Income	Ki	MEAN	Zr	ANALYSIS		SIGF
(1) Low	5	0.197		Qb1&2 =	0.09	NSD .05
(2) Middle	1	0.208				
(3) Unknown	0	EMPTY				

Setting	Ki	MEAN	Zr	ANALYSIS		SIGF
(1) Hospital	0	EMPTY		Qb2&4 =	15.24	p < .05
(2) Clinic	4	0.220		Qb2&6 =	15.24	p < .05
(3) School/Community	0	EMPTY		Qb4&6 =	31.06	p < .05
(4) Other	1	0.102				
(5) Long Term Facility	0	EMPTY				
(6) University	1	0.208				
(7) Unknown	0	EMPTY				

Statistic Used	Ki	MEAN	Zr	ANALYSIS		SIGF
(1) Frequency, percentage, means, variance	4	0.211		Qb1&3 =	-0.09	NSD .05
(2) Chi-square, Fisher's Exact, McNemar	0	EMPTY				
(3) ANOVA, t	2	0.174				
(4) ANCOVA	0	EMPTY				
(5) Multivariate correlation, r <sup>2</sup> , etc.	0	EMPTY				
(6) Other	0	EMPTY				

Observation Type	Ki	MEAN	Zr	ANALYSIS		SIGF
(1) Chi-Square	4	0.211		Qb1&3 =	-0.09	NSD .05
(2) Z-value	0	EMPTY				
(3) t-value	2	0.174				
(4) F-value	0	EMPTY				
(5) Other	0	EMPTY				

# Parental Relationship Meta-Analysis

## PARNT ANOVA TABLE

STUDIES IN THE ANALYSIS; K = 28

MODERATOR VARIABLE	F RATIO	F PROB.	Cochrans C p =	Homogeneity	SIGNIFANCE
PUBYR	0.650	0.591	0.001	HETEROG	SEE Qt ANALYSIS
PUBFORM	1.977	0.172	0.001	HETEROG	SEE Qt ANALYSIS
JOURTYP	0.969	0.393	0.001	HETEROG	SEE Qt ANALYSIS
SOURCE	3.732	0.018	0.000	HETEROG	SEE Qt ANALYSIS
AUTHOR	0.522	0.721	0.000	HETEROG	SEE Qt ANALYSIS
STUDYFLD	0.239	0.914	0.001	HETEROG	SEE Qt ANALYSIS
RESTYPE	1.881	0.160	0.000	HETEROG	SEE Qt ANALYSIS
FUNDING	21.025	0.000	0.000	HETEROG	SEE Qt ANALYSIS
DESIGN	0.028	0.869	0.001	HETEROG	SEE Qt ANALYSIS
SAMPMTHD	0.155	0.857	0.001	HETEROG	SEE Qt ANALYSIS
CGSMSZ	0.332	0.721	0.000	HETEROG	SEE Qt ANALYSIS
PGSMSZ	0.005	0.944	0.000	HETEROG	SEE Qt ANALYSIS
SAMSIPT	1.208	0.316	0.000	HETEROG	SEE Qt ANALYSIS
QUALSTD	0.289	0.751	0.016	HETEROG	SEE Qt ANALYSIS
CGAGE	0.125	0.727	0.000	HETEROG	SEE Qt ANALYSIS
CGETH	2.458	0.106	0.000	HETEROG	SEE Qt ANALYSIS
CGMAR	1.483	0.246	0.000	HETEROG	SEE Qt ANALYSIS
CGFAMS	0.774	0.472	0.000	HETEROG	SEE Qt ANALYSIS
CGED	31.427	0.000	0.709	HOMOG	SEE Scheffe Analysis
PGAGE	0.025	0.877	0.000	HETEROG	SEE Qt ANALYSIS
PGETH	2.458	0.106	0.000	HETEROG	SEE Qt ANALYSIS
PGMAR	1.483	0.246	0.000	HETEROG	SEE Qt ANALYSIS
PGFAMS	0.774	0.472	0.000	HETEROG	SEE Qt ANALYSIS
PGED	0.357	0.703	0.002	HETEROG	SEE Qt ANALYSIS
SETTING	0.703	0.628	0.000	HETEROG	SEE Qt ANALYSIS
NSGTHRY	ONLY ONE GROUP			NA	NA
NONGTH	0.192	0.665	0.000	HETEROG	SEE Qt ANALYSIS
STAND	ONLY ONE GROUP			NA	NA
STATUSD	4.114	0.017	0.000	HETEROG	SEE Qt ANALYSIS
OBTYP	1.044	0.392	0.003	HETEROG	SEE Qt ANALYSIS

NTGSD 0.05 = NO TWO GROUPS ARE SIGNIFICANTLY DIFFERENT AT THE 0.05 LEVEL

HCNP = Tests for homogeneity of variance cannot be performed.

Only one group has a computed variance.

ONLY ONE GROUP = Fewer than two non-empty groups; ANOVA cannot be performed.

UNKNOWN = Homogeneity of variance not known.

HOMOG = Cochrans C (p GT 0.05) indicates variance Homogenous at 0.05 level;

ANOVA is appropriate.

HETEROG = Cochrans C (p LT 0.05) indicates variance is Heterogenous at 0.05 level.

SEE Scheffe Analysis = See associated Scheffe analysis table for results.

SEE Qt ANALYSIS = See associated Qt analysis table for results.

## Qt / Scheffe Analysis Table

## PARNT VARIABLES

K = 28

QT = 312.89

Publication Year	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) LOW THRU 1979	5	0.197		Qb1&2 = 288.34	p < .05
(2) 1980 THRU 1989	15	0.106		Qb1&3 = 53.99	p < .05
(3) 1990 THRU HIGH	8	0.308		Qb2&3 = 55.69	p < .05

Publication Form	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Journal	14	0.245		Qb1&2 = 2.92	NSD .05
(2) Dissertation	14	0.095			

Journal Type	Ki	MEAN	Zr	ANALYSIS	SIGF
(2) Speciality	14	0.245		Qb2&3 = 2.92	NSD .05
(3) NA	14	0.095			

Source	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) CINAL	2	0.891		Qb1&2 = 254.06	p < .05
(2) ERIC	2	0.105		Qb1&3 = 257.38	p < .05
(3) MEDLINE	1	0.106		Qb1&5 = 237.55	p < .05
(4) PsychLit	0	EMPTY		Qb1&6 = 236.66	p < .05
(5) REF List	9	0.179		Qb2&3 = 316.58	p < .05
(6) DAI	14	0.095		Qb2&5 = 296.76	p < .05
				Qb2&6 = 295.87	p < .05
				Qb3&5 = 300.08	p < .05
				Qb3&6 = 299.19	p < .05
				Qb5&6 = 279.37	p < .05

Author	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) 1	16	0.127		Qb1&2 = 290.22	p < .05
(2) 2	4	0.161		Qb1&3 = 4.94	NSD .05
(3) 3	5	0.375		Qb1&4 = 293.44	p < .05
(4) 4	2	0.174		Qb1&5 = 293.62	p < .05
(5) 5	1	0.128		Qb2&3 = 27.83	p < .05
				Qb2&4 = 316.33	p < .05
				Qb2&5 = 316.50	p < .05
				Qb3&4 = 31.05	p < .05
				Qb3&5 = 31.23	p < .05
				Qb4&5 = 319.73	p < .05

Study Field	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Nursing	1	0.247	Qb1&2 = 316.68	p < .05
(2) Sociology	3	0.160	Qb1&3 = 306.84	p < .05
(3) Medicine	4	0.064	Qb1&4 = 52.46	p < .05
(4) Psychology	18	0.218	Qb1&5 = 317.66	p < .05
(5) Education	2	0.064	Qb2&3 = 303.62	p < .05
(6) Public Health	0	EMPTY	Qb2&4 = 49.25	p < .05
			Qb2&5 = 314.45	p < .05
			Qb3&4 = 39.40	p < .05
			Qb3&5 = 304.60	p < .05
			Qb4&5 = 50.23	p < .05

Research Type	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Independent research	12	0.121	Qb1&2 = 294.30	p < .05
(2) Funded research	5	0.134	Qb1&3 = 276.88	p < .05
(3) Dissertation	8	0.145	Qb1&4 = 94.41	p < .05
(4) Unknown	3	0.582	Qb2&3 = 299.50	p < .05
			Qb2&4 = 117.02	p < .05
			Qb3&4 = 99.61	p < .05

Funding	Ki	MEAN Zr	ANALYSIS	SIGF
(1) UNKNOWN	18	-0.224	Qb1&2 = 277.74	p < .05
(2) NONE	4	0.000	Qb1&3 = 278.59	p < .05
(3) Other	1	1.653	Qb1&4 = 278.58	p < .05
(4) Federal	2	0.136	Qb1&5 = 277.17	p < .05
(5) Foundation	3	0.105	Qb2&3 = 319.06	p < .05
			Qb2&4 = 319.05	p < .05
			Qb2&5 = 317.65	p < .05
			Qb3&4 = 319.89	p < .05
			Qb3&5 = 318.49	p < .05
			Qb4&5 = 318.48	p < .05

Design	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Descriptive	5	0.157	Qb1&2 = 0.01	NSD .05
(2) Correlational	23	0.184		

Sampling Method	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Matched	2	0.210	Qb1&2 = 309.17	p < .05
(2) Random and matched	3	0.078	Qb1&3 = 22.18	p < .05
(3) Convenience	23	0.190	Qb2&3 = 12.61	p < .05

Comparison Group Sample Size	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 99	22	0.203	Qb1&2 = 34.58	p < .05
(2) 100 thru 299	3	0.151	Qb1&3 = 26.02	p < .05
(3) 300 thru High	3	0.193	Qb2&3 = 307.14	p < .05

Pregnant Group Sample Size	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 99	26	0.178	Qb1&2 = 1.91	NSD .05
(2) 100 thru 299	2	0.196		
(3) 300 thru High	0	EMPTY		

Sample Size Total	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 99	16	0.132		Qb1&2 = 43.28	p < .05
(2) 100 thru 299	9	0.311		Qb1&3 = 288.55	p < .05
(3) 300 thru High	3	0.197		Qb2&3 = 53.30	p < .05
Quality of Study	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 1.99	6	0.304		Qb1&2 = 35.34	p < .05
(2) 2 thru 2.49	11	0.299		Qb1&3 = 287.58	p < .05
(3) 2.5 thru 3	11	0.167		Qb2&3 = 26.29	p < .05
Comparison Group Age	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 15.99	10	0.150		Qb1&2 = 0.81	NSD .05
(2) 16 thru High	18	0.196			
Comparison Group Ethnic	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) White	5	0.444		Qb1&2 = 129.26	p < .05
(2) Black	3	0.235		Qb1&4 = 93.16	p < .05
(3) Other/Unknown	0	EMPTY		Qb2&4 = 281.72	p < .05
(4) Mixed group	20	0.105			
Comparison Group Marital Stat	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Single or Never Married	23	0.209		Qb1&2 = 38.13	p < .05
(2) Mixed group	2	0.281		Qb1&3 = 37.18	p < .05
(3) Other	3	-0.117		Qb2&3 = 318.06	p < .05
Comparison Group Family Inc	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low	17	0.121		Qb1&2 = 35.36	p < .05
(2) Middle	9	0.290		Qb1&3 = 281.85	p < .05
(3) Unknown	2	0.179		Qb2&3 = 71.66	p < .05
Comparison Group Ed Status	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) 6th to 9th grade	7	0.185		SCHEFFE 1&2	NSD .05
(2) 10th to 12th Grade	12	0.101		SCHEFFE 1&3	NSD .05
(3) Mixed group/	8	0.109		SCHEFFE 2&3	NSD .05
(4) High School Graduate	0	EMPTY			
(5) Some College/Technical	0	EMPTY			
Pregnant Group Age	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 15.99	8	0.164		Qb1&2 = 1.04	NSD .05
(2) 16 thru High	20	0.186			
Pregnant Group Ethnic	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) White	5	0.444		Qb1&2 = 129.26	p < .05
(2) Black	3	0.235		Qb1&4 = 93.16	p < .05
(3) Other/Unknown	0	EMPTY		Qb2&4 = 281.72	p < .05
(4) Mixed group	20	0.105			



Pregnant Group Marital Status	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Single or Never Married	23	0.209	Qb1&2 = 38.13	p < .05
(2) Mixed group	2	0.281	Qb1&3 = 37.18	p < .05
(3) Other	3	-0.117	Qb2&3 = 318.06	p < .05

Pregnant Group Family Income	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low	17	0.121	Qb1&2 = 35.36	p < .05
(2) Middle	9	0.290	Qb1&3 = 281.85	p < .05
(3) Unknown	2	0.179	Qb2&3 = 71.66	p < .05

Pregnant Group Ed Status	Ki	MEAN Zr	ANALYSIS	SIGF
(1) 6th to 9th grade	8	0.166	Qb1&2 = 37.04	p < .05
(2) 10th to 12th Grade	12	0.236	Qb1&3 = 286.96	p < .05
(3) Mixed group/	8	0.109	Qb2&3 = 46.53	p < .05
(4) High School Graduate	0	EMPTY		
(5) Some College/Technical	0	EMPTY		

Setting	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Hospital	2	0.281	Qb1&2 = 103.63	p < .05
(2) Clinic	8	0.293	Qb1&3 = 319.46	p < .05
(3) School/Community	1	0.142	Qb1&4 = 291.97	p < .05
(4) Other	13	0.119	Qb1&5 = 319.45	p < .05
(5) Long Term Facility	1	0.187	Qb1&6 = 314.03	p < .05
(6) University	2	0.142	Qb2&3 = 104.08	p < .05
(7) Unknown	0	EMPTY	Qb2&4 = 76.59	p < .05
			Qb2&5 = 104.07	p < .05
			Qb2&6 = 98.65	p < .05
			Qb3&4 = 292.42	p < .05
			Qb3&5 = 319.90	p < .05
			Qb3&6 = 314.48	p < .05
			Qb4&5 = 292.42	p < .05
			Qb4&6 = 287.00	p < .05
			Qb5&6 = 314.48	p < .05

Other/NonNursing Theory	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Yes	16	0.203	Qb1&2 = 0.90	NSD .05
(2) No	12	0.148		

Statistic Used	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Frequency, percentage, means, variance	14	0.123	Qb1&2 = 178.56	p < .05
			Qb1&3 = 286.77	p < .05
(2) Chi-square, Fisher's Exact, McNemar	4	0.628	Qb1&4 = 303.28	p < .05
			Qb2&3 = 178.66	p < .05
(3) ANOVA, t	9	0.097	Qb2&4 = 195.17	p < .05
(4) ANCOVA	1	-0.076	Qb3&4 = 303.38	p < .05
(5) Multivariate correlation, r2, etc.	0	EMPTY		
(6) Other	0	EMPTY		

# Parental Relationship Meta-Analysis

Observation Type	Ki	MEAN Zr	ANALYSIS	SIGF	444
(1) Chi-Square	15	0.263	Qb1&2 =	48.70	p < .05
(2) Z-value	2	-0.125	Qb1&3 =	39.16	p < .05
(3) t-value	7	0.179	Qb1&4 =	44.38	p < .05
(4) F-value	3	0.052	Qb1&5 =	49.87	p < .05
(5) Other	1	0.189	Qb2&3 =	307.99	p < .05
			Qb2&4 =	313.22	p < .05
			Qb2&5 =	318.71	p < .05
			Qb3&4 =	303.68	p < .05
			Qb3&5 =	309.17	p < .05
			Qb4&5 =	314.39	p < .05

# Peer Relationship Meta-Analysis

## PEERS ANOVA TABLE

STUDIES IN THE ANALYSIS; K = 14

MODERATOR VARIABLE	F RATIO	F PROB.	Cochrans C p =	Homogeneity	SIGNIFANCE
PUBYR	1.640	0.242	0.028	HETEROG	SEE Qt ANALYSIS
PUBFORM	1.877	0.196	0.334	HOMOG	NTGSD 0.05
JOURTYP	1.206	0.336	0.350	HOMOG	NTGSD 0.05
SOURCE	1.234	0.348	0.314	HOMOG	NTGSD 0.05
AUTHOR	2.065	0.169	0.196	HOMOG	NTGSD 0.05
STUDYFLD	0.898	0.504	0.609	HOMOG	NTGSD 0.05
RESTYPE	3.820	0.046	0.348	HOMOG	SEE Qt ANALYSIS
FUNDING	0.675	0.587	0.068	HOMOG	NTGSD 0.05
DESIGN	0.039	0.846	0.644	HOMOG	NTGSD 0.05
SAMPMTHD	0.886	0.355	HCNP	UNKNOWN	SEE Qt ANALYSIS
CGSMSZ	0.238	0.792	0.435	HOMOG	NTGSD 0.05
PGSMSZ	0.054	0.820	0.231	HOMOG	NTGSD 0.05
SAMSIZT	1.400	0.287	0.285	HOMOG	NTGSD 0.05
QUALSTD	0.207	0.816	0.813	HOMOG	NTGSD 0.05
CGAGE	0.248	0.628	0.168	HOMOG	NTGSD 0.05
CGETH	0.158	0.922	0.166	HOMOG	NTGSD 0.05
CGMAR	0.510	0.489	0.088	HOMOG	NTGSD 0.05
CGFAMS	2.713	0.110	0.228	HOMOG	NTGSD 0.05
CGED	0.682	0.526	0.780	HOMOG	NTGSD 0.05
PGAGE	0.712	0.415	0.512	HOMOG	NTGSD 0.05
PGETH	0.158	0.922	0.166	HOMOG	NTGSD 0.05
PGMAR	0.253	0.781	0.027	HETEROG	SEE Qt ANALYSIS
PGFAMS	2.713	0.110	0.220	HOMOG	NTGSD 0.05
PGED	0.125	0.884	0.642	HOMOG	NTGSD 0.05
SETTING	1.265	0.324	0.202	HOMOG	NTGSD 0.05
NSGTHRY	ONLY ONE GROUP			NA	NA
NONSGTH	0.209	0.656	0.797	HOMOG	NTGSD 0.05
STAND	0.949	0.349	0.620	HOMOG	NTGSD 0.05
STATUSD	2.008	0.177	0.757	HOMOG	NTGSD 0.05
OBTYPE	0.257	0.779	0.301	HOMOG	NTGSD 0.05

NTGSD 0.05 = NO TWO GROUPS ARE SIGNIFICANTLY DIFFERENT AT THE 0.05 LEVEL

HCNP = Tests for homogeneity of variance cannot be performed.

Only one group has a computed variance.

ONLY ONE GROUP = Fewer than two non-empty groups; ANOVA cannot be performed.

UNKNOWN = Homogeneity of variance not known.

HOMOG = Cochrans C (p GT 0.05) indicates variance Homogenous at 0.05 level;

ANOVA is appropriate.

HETEROG = Cochrans C (p LT 0.05) indicates variance is Heterogenous at 0.05 level.

SEE Scheffe Analysis = See associated Scheffe analysis table for results.

SEE Qt ANALYSIS = See associated Qt analysis table for results.

## Qt / Scheffe Analysis Table.

## PEERS VARIABLES

K = 14

QT = 134.73

Publication Year	Ki	MEAN Zr	ANALYSIS	SIGF
(1) LOW THRU 1979	2	0.222	Qb1&2 = 80.34	p < .05
(2) 1980 THRU 1989	7	0.095	Qb1&3 = 54.44	p < .05
(3) 1990 THRU HIGH	5	0.246	Qb2&3 = 44.26	p < .05

Research Type	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Independent research	5	0.320	Qb1&2 = 69.06	p < .05
(2) Funded research	6	0.179	Qb1&3 = 110.48	p < .05
(3) Dissertation	1	0.138	Qb1&4 = 106.58	p < .05
(4) Unknown	2	0.386	Qb2&3 = 93.32	p < .05
			Qb2&4 = 89.41	p < .05
			Qb3&4 = 130.83	p < .05

Sampling Method	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Matched	0	EMPTY	Qb2&3 = 8.12	NSD .05
(2) Random and matched	1	0.244		
(3) Convenience	13	0.257		

Pregnant Group Marital Status	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Single or Never Married	10	0.255	Qb1&2 = 31.49	p < .05
(2) Mixed group	2	0.121	Qb1&3 = 6.48	p < .05
(3) Other	2	0.396	Qb2&3 = 109.29	p < .05

# Pregnant Role Model Meta-Analysis

## PTRM ANOVA TABLE

STUDIES IN THE ANALYSIS; K = 7

MODERATOR	F	F	Cochrans C	Homogeniety	SIGNIFANCE
VARIABLE	RATIO	PROB.	p =		
PUBYR	0.004	0.950	0.602	HOMOG	NTGSD 0.05
PUBFORM	0.107	0.757	0.322	HOMOG	NTGSD 0.05
JOURTYP	0.107	0.757	0.322	HOMOG	NTGSD 0.05
SOURCE	0.161	0.916	0.578	HOMOG	NTGSD 0.05
AUTHOR	0.801	0.510	0.014	HETEROG	SEE Qt ANALYSIS
STUDYFLD	0.410	0.759	HCNP	UNKNOWN	SEE Qt ANALYSIS
RESTYPE	0.871	0.486	0.027	HETEROG	SEE Qt ANALYSIS
FUNDING	1.890	0.228	0.021	HETEROG	SEE Qt ANALYSIS
DESIGN	0.006	0.941	0.587	HOMOG	NTGSD 0.05
SAMPMTHD	ONLY ONE GROUP			NA	NA
CGSMSZ	0.418	0.547	HCNP	UNKNOWN	SEE Qt ANALYSIS
PGSMSZ	0.418	0.547	HCNP	UNKNOWN	SEE Qt ANALYSIS
SAMSIZT	1.890	0.228	0.021	HETEROG	SEE Qt ANALYSIS
QUALSTD	2.723	0.179	0.890	HOMOG	NTGSD 0.05
CGAGE	0.944	0.376	HCNP	UNKNOWN	SEE Qt ANALYSIS
CGETH	2.090	0.239	0.706	HOMOG	NTGSD 0.05
CGMAR	3.580	0.117	0.274	HOMOG	NTGSD 0.05
CGFAMS	3.426	0.136	0.037	HETEROG	SEE Qt ANALYSIS
CGED	2.520	0.196	HCNP	UNKNOWN	SEE Qt ANALYSIS
PGAGE	0.304	0.605	HCNP	UNKNOWN	SEE Qt ANALYSIS
PGETH	2.090	0.239	0.706	HOMOG	NTGSD 0.05
PGMAR	1.459	0.334	0.197	HOMOG	NTGSD 0.05
PGFAMS	3.426	0.136	0.037	HETEROG	SEE Qt ANALYSIS
PGED	2.240	0.195	HCNP	UNKNOWN	SEE Qt ANALYSIS
SETTING	1.272	0.374	0.905	HOMOG	NTGSD 0.05
NSGTHRY	ONLY ONE GROUP			NA	NA
NONSGTH	0.004	0.950	0.602	HOMOG	NTGSD 0.05
STAND	0.077	0.792	0.904	HOMOG	NTGSD 0.05
STATUSD	2.096	0.238	0.685	HOMOG	NTGSD 0.05
OBTYPE	0.852	0.509	HCNP	UNKNOWN	SEE Qt ANALYSIS

NTGSD 0.05 = NO TWO GROUPS ARE SIGNIFICANTLY DIFFERENT AT THE 0.05 LEVEL

HCNP = Tests for homogeneity of variance cannot be performed.

Only one group has a computed variance.

ONLY ONE GROUP = Fewer than two non-empty groups; ANOVA cannot be performed.

UNKNOWN = Homogeneity of variance not known.

HOMOG = Cochrans C (p GT 0.05) indicates variance Homogenous at 0.05 level;

ANOVA is appropriate.

HETEROG = Cochrans C (p LT 0.05) indicates variance is Heterogenous at 0.05 level.

SEE Scheffe Analysis = See associated Scheffe analysis table for results.

SEE Qt ANALYSIS = See associated Qt analysis table for results.

## RDAD ANOVA TABLE

STUDIES IN THE ANALYSIS; K = 20

MODERATOR VARIABLE	F RATIO	F PROB.	Cochrans C p =	Homogeneity	SIGNIFANCE
PUBYR	1.817	0.193	0.535	HOMOG	NTGSD 0.05
PUBFORM	0.979	0.336	0.623	HOMOG	NTGSD 0.05
JOURTYP	0.979	0.336	0.623	HOMOG	NTGSD 0.05
SOURCE	0.468	0.709	1.000	HOMOG	NTGSD 0.05
AUTHOR	0.082	0.987	0.308	HOMOG	NTGSD 0.05
STUDYFLD	0.261	0.853	0.037	HETEROG	SEE Qt ANALYSIS
RESTYPE	0.243	0.865	0.003	HETEROG	SEE Qt ANALYSIS
FUNDING	0.026	0.874	0.051	HOMOG	NTGSD 0.05
DESIGN	0.005	0.946	0.085	HOMOG	NTGSD 0.05
SAMPMTHD	0.173	0.842	0.000	HETEROG	SEE Qt ANALYSIS
CGSMSZ	0.129	0.724	0.000	HETEROG	SEE Qt ANALYSIS
PGSMSZ	0.217	0.647	HCNP	UNKNOWN	SEE Qt ANALYSIS
SAMSIZT	1.382	0.256	0.001	HETEROG	SEE Qt ANALYSIS
QUALSTD	6.764	0.007	0.255	HOMOG	SEE Scheffe Analysis
CGAGE	0.469	0.502	0.003	HETEROG	SEE Qt ANALYSIS
CGETH	0.624	0.548	0.036	HETEROG	SEE Qt ANALYSIS
CGMAR	4.148	0.034	0.001	HETEROG	SEE Qt ANALYSIS
CGFAMS	0.152	0.860	0.692	HOMOG	NTGSD 0.05
CGED	1.176	0.333	0.078	HOMOG	NTGSD 0.05
PGAGE	0.753	0.397	0.002	HETEROG	SEE Qt ANALYSIS
PGETH	0.624	0.548	0.036	HETEROG	SEE Qt ANALYSIS
PGMAR	4.148	0.034	0.001	HETEROG	SEE Qt ANALYSIS
PGFAMS	0.152	0.860	0.692	HOMOG	NTGSD 0.05
PGED	0.800	0.465	0.098	HOMOG	NTGSD 0.05
SETTING	0.581	0.637	0.000	HETEROG	SEE Qt ANALYSIS
NSGTHRY	ONLY ONE GROUP			NA	NA
NONSGTH	0.200	0.660	0.007	HETEROG	SEE Qt ANALYSIS
STAND	ONLY ONE GROUP			NA	NA
STATUSD	0.781	0.522	0.029	HETEROG	SEE Qt ANALYSIS
OBTYPE	3.780	0.034	0.285	HOMOG	SEE Scheffe Analysis

NTGSD 0.05 = NO TWO GROUPS ARE SIGNIFICANTLY DIFFERENT AT THE 0.05 LEVEL

HCNP = Tests for homogeneity of variance cannot be performed.

Only one group has a computed variance.

ONLY ONE GROUP = Fewer than two non-empty groups; ANOVA cannot be performed.

UNKNOWN = Homogeneity of variance not known.

HOMOG = Cochrans C (p GT 0.05) indicates variance Homogeneous at 0.05 level;

ANOVA is appropriate.

HETEROG = Cochrans C (p LT 0.05) indicates variance is Heterogeneous at 0.05 level.

SEE Scheffe Analysis = See associated Scheffe analysis table for results.

SEE Qt ANALYSIS = See associated Qt analysis table for results.

# Qt / Scheffe Analysis

## RDAD VARIABLES

K = 20

QT = 53.87

Study Field	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Nursing	1	0.296	Qb1&2 = 50.30	p < .05
(2) Sociology	3	0.167	Qb1&4 = 7.44	NSD .05
(3) Medicine	0	EMPTY	Qb1&5 = 53.87	p < .05
(4) Psychology	13	0.092	Qb2&4 = 48.78	p < .05
(5) Education	3	0.132	Qb2&5 = 50.29	p < .05
(6) Public Health	0	EMPTY	Qb2&4 = 3.86	NSD .05
			Qb4&5 = 7.43	NSD .05

Research Type	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Independent research	8	0.090	Qb1&2 = 45.11	p < .05
(2) Funded research	3	0.162	Qb1&3 = 4.76	NSD .05
(3) Dissertation	7	0.163	Qb1&4 = 45.03	p < .05
(4) Unknown	2	0.021	Qb2&3 = 10.36	p < .05
			Qb2&4 = 50.63	p < .05
			Qb3&4 = 10.29	p < .05

Sampling Method	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Matched	1	0.255	Qb1&2 = 52.34	p < .05
(2) Random and matched	3	0.132	Qb1&3 = 2.27	NSD .05
(3) Convenience	16	0.109	Qb2&3 = 0.76	NSD .05

Comparison Group Sample Size	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 99	16	0.113	Qb1&2 = 2.55	NSD .05
(2) 100 thru 299	3	0.168	Qb1&3 = 4.05	NSD .05
(3) 300 thru High	0	EMPTY	Qb2&3 = 52.37	p < .05

Pregnant Group Sample Size	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 99	19	0.114	Qb1&2 = 2.84	NSD .05
(2) 100 thru 299	1	0.228		
(3) 300 thru High	0	EMPTY		

Sample Size Total	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 99	13	0.078	Qb1&2 = 12.73	p < .05
(2) 100 thru 299	6	0.216	Qb1&3 = 17.13	p < .05
(3) 300 thru High	1	0.081	Qb2&3 = 49.47	p < .05

Quality of Study	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 1.99	4	0.429	SCHEFFE 1&2	p < .05
(2) 2 thru 2.49	6	0.118	SCHEFFE 1&3	p < .05
(3) 2.5 thru 3	10	0.196	SCHEFFE 2&3	NSD .05

# Father Relationship Meta-Analysis

450

Comparison Group Age	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 15.99	10	0.156	Qb1&2 =	6.84 p < .05
(2) 16 thru High	10	0.083		

Comparison Group Ethnic	Ki	MEAN Zr	ANALYSIS	SIGF
(1) White	4	0.178	Qb1&2 =	45.68 p < .05
(2) Black	2	0.259	Qb1&4 =	2.96 NSD .05
(3) Other/Unknown	0	EMPTY	Qb2&4 =	10.97 p < .05
(4) Mixed group	14	0.083		

Comparison Group Marital Stat	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Single or Never Married	16	0.139	Qb1&2 =	33.72 p < .05
(2) Mixed group	2	0.319	Qb1&3 =	13.44 p < .05
(3) Other	2	-0.238	Qb2&3 =	33.46 p < .05

Pregnant Group Age	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 15.99	7	0.182	Qb1&2 =	7.20 p < .05
(2) 16 thru High	13	0.086		

Pregnant Group Ethnic	Ki	MEAN Zr	ANALYSIS	SIGF
(1) White	4	0.178	Qb1&2 =	45.68 p < .05
(2) Black	2	0.259	Qb1&4 =	2.96 NSD .05
(3) Other/Unknown	0	EMPTY	Qb2&4 =	10.97 p < .05
(4) Mixed group	14	0.083		

Pregnant Group Marital Status	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Single or Never Married	16	0.139	Qb1&2 =	33.72 p < .05
(2) Mixed group	2	0.319	Qb1&3 =	13.44 p < .05
(3) Other	2	-0.238	Qb2&3 =	33.46 p < .05

Setting	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Hospital	2	0.319	Qb1&2 =	48.81 p < .05
(2) Clinic	6	0.068	Qb1&3 =	53.81 p < .05
(3) School/Community	2	0.079	Qb1&4 =	45.86 p < .05
(4) Other	8	0.147	Qb1&6 =	29.10 p < .05
(5) Long Term Facility	0	EMPTY	Qb2&3 =	48.88 p < .05
(6) University	1	0.079	Qb2&4 =	40.93 p < .05
(7) Unknown	0	EMPTY	Qb2&6 =	24.17 p < .05
			Qb3&4 =	45.93 p < .05
			Qb3&6 =	29.18 p < .05
			Qb4&6 =	21.22 p < .05

Other/NonNursing Theory	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Yes	13	0.102	Qb1&2 =	3.16 NSD .05
(2) No	7	0.152		



# Father Relationship Meta-Analysis

451

Statistic Used	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Frequency, percentage, means, variance	12	0.104	Qb1&2 =	8.89 NSD .05
			Qb1&3 =	8.79 NSD .05
(2) Chi-square, Fisher's Exact, McNemar	2	0.322	Qb1&4 =	12.69 p < .05
			Qb2&3 =	46.18 p < .05
(3) ANOVA, t	5	0.120	Qb2&4 =	50.07 p < .05
(4) ANCOVA	1	-0.100	Qb3&4 =	49.98 p < .05
(5) Multivariate correlation, r2, etc.	0	EMPTY		
(6) Other	0	EMPTY		

Observation Type	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Chi-Square	11	0.000	SCHEFFE 1&2	NSD .05
(2) Z-value	2	-0.557	SCHEFFE 1&3	NSD .05
(3) t-value	3	-0.069	SCHEFFE 1&4	NSD .05
(4) F-value	3	0.081	SCHEFFE 2&3	NSD .05
(5) Other	0	EMPTY	SCHEFFE 2&4	NSD .05
			SCHEFFE 3&4	NSD .05

# Mother Relationship Meta-Analysis

## RMOM ANOVA TABLE

STUDIES IN THE ANALYSIS; K = 23

MODERATOR VARIABLE	F RATIO	F PROB.	Cochrans C p =	Homogeniety	SIGNIFANCE
PUBYR	1.978	0.164	0.471	HOMOG	NTGSD 0.05
PUBFORM	0.368	0.550	0.066	HOMOG	NTGSD 0.05
JOURTYP	0.368	0.550	0.066	HOMOG	NTGSD 0.05
SOURCE	0.353	0.838	0.018	HETEROG	SEE Qt ANALYSIS
AUTHOR	0.094	0.983	0.000	HETEROG	SEE Qt ANALYSIS
STUDYFLD	0.165	0.919	0.362	HOMOG	NTGSD 0.05
RESTYPE	0.124	0.945	0.000	HETEROG	SEE Qt ANALYSIS
FUNDING	0.250	0.624	0.071	HOMOG	NTGSD 0.05
DESIGN	0.578	0.456	0.964	HOMOG	NTGSD 0.05
SAMPMTHD	0.454	0.508	0.000	HETEROG	SEE Qt ANALYSIS
CGSMSZ	ONLY ONE GROUP			NA	NA
PGSMSZ	0.366	0.552	0.000	HETEROG	SEE Qt ANALYSIS
SAMSIPT	0.193	0.666	0.020	HETEROG	SEE Qt ANALYSIS
QUALSTD	2.448	0.112	0.415	HOMOG	NTGSD 0.05
CGAGE	0.162	0.691	0.017	HETEROG	SEE Qt ANALYSIS
CGETH	0.636	0.540	0.087	HOMOG	NTGSD 0.05
CGMAR	6.402	0.007	0.036	HETEROG	SEE Qt ANALYSIS
CGFAMS	0.119	0.887	0.650	HOMOG	NTGSD 0.05
CGED	0.666	0.525	0.325	HOMOG	NTGSD 0.05
PGAGE	0.418	0.525	0.000	HETEROG	SEE Qt ANALYSIS
PGETH	0.636	0.540	0.087	HOMOG	NTGSD 0.05
PGMAR	6.402	0.007	0.036	HETEROG	SEE Qt ANALYSIS
PGFAMS	0.122	0.886	0.406	HOMOG	NTGSD 0.05
PGED	1.150	0.337	0.410	HOMOG	NTGSD 0.05
SETTING	0.852	0.485	0.000	HETEROG	SEE Qt ANALYSIS
NONSGTH	0.002	0.964	0.000	HETEROG	SEE Qt ANALYSIS
STAND	ONLY ONE GROUP			NA	NA
STATUSD	1.650	0.211	0.064	HOMOG	NTGSD 0.05
OBTYPE	6.994	0.003	0.062	HOMOG	SEE Scheffe Analysis

NTGSD 0.05 = NO TWO GROUPS ARE SIGNIFICANTLY DIFFERENT AT THE 0.05 LEVEL

HCNP = Tests for homogeneity of variance cannot be performed.

Only one group has a computed variance.

ONLY ONE GROUP = Fewer than two non-empty groups; ANOVA cannot be performed.

UNKNOWN = Homogeneity of variance not known.

HOMOG = Cochrans C (p GT 0.05) indicates variance Homogenous at 0.05 level; ANOVA is appropriate.

HETEROG = Cochrans C (p LT 0.05) indicates variance is Heterogenous at 0.05 level.

SEE Scheffe Analysis = See associated Scheffe analysis table for results.

SEE Qt ANALYSIS = See associated Qt analysis table for results.

## Qt / Scheffe Analysis Table

## RMOM VARIABLES

K = 23

QT = 43.45

Source	Ki	MEAN Zr	ANALYSIS	SIGF
(1) CINAL	1	0.000	Qb1&2 = 43.45	p < .05
(2) ERIC	1	0.034	Qb1&3 = 43.36	p < .05
(3) MEDLINE	2	0.075	Qb1&5 = 38.63	p < .05
(4) PsychLit	0	EMPTY	Qb1&6 = 6.41	NSD .05
(5) REF List	7	0.175	Qb2&3 = 43.36	p < .05
(6) DAI	12	0.078	Qb2&5 = 38.63	p < .05
			Qb2&6 = 6.42	NSD .05
			Qb3&5 = 38.54	p < .05
			Qb3&6 = 6.33	NSD .05
			Qb5&6 = 1.59	NSD .05

Author	Ki	MEAN Zr	ANALYSIS	SIGF
(1) 1	12	0.106	Qb1&2 = 2.97	NSD .05
(2) 2	5	0.092	Qb1&3 = 4.89	NSD .05
(3) 3	3	0.101	Qb1&4 = 4.54	NSD .05
(4) 4	2	0.157	Qb2&3 = 41.51	p < .05
(5) 5	1	0.000	Qb2&4 = 41.16	p < .05
			Qb3&4 = 43.08	p < .05

Research Type	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Independent research	8	0.131	Qb1&2 = 36.15	p < .05
(2) Funded research	5	0.102	Qb1&3 = 5.79	NSD .05
(3) Dissertation	8	0.089	Qb1&4 = 38.43	p < .05
(4) Unknown	2	0.039	Qb2&3 = 8.54	p < .05
			Qb2&4 = 41.18	p < .05
			Qb3&4 = 10.82	p < .05

Sampling Method	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Matched	2	0.012	Qb1&3 = 0.56	NSD .05
(2) Random and matched	0	EMPTY		
(3) Convenience	21	0.111		

Pregnant Group Sample Size	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 99	21	0.094	Qb1&2 = 3.28	NSD .05
(2) 100 thru 299	2	0.183		
(3) 300 thru High	0	EMPTY		

Sample Size Total	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 99	2	0.056	Qb1&2 = 2.28	NSD .05
(2) 100 thru 299	15	0.132	Qb1&3 = 9.56	p < .05
(3) 300 thru High	6	0.098	Qb2&3 = 36.15	p < .05

# Mother Relationship Meta-Analysis

454

Comparison Group Age	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 15.99	8	0.125	Qb1&2 =	1.65	NSD .05
(2) 16 thru High	15	0.090			

Comparison Group Marital Stat	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Single or Never Married	19	0.116	Qb1&2 =	24.00	p < .05
(2) Mixed group	2	0.312	Qb1&3 =	17.84	p < .05
	2	-0.241	Qb2&3 =	35.64	p < .05

Pregnant Group Age	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 15.99	5	0.153	Qb1&2 =	2.66	NSD .05
(2) 16 thru High	18	0.088			

Pregnant Group Marital Status	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Single or Never Married	19	0.116	Qb1&2 =	24.00	p < .05
(2) Mixed group	2	0.312	Qb1&3 =	17.84	p < .05
(3) Other	2	-0.241	Qb2&3 =	35.64	p < .05

Setting	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Hospital	2	0.312	Qb1&2 =	32.38	p < .05
(2) Clinic	7	0.072	Qb1&4 =	34.55	p < .05
(3) School/Community	0	EMPTY	Qb1&5 =	42.62	p < .05
(4) Other	10	0.091	Qb2&4 =	25.13	p < .05
(5) Long Term Facility	2	0.019	Qb2&5 =	33.21	p < .05
(6) University	0	EMPTY	Qb4&5 =	35.38	p < .05
(7) Unknown	0	EMPTY			

Other/NonNursing Theory	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Yes	13	0.104	Qb1&2 =	0.92	NSD .05
(2) No	10	0.100			

Observation Type	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Chi-Square	11	0.156	SCHEFFE 1&2		p < .05
(2) Z-value	1	-0.442	SCHEFFE 1&3		NSD .05
(3) t-value	8	0.164	SCHEFFE 1&4		NSD .05
(4) F-value	2	-0.009	SCHEFFE 2&3		p < .05
(5) Other	0	EMPTY	SCHEFFE 2&4		NSD .05
			SCHEFFE 3&4		NSD .05

# Sexual Activity Meta-Analysis

## SEXAT ANOVA TABLE

STUDIES IN THE ANALYSIS; K = 27

MODERATOR VARIABLE	F RATIO	F PROB.	Cochrans C p =	Homogeniety	SIGNIFANCE
PUBYR	2.381	0.096	0.095	HOMOG	NTGSD 0.05
PUBFORM	0.690	0.414	0.058	HOMOG	NTGSD 0.05
JOURTYP	0.333	0.720	0.077	HOMOG	NTGSD 0.05
SOURCE	0.419	0.830	0.100	HOMOG	NTGSD 0.05
AUTHOR	1.083	0.376	0.087	HOMOG	NTGSD 0.05
STUDYFLD	0.727	0.611	0.189	HOMOG	NTGSD 0.05
RESTYPE	1.932	0.153	0.442	HOMOG	NTGSD 0.05
FUNDING	0.237	0.914	0.037	HETEROG	SEE Qt ANALYSIS
DESIGN	0.029	0.867	0.172	HOMOG	NTGSD 0.05
SAMPMTHD	0.959	0.397	0.308	HOMOG	NTGSD 0.05
CGSMSZ	0.604	0.555	0.170	HOMOG	NTGSD 0.05
PGSMSZ	0.368	0.550	0.044	HETEROG	SEE Qt ANALYSIS
SAMSIKT	0.208	0.814	0.300	HOMOG	NTGSD 0.05
QUALSTD	0.730	0.492	0.976	HOMOG	NTGSD 0.05
CGAGE	0.943	0.341	0.695	HOMOG	NTGSD 0.05
CGETH	2.152	0.138	0.577	HOMOG	NTGSD 0.05
CGMAR	1.313	0.288	0.014	HETEROG	SEE Qt ANALYSIS
CGFAMS	0.093	0.912	0.110	HOMOG	NTGSD 0.05
CGED	0.014	0.987	0.320	HOMOG	NTGSD 0.05
PGAGE	0.616	0.440	0.445	HOMOG	NTGSD 0.05
PGETH	1.297	0.292	0.916	HOMOG	NTGSD 0.05
PGMAR	1.636	0.216	0.059	HOMOG	NTGSD 0.05
PGFAMS	0.093	0.912	0.110	HOMOG	NTGSD 0.05
PGED	0.338	0.716	0.667	HOMOG	NTGSD 0.05
SETTING	0.993	0.414	1.000	HOMOG	NTGSD 0.05
NSGTHRY	0.095	0.760	HCNP	UNKNOWN	SEE Qt ANALYSIS
NONGTH	1.140	0.296	0.013	HETEROG	SEE Qt ANALYSIS
STAND	0.001	0.977	0.473	HOMOG	NTGSD 0.05
STATUSD	0.924	0.468	0.987	HOMOG	NTGSD 0.05
OBTYPE	2.511	0.088	0.167	HOMOG	NTGSD 0.05

NTGSD 0.05 = NO TWO GROUPS ARE SIGNIFICANTLY DIFFERENT AT THE 0.05 LEVEL

HCNP = Tests for homogeneity of variance cannot be performed.

Only one group has a computed variance.

ONLY ONE GROUP = Fewer than two non-empty groups; ANOVA cannot be performed.

UNKNOWN = Homogeneity of variance not known.

HOMOG = Cochrans C (p GT 0.05) indicates variance Homogenous at 0.05 level; ANOVA is appropriate.

HETEROG = Cochrans C (p LT 0.05) indicates variance is Heterogenous at 0.05 level.

SEE Scheffe Analysis = See associated Scheffe analysis table for results.

SEE Qt ANALYSIS = See associated Qt analysis table for results.

## Qt / Scheffe Analysis Table

## SEXAT VARIABLES

K = 27

QT = 175.32

Funding	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) UNKNOWN	16	0.10	Qb1&2 =	8.65	p < 0.05
(2) NONE	4	0.23	Qb1&3 =	46.15	p < 0.05
(3) Other/	3	0.18	Qb2&3 =	132.97	p < 0.05

Pregnant Group Sample Size	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 99	23	0.14	Qb1&2 =	5.00	NSD 0.05
(2) 100 thru 299	4	0.06			
(3) 300 thru High	0	EMPTY			

Comparison Group Marital Stat	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Single or Never Married	19	0.17	Qb1&2 =	24.00	p < 0.05
(2) Mixed group	2	0.00			

Nursing Theory	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Yes	1	0.06	Qb1&2 =	0.41	NSD 0.05
(2) No/	26	0.13			

Other/NonNursing Theory	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Yes	14	0.08	Qb1&2 =	0.06	NSD 0.05
(2) No/	13	0.18			

# Sibling Relationship Meta-Analysis

457

## SIBS ANOVA TABLE

STUDIES IN THE ANALYSIS; K = 14

MODERATOR VARIABLE	F RATIO	F PROB.	Cochrans C p =	Homogeniety	SIGNIFANCE
PUBYR	0.465	0.640	0.266	HOMOG	NTGSD 0.05
PUBFORM	0.098	0.760	0.225	HOMOG	NTGSD 0.05
JOURTYP	0.159	0.855	0.187	HOMOG	NTGSD 0.05
SOURCE	3.079	0.074	0.007	HETEROG	SEE Qt ANALYSIS
AUTHOR	0.093	0.962	0.000	HETEROG	SEE Qt ANALYSIS
STUDYFLD	0.453	0.801	0.020	HETEROG	SEE Qt ANALYSIS
RESTYPE	0.048	0.985	0.000	HETEROG	SEE Qt ANALYSIS
FUNDING	0.087	0.917	0.001	HETEROG	SEE Qt ANALYSIS
DESIGN	6.308	0.027	0.842	HOMOG	SEE ANOVA Below
SAMPMTHD	0.253	0.781	HCNP	UNKNOWN	SEE Qt ANALYSIS
CGSMSZ	0.024	0.977	0.000	HOMOG	NTGSD 0.05
PGSMSZ	0.038	0.848	HCNP	UNKNOWN	SEE Qt ANALYSIS
SAMSIZT	0.073	0.930	0.000	HETEROG	SEE Qt ANALYSIS
QUALSTD	0.719	0.509	0.598	HOMOG	NTGSD 0.05
CGAGE	1.946	0.188	0.126	HOMOG	NTGSD 0.05
CGETH	2.383	0.138	0.559	HOMOG	NTGSD 0.05
CGMAR	0.200	0.662	0.346	HOMOG	NTGSD 0.05
CGFAMS	0.002	0.998	0.000	HETEROG	SEE Qt ANALYSIS
CGED	1.993	0.183	0.059	HOMOG	NTGSD 0.05
PGAGE	0.244	0.631	0.006	HETEROG	SEE Qt ANALYSIS
PGETH	2.383	0.138	0.559	HOMOG	NTGSD 0.05
PGMAR	0.208	0.815	0.305	HOMOG	NTGSD 0.05
PGFAMS	2.297	0.147	0.175	HOMOG	NTGSD 0.05
PGED	0.347	0.714	0.031	HETEROG	SEE Qt ANALYSIS
SETTING	0.622	0.557	0.056	HOMOG	NTGSD 0.05
NSGTHRY	ONLY ONE GROUP			NA	NA
NONGSHT	0.057	0.816	0.005	HETEROG	SEE Qt ANALYSIS
STAND	ONLY ONE GROUP			NA	NA
STATUSD	3.846	0.046	0.004	HETEROG	SEE Qt ANALYSIS
OBTYPE	0.310	0.818	0.000	HETEROG	SEE Qt ANALYSIS

NTGSD 0.05 = NO TWO GROUPS ARE SIGNIFICANTLY DIFFERENT AT THE 0.05 LEVEL

HCNP = Tests for homogeneity of variance cannot be performed.

Only one group has a computed variance.

ONLY ONE GROUP = Fewer than two non-empty groups; ANOVA cannot be performed.

UNKNOWN = Homogeneity of variance not known.

HOMOG = Cochrans C (p GT 0.05) indicates variance Homogenous at 0.05 level; ANOVA is appropriate.

HETEROG = Cochrans C (p LT 0.05) indicates variance is Heterogenous at 0.05 level.

SEE Scheffe Analysis = See associated Scheffe analysis table for results.

SEE Qt ANALYSIS = See associated Qt analysis table for results.

# Qt / SCHEFFE Analysis Table

## SIBS VARIABLES

K = 14

QT = 32.20

Source	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) CINAL	0	EMPTY		Qb2&3 = 26.50	p < .05
(2) ERIC	1	-0.330		Qb2&4 = 31.54	p < .05
(3) MEDLINE	2	0.346		Qb2&5 = 30.03	p < .05
(4) PsychLit	2	0.072		Qb2&6 = 29.29	p < .05
(5) REF List	5	0.096		Qb3&4 = 25.84	p < .05
(6) DAI	4	0.138		Qb3&5 = 24.33	p < .05
				Qb3&6 = 23.59	p < .05
				Qb4&5 = 29.37	p < .05
				Qb4&6 = 28.63	p < .05
				Qb5&6 = 27.12	p < .05

Author	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) 1	5	0.11		Qb1&2 = 1.90	NSD .05
(2) 2	3	0.16		Qb1&3 = 28.45	p < .05
(3) 3	3	0.09		Qb1&4 = 27.17	p < .05
(4) 4	3	0.07		Qb2&3 = 5.63	NSD .05
(5) 5	0	EMPTY		Qb2&4 = 4.35	NSD .05
				Qb3&4 = 30.90	p < .05

Study Field	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Nursing	2	0.304		Qb1&2 = 23.37	p < .05
(2) Sociology	2	0.190		Qb1&3 = 22.61	p < .05
(3) Medicine	1	0.070		Qb1&4 = 9.02	p < .05
(4) Psychology	4	0.050		Qb1&5 = 23.74	p < .05
(5) Education	4	0.058		Qb2&3 = 30.71	p < .05
(6) Public Health	0	EMPTY		Qb2&4 = 17.12	p < .05
				Qb2&5 = 31.84	p < .05
				Qb3&4 = 16.36	p < .05
				Qb3&5 = 31.07	p < .05
				Qb4&5 = 17.49	p < .05

Research Type	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Independent research	5	0.115		Qb1&2 = 28.27	p < .05
(2) Funded research	5	0.081		Qb1&3 = 27.98	p < .05
(3) Dissertation	2	0.140		Qb1&4 = 4.35	NSD .05
(4) Unknown	2	0.139		Qb2&3 = 28.73	p < .05
				Qb2&4 = 5.09	NSD .05
				Qb3&4 = 4.81	NSD .05



Funding	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) UNKNOWN	9	0.126		Qb1&3 = 1.35	NSD .05
(2) NONE	0	EMPTY		Qb1&5 = 0.68	NSD .05
(3) Other	2	0.107		Qb3&5 = 30.61	p < .05
(4) Federal	0	EMPTY			
(5) Foundation	2	0.091			

Design	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Descriptive	5	-0.0448		F RATIO = 6.31	p = .0273
(2) Correlational	9	0.1958			

Sampling Method	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Matched	1	0.218		Qb1&2 = 32.20	p < .05
(2) Random and matched	1	0.000		Qb1&3 = 2.00	NSD .05
(3) Convenience	12	0.110		Qb2&3 = 2.00	NSD .05

Pregnant Group Sample Size	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 99	13	0.113		Qb1&2 = 0.18	NSD .05
(2) 100 thru 299	1	0.070			
(3) 300 thru High	0	EMPTY			

Sample Size Total	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 99	1	0.126		Qb1&2 = 0.52	NSD .05
(2) 100 thru 299	9	0.071		Qb1&3 = 1.80	NSD .05
(3) 300 thru High	4	0.097		Qb2&3 = 30.90	p < .05

Comparison Group Family Inc	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low	9	0.112		Qb1&2 = 0.82	NSD .05
(2) Middle	3	0.105			
(3) Unknown	2	0.107			

Pregnant Group Age	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 15.99	2	0.042		Qb1&2 = 1.00	NSD .05
(2) 16 thru High	12	0.121			

Pregnant Group Ed Status	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) 6th to 9th grade	1	0.000		Qb1&2 = 4.37	NSD .05
(2) 10th to 12th Grade	9	0.093		Qb1&3 = 29.37	p < .05
(3) Mixed group/	4	0.176		Qb2&3 = 1.55	NSD .05
(4) High School Graduate	0	EMPTY			
(5) Some College/Technical	0	EMPTY			

Other/NonNursing Theory	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Yes	8	0.122		Qb1&2 = 0.18	NSD .05
(2) No	6	0.094			

# Sibling Relationship Meta-Analysis

460

Statistic Used	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Frequency, percentage, means, variance	8	0.097	Qb1&2 = 18.98 Qb1&3 = 26.91	p < .05 p < .05
(2) Chi-square, Fisher's Exact, McNemar	3	0.287	Qb1&5 = 27.01 Qb2&3 = 24.08	p < .05 p < .05
(3) ANOVA, t	2	0.114	Qb2&5 = 24.18	p < .05
(4) ANCOVA	0	EMPTY	Qb3&5 = 32.10	p < .05
(5) Multivariate correlation, r2, etc.	1	-0.330	Qb3&5 = 32.10	p < .05
(6) Other	0	EMPTY		

Observation Type	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Chi-Square	9	0.126	Qb1&2 = 16.15	p < .05
(2) Z-value	2	0.255	Qb1&3 = 16.19	p < .05
(3) t-value	1	0.084	Qb1&4 = 16.18	p < .05
(4) F-value	1	0.143	Qb2&3 = 32.17	p < .05
(5) Other	0	EMPTY	Qb2&4 = 32.16 Qb3&4 = 32.20	p < .05 p < .05

# Self-concept Meta-Analysis

461

## SLFCN ANOVA TABLE

STUDIES IN THE ANALYSIS; K = 32

MODERATOR VARIABLE	F RATIO	F PROB.	Cochrans C p =	Homogeneity	SIGNIFANCE
PUBYR	1.551	0.229	0.000	HETEROG	SEE Qt ANALYSIS
PUBFORM	0.582	0.452	0.001	HETEROG	SEE Qt ANALYSIS
JOURTYP	0.582	0.452	0.001	HETEROG	SEE Qt ANALYSIS
SOURCE	1.112	0.379	0.000	HETEROG	SEE Qt ANALYSIS
AUTHOR	1.057	0.383	0.000	HETEROG	SEE Qt ANALYSIS
STUDYFLD	0.245	0.939	0.000	HETEROG	SEE Qt ANALYSIS
RESTYPE	4.645	0.009	0.000	HETEROG	SEE Qt ANALYSIS
FUNDING	0.940	0.456	0.000	HETEROG	SEE Qt ANALYSIS
DESIGN	0.189	0.667	0.000	HETEROG	SEE Qt ANALYSIS
SAMPMTHD	0.328	0.571	HCNP	UNKNOWN	SEE Qt ANALYSIS
CGSMSZ	0.814	0.453	0.000	HETEROG	SEE Qt ANALYSIS
PGSMSZ	0.028	0.869	0.336	HETEROG	SEE Qt ANALYSIS
SAMSIZT	0.465	0.633	0.000	HETEROG	SEE Qt ANALYSIS
QUALSTD	0.349	0.708	0.000	HETEROG	SEE Qt ANALYSIS
CGAGE	0.527	0.473	0.000	HETEROG	SEE Qt ANALYSIS
CGETH	3.242	0.036	0.000	HETEROG	SEE Qt ANALYSIS
CGMAR	0.075	0.928	0.001	HETEROG	SEE Qt ANALYSIS
CGFAMS	1.872	0.172	0.000	HETEROG	SEE Qt ANALYSIS
CGED	30.591	0.000	0.270	HETEROG	SEE Qt ANALYSIS
PGAGE	0.720	0.403	0.000	HETEROG	SEE Qt ANALYSIS
PGETH	2.300	0.099	0.000	HETEROG	SEE Qt ANALYSIS
PGMAR	0.161	0.852	0.016	HETEROG	SEE Qt ANALYSIS
PGFAMS	1.872	0.172	0.000	HETEROG	SEE Qt ANALYSIS
PGED	0.260	0.773	0.000	HETEROG	SEE Qt ANALYSIS
SETTING	0.538	0.709	0.000	HETEROG	SEE Qt ANALYSIS
NSGTHRY	0.038	0.847	HCNP	UNKNOWN	SEE Qt ANALYSIS
NONSGTH	0.951	0.337	0.000	HETEROG	SEE Qt ANALYSIS
STAND	ONLY ONE GROUP			NA	NA
STATUSD	26.014	0.000	0.000	HETEROG	SEE Qt ANALYSIS
OBTYPE	5.045	0.014	0.000	HETEROG	SEE Qt ANALYSIS

NTGSD 0.05 = NO TWO GROUPS ARE SIGNIFICANTLY DIFFERENT AT THE 0.05 LEVEL

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Only one group has a computed variance.

ONLY ONE GROUP = Fewer than two non-empty groups; ANOVA cannot be performed.

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ANOVA is appropriate.

HETEROG = Cochrans C (p LT 0.05) indicates variance is Heterogenous at 0.05 level.

SEE Scheffe Analysis = See associated Scheffe analysis table for results.

SEE Qt ANALYSIS = See associated Qt analysis table for results.

## Qt / SCHEFFE ANALYSIS

## SLFCN VARIABLES

K = 32

QT = 279.67

Publication Year	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) LOW THRU 1979	2	0.005		Qb1&2 = 202.89	p < .05
(2) 1980 THRU 1989	19	0.136		Qb1&3 = 90.41	p < .05
(3) 1990 THRU HIGH	11	0.284		Qb2&3 = 13.94	p < .05

Publication Form	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Journal	15	0.217		Qb1&2 = -12.32	NSD .05
(2) Dissertation	17	0.144			

Journal Type	Ki	MEAN	Zr	ANALYSIS	SIGF
(2) Speciality	15	0.217		Qb2&3 = -12.32	NSD .05
(3) NA/	17	0.144			

Source	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) CINAL	4	0.468		Qb1&2 = 119.04	p < .05
(2) ERIC	2	0.087		Qb1&3 = 120.74	p < .05
(3) MEDLINE	1	0.074		Qb1&4 = 120.74	p < .05
(4) PsychLit	1	0.139		Qb1&5 = 73.54	p < .05
(5) REF List	8	0.128		Qb1&6 = 84.50	p < .05
(6) DAI	16	0.152		Qb2&3 = 277.97	p < .05
				Qb2&4 = 277.97	p < .05
				Qb2&5 = 230.77	p < .05
				Qb2&6 = 241.73	p < .05
				Qb3&4 = 279.66	p < .05
				Qb3&5 = 232.46	p < .05
				Qb3&6 = 243.42	p < .05
				Qb4&5 = 232.46	p < .05
				Qb4&6 = 243.42	p < .05
				Qb5&6 = 196.22	p < .05

Author	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) 1	24	0.143		Qb1&2 = 216.85	p < .05
(2) 2	1	0.078		Qb1&3 = -10.47	NSD .05
(3) 3	5	0.373		Qb1&4 = 216.56	p < .05
(4) 4	2	0.169		Qb2&3 = 52.33	p < .05
(5) 5	0	EMPTY		Qb2&4 = 279.37	p < .05

# Self-concept Meta-Analysis

463

Study Field	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Nursing	3	0.128	Qb1&2 = 277.92	p < .05
(2) Sociology	3	0.167	Qb1&3 = 272.89	p < .05
(3) Medicine	3	-0.015	Qb1&4 = 57.19	p < .05
(4) Psychology	16	0.222	Qb1&5 = 279.09	p < .05
(5) Education	1	0.143	Qb1&6 = 255.93	p < .05
(6) Public Health/	6	0.148	Qb2&3 = 272.30	p < .05
			Qb2&4 = 56.59	p < .05
			Qb2&5 = 278.50	p < .05
			Qb2&6 = 255.33	p < .05
			Qb3&4 = 51.57	p < .05
			Qb3&5 = 273.47	p < .05
			Qb3&6 = 250.31	p < .05
			Qb4&5 = 57.77	p < .05
			Qb4&6 = 34.60	p < .05
			Qb5&6 = 256.51	p < .05

Research Type	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Independent research	14	0.186	Qb1&2 = 251.32	p < .05
(2) Funded research	8	0.088	Qb1&3 = 237.42	p < .05
(3) Dissertation	8	0.114	Qb1&4 = 113.34	p < .05
(4) Unknown/	2	0.748	Qb2&3 = 239.14	p < .05
			Qb2&4 = 115.07	p < .05
			Qb3&4 = 101.17	p < .05

Funding	Ki	MEAN Zr	ANALYSIS	SIGF
(1) UNKNOWN	17	0.152	Qb1&2 = 227.64	p < .05
(2) NONE	6	0.159	Qb1&3 = 78.81	p < .05
(3) Other/	4	0.418	Qb1&4 = 245.02	p < .05
(4) Federal	2	0.107	Qb1&5 = 244.60	p < .05
(5) Foundation	3	0.047	Qb2&3 = 86.01	p < .05
			Qb2&4 = 252.23	p < .05
			Qb2&5 = 251.80	p < .05
			Qb3&4 = 103.40	p < .05
			Qb3&5 = 102.97	p < .05
			Qb4&5 = 269.19	p < .05

Design	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Descriptive	3	0.113	Qb1&2 = -11.89	NSD .05
(2) Correlational	29	0.185		

Sampling Method	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Matched	0	EMPTY	Qb2&3 = -10.82	NSD .05
(2) Random and matched	1	0.025		
(3) Convenience/	31	0.183		

# Self-concept Meta-Analysis

464

Comparison Group Sample Size	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 99	25	0.210	Qb1&2 = 38.74	p < .05
(2) 100 thru 299	5	0.078	Qb1&3 = 47.15	p < .05
(3) 300 thru High	2	0.033	Qb2&3 = 271.26	p < .05
Pregnant Group Sample Size	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 99	28	0.182	Qb1&2 = -14.07	NSD .05
(2) 100 thru 299	4	0.157		
Sample Size Total	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 99	2	0.177	Qb1&2 = 31.69	p < .05
(2) 100 thru 299	19	0.194	Qb1&3 = 225.63	p < .05
(3) 300 thru High	11	0.143	Qb2&3 = 2.72	NSN .05
Quality of Study	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 1.99	6	0.129	Qb1&2 = 19.57	p < .05
(2) 2 thru 2.49	12	0.243	Qb1&3 = 253.22	p < .05
(3) 2.5 thru 3	14	0.166	Qb2&3 = 13.75	p < .05
Comparison Group Age	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low thru 15.99	9	0.123	Qb1&2 = -11.13	NSD .05
(2) 16 thru High	23	0.200		
Comparison Group Ethnic	Ki	MEAN Zr	ANALYSIS	SIGF
(1) White	5	0.448	Qb1&2 = 122.00	p < .05
(2) Black	6	0.212	Qb1&3 = 126.09	p < .05
(3) Other/Unknown	2	0.312	Qb1&4 = 104.03	p < .05
(4) Mixed group/	19	0.083	Qb2&3 = 275.47	p < .05
			Qb2&4 = 253.41	p < .05
			Qb3&4 = 257.49	p < .05
Comparison Group Marital Stat	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Single or Never Married	26	0.186	Qb1&2 = -8.40	NSD .05
(2) Mixed group	3	0.170	Qb1&3 = 4.49	NSD .05
(3) Other/Unknown	3	0.121	Qb2&3 = 17.01	p < .05
Comparison Group Family Inc	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Low	19	0.115	Qb1&2 = 28.07	p < .05
(2) Middle	6	0.349	Qb1&3 = 194.69	p < .05
(3) Unknown	7	0.205	Qb2&3 = 67.42	p < .05
Comparison Group Ed Status	Ki	MEAN Zr	ANALYSIS	SIGF
(1) 6th to 9th grade	4	0.123	Qb1&2 = 236.89	p < .05
(2) 10th to 12th Grade	16	0.142	Qb1&3 = 228.47	p < .05
(3) Mixed group/	11	0.134	Qb1&4 = 276.91	p < .05
(4) High School Graduate	1	1.470	Qb2&3 = 191.22	p < .05
(5) Some College/Technical	0	EMPTY	Qb2&4 = 239.66	p < .05
			Qb3&4 = 231.24	p < .05

# Self-concept Meta-Analysis

465

Pregnant Group Age	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 15.99	6	0.094		Qb1&2 = -10.92	NSD .05
(2) 16 thru High	26	0.198			

Pregnant Group Ethnic	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) White	4	0.448		Qb1&2 = 123.31	p < .05
(2) Black	5	0.213		Qb1&3 = 127.18	p < .05
(3) Other/Unknown	0	EMPTY		Qb1&4 = 48.22	p < .05
(4) Mixed group/	21	0.106		Qb2&4 = 196.73	p < .05
				Qb2&3 = 275.69	p < .05
				Qb3&4 = 200.60	p < .05

Pregnant Group Marital Stat	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Single or Never Married	25	0.176		Qb1&2 = -2.52	NSD .05
(2) Mixed group	4	0.239		Qb1&3 = 4.45	NSD .05
(3) Other/	3	0.121		Qb2&3 = 267.01	p < .05

Pregnant Group Family Income	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low	19	0.115		Qb1&2 = 28.07	p < .05
(2) Middle	6	0.349		Qb1&3 = 194.69	p < .05
(3) Unknown/	7	0.205		Qb2&3 = 67.42	p < .05

Pregnant Group Ed Status	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) 6th to 9th grade	4	0.108		Qb1&2 = 53.47	p < .05
(2) 10th to 12th Grade	16	0.209		Qb1&3 = 213.37	p < .05
(3) Mixed group/	12	0.160		Qb2&3 = -7.47	p < .05
(4) High School Graduate	0	EMPTY			
(5) Some College/Technical	0	EMPTY			

Setting	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Hospital	0	EMPTY		Qb2&3 = 89.72	p < .05
(2) Clinic	13	0.255		Qb2&4 = 23.01	p < .05
(3) School/Community	1	0.020		Qb2&5 = 89.71	p < .05
(4) Other	15	0.140		Qb3&4 = 212.97	p < .05
(5) Long Term Facility	1	-0.035		Qb3&5 = 279.67	p < .05
(6) University	0	EMPTY		Qb4&5 = 212.96	p < .05
(7) Unknown	1	0.126		Qb2&7 = 89.72	p < .05
				Qb3&7 = 279.68	p < .05
				Qb4&7 = 212.97	p < .05
				Qb5&7 = 279.67	p < .05

Nursing Theory	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Yes	1	0.126		Qb1&2 = -14.24	NSD .05
(2) No/	31	0.180			

Other/NonNursing Theory	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Yes	16	0.225		Qb1&2 = 0.32	NSD .05
(2) No/	16	0.132			

Statistic Used	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Frequency, percentage, means, variance	2	-0.025	Qb1&2 = 206.11	p < .05
			Qb1&3 = 205.48	p < .05
(2) Chi-square, Fisher's Exact, McNemar	2	0.661	Qb1&4 = 279.64	p < .05
			Qb1&5 = 279.64	p < .05
(3) ANOVA, t	25	0.150	Qb1&6 = 279.64	p < .05
(4) ANCOVA	1	0.148	Qb2&3 = 131.98	p < .05
(5) Multivariate correlation, r2, etc./	1	0.126	Qb2&4 = 206.14	p < .05
			Qb2&5 = 206.14	p < .05
(6) Other/	1	0.416	Qb2&6 = 206.14	p < .05
			Qb3&4 = 205.50	p < .05
			Qb3&5 = 205.51	p < .05
			Qb3&6 = 205.51	p < .05
			Qb4&5 = 279.67	p < .05
			Qb4&6 = 279.67	p < .05
			Qb5&6 = 279.67	p < .05

Observation Type	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Chi-Square	2	0.728	Qb1&3 = 55.20	p < .05
(2) Z-value	0	EMPTY	Qb1&4 = 107.09	p < .05
(3) t-value	19	0.161	Qb1&5 = 116.78	p < .05
(4) F-value	7	0.157	Qb3&4 = 202.16	p < .05
(5) Other/	0	EMPTY	Qb3&5 = 211.85	p < .05
			Qb4&5 = 263.74	p < .05



# Self-esteem Meta-Analysis

467

## SLFES ANOVA TABLE

STUDIES IN THE ANALYSIS; K = 23

MODERATOR VARIABLE	F RATIO	F PROB.	Cochrans C p =	Homogeniety	SIGNIFANCE
PUBYR	1.398	0.270	0.001	HETEROG	SEE Qt ANALYSIS
PUBFORM	1.353	0.258	0.001	HETEROG	SEE Qt ANALYSIS
JOURTYP	1.353	0.258	0.001	HETEROG	SEE Qt ANALYSIS
SOURCE	2.333	0.095	0.000	HETEROG	SEE Qt ANALYSIS
AUTHOR	1.891	0.177	0.000	HETEROG	SEE Qt ANALYSIS
STUDYFLD	0.284	0.915	0.000	HETEROG	SEE Qt ANALYSIS
RESTYPE	35.153	0.000	0.262	HOMOG	SEE Scheffe Analysis
FUNDING	0.969	0.449	0.000	HETEROG	SEE Qt ANALYSIS
DESIGN	0.029	0.867	HCNP	UNKNOWN	SEE Qt ANALYSIS
SAMPMTHD	ONLY ONE GROUP			NA	NA
CGSMSZ	0.164	0.850	0.057	HETEROG	SEE Qt ANALYSIS
PGSMSZ	0.476	0.498	0.002	HETEROG	SEE Qt ANALYSIS
SAMSI2T	0.386	0.685	0.000	HETEROG	SEE Qt ANALYSIS
QUALSTD	0.246	0.785	0.000	HETEROG	SEE Qt ANALYSIS
CGAGE	0.267	0.611	0.000	HETEROG	SEE Qt ANALYSIS
CGETH	2.384	0.101	0.000	HETEROG	SEE Qt ANALYSIS
CGMAR	0.216	0.807	0.000	HETEROG	SEE Qt ANALYSIS
CGFAMS	1.856	0.182	0.000	HETEROG	SEE Qt ANALYSIS
CGED	0.354	0.706	0.533	HOMOG	NTGSD 0.05
PGAGE	0.154	0.699	0.000	HETEROG	SEE Qt ANALYSIS
PGETH	2.384	0.101	0.000	HETEROG	SEE Qt ANALYSIS
PGMAR	0.216	0.807	0.000	HETEROG	SEE Qt ANALYSIS
PGFAMS	1.856	0.182	0.000	HETEROG	SEE Qt ANALYSIS
PGED	0.197	0.823	0.003	HETEROG	SEE Qt ANALYSIS
SETTING	0.694	0.606	0.000	HETEROG	SEE Qt ANALYSIS
NSGTHRY	0.029	0.867	HCNP	UNKNOWN	SEE Qt ANALYSIS
NONSGTH	0.117	0.735	0.003	HETEROG	SEE Qt ANALYSIS
STAND	1.233	0.279	0.001	HETEROG	SEE Qt ANALYSIS
STATUSD	18.316	0.000	0.001	HETEROG	SEE Qt ANALYSIS
OBTYPE	2.884	0.071	0.000	HETEROG	SEE Qt ANALYSIS

NTGSD 0.05 = NO TWO GROUPS ARE SIGNIFICANTLY DIFFERENT AT THE 0.05 LEVEL

HCNP = Tests for homogeneity of variance cannot be performed.

Only one group has a computed variance.

ONLY ONE GROUP = Fewer than two non-empty groups; ANOVA cannot be performed.

UNKNOWN = Homogeneity of variance not known.

HOMOG = Cochrans C (p GT 0.05) indicates variance Homogenous at 0.05 level; ANOVA is appropriate.

HETEROG = Cochrans C (p LT 0.05) indicates variance is Heterogenous at 0.05 level.

SEE Scheffe Analysis = See associated Scheffe analysis table for results.

SEE Qt ANALYSIS = See associated Qt analysis table for results.

## Qt / Scheffe Analysis Table

## SLFES VARIABLES

K = 23

QT = 257.93

Publication Year	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) LOW THRU 1979	1	0.009		Qb1&2 = 233.76	p < .05
(2) 1980 THRU 1989	14	0.109		Qb1&3 = 69.45	p < .05
(3) 1990 THRU HIGH	8	0.325		Qb2&3 = 45.29	p < .05

Publication Form	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Journal	10	0.266		Qb1&2 = 1.62	NSD .05
(2) Dissertation	13	0.113			

Journal Type	Ki	MEAN	Zr	ANALYSIS	SIGF
(2) Speciality	10	0.266		Qb2&3 = 1.62	NSD .05
(3) NA/	13	0.113			

Source	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) CINAL	3	0.642		Qb1&2 = 123.60	p < .05
(2) ERIC	2	0.087		Qb1&4 = 125.30	p < .05
(3) MEDLINE	0	EMPTY		Qb1&5 = 114.04	p < .05
(4) PsychLit	1	0.050		Qb1&6 = 108.24	p < .05
(5) REF List	5	0.105		Qb2&4 = 256.23	p < .05
(6) Dissertation Abstracts/	12	0.121		Qb2&5 = 244.97	p < .05
				Qb2&6 = 239.18	p < .05
				Qb4&5 = 246.67	p < .05
				Qb4&6 = 240.88	p < .05
				Qb5&6 = 229.62	p < .05

Author	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) 1	17	0.123		Qb1&3 = 4.45	p < .05
(2) 2	0	EMPTY		Qb1&4 = 229.83	p < .05
(3) 3	4	0.447		Qb3&4 = 28.83	p < .05
(4) 4	2	0.124			
(5) 5	0	EMPTY			

Study Field	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Nursing	2	0.153		Qb1&2 = 255.25	p < .05
(2) Sociology	3	0.142		Qb1&3 = 251.62	p < .05
(3) Medicine	1	0.009		Qb1&4 = 35.40	p < .05
(4) Psychology	12	0.254		Qb1&5 = 257.81	p < .05
(5) Education	5	0.067		Qb2&3 = 249.17	p < .05
(6) Public Health/	0	EMPTY		Qb2&4 = 32.94	p < .05
				Qb2&5 = 255.36	p < .05
				Qb3&4 = 29.31	p < .05
				Qb3&5 = 251.73	p < .05
				Qb4&5 = 35.50	p < .05

# Self-esteem Meta-Analysis

469

Research Type	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Independent research	8	0.213	SCHEFFE	1&2	NSD .05
(2) Funded research	7	0.080	SCHEFFE	1&3	NSD .05
(3) Dissertation	7	0.056	SCHEFFE	1&4	p < .05
(4) Unknown/	1	1.470	SCHEFFE	2&3	NSD .05
			SCHEFFE	2&4	p < .05
			SCHEFFE	3&4	p < .05

Funding	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) UNKNOWN	11	0.164	Qb1&2 =	236.83	p < .05
(2) NONE	4	0.074	Qb1&3 =	72.28	p < .05
(3) Other/	3	0.502	Qb1&4 =	234.90	p < .05
(4) Federal			Qb1&5 =	233.40	p < .05
(5) Foundation			Qb2&3 =	89.33	p < .05
			Qb2&4 =	251.94	p < .05
			Qb2&5 =	250.45	p < .05
			Qb3&4 =	87.40	p < .05
			Qb3&5 =	85.90	p < .05
			Qb4&5 =	248.52	p < .05

Design	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Descriptive	1	0.126	Qb1&2 =	0.13	NSD .05
(2) Correlational	22	0.182			

Comparison Group Sample Size	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 99	16	0.201	Qb1&2 =	29.34	p < .05
(2) 100 thru 299	4	0.096	Qb1&3 =	29.81	p < .05
(3) 300 thru High	13	0.041	Qb2&3 =	244.65	p < .05

Pregnant Group Sample Size	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 99	20	0.197	Qb1&2 =	1.34	NSD .05
(2) 100 thru 299	3	0.061			
(3) 300 thru High	0	EMPTY			

Sample Size Total	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 99	9	0.189	Qb1&2 =	26.65	p < .05
(2) 100 thru 299	11	0.213	Qb1&3 =	245.97	p < .05
(3) 300 thru High	3	0.031	Qb2&3 =	38.52	p < .05

Quality of Study	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 1.99	5	0.090	Qb1&2 =	21.59	p < .05
(2) 2 thru 2.49	9	0.213	Qb1&3 =	236.12	p < .05
(3) 2.5 thru 3	9	0.195	Qb2&3 =	14.12	p < .05

Comparison Group Age	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 15.99	6	0.121	Qb1&2 =	0.24	NSD .05
(2) 16 thru High	17	0.200			

# Self-esteem Meta-Analysis

470

Comparison Group Ethnic	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) White	3	0.511		Qb1&2 = 104.75	p < .05
(2) Black	4	0.248		Qb1&3 = 107.63	p < .05
(3) Other/Unknown	1	0.471		Qb1&4 = 87.76	p < .05
(4) Mixed group/	15	0.075		Qb2&3 = 255.06	p < .05
				Qb2&4 = 235.19	p < .05
				Qb3&4 = 238.07	p < .05

Comparison Group Marital Stat	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Single or Never Married	19	0.191		Qb1&2 = 4.71	p < .05
(2) Mixed group	2	0.216			
(3) Other/Unknown	2	0.036			

Comparison Group Family Inc	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low	15	0.110		Qb1&2 = 42.19	p < .05
(2) Middle	4	0.439			
(3) Unknown	4	0.179			

Pregnant Group Age	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 15.99	4	0.122		Qb1&2 = 0.45	p < .05
(2) 16 thru High	19	0.192			

Pregnant Group Ethnic	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) White	3	0.511		Qb1&2 = 104.75	p < .05
(2) Black	4	0.248		Qb1&3 = 107.63	p < .05
(3) Other/Unknown	1	0.471		Qb1&4 = 87.76	p < .05
(4) Mixed group/	15	0.075		Qb2&3 = 255.06	p < .05
				Qb2&4 = 235.19	p < .05
				Qb3&4 = 238.07	p < .05

Pregnant Group Marital Status	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Single or Never Married	19	0.191		Qb1&2 = 4.71	NSD .05
(2) Mixed group	2	0.216		Qb1&3 = 4.96	NSD .05
(3) Other/	2	0.036		Qb2&3 = 257.45	p < .05

Pregnant Group Family Income	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low	15	0.110		Qb1&2 = 42.19	p < .05
(2) Middle	4	0.439		Qb1&3 = 222.64	p < .05
(3) Unknown/	4	0.179		Qb2&3 = 63.79	p < .05

Pregnant Group Ed Status	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) 6th to 9th grade	2	0.071		Qb1&2 = 29.82	p < .05
(2) 10th to 12th Grade	14	0.210		Qb1&3 = 245.67	p < .05
(3) Mixed group/	7	0.150		Qb2&3 = 22.08	p < .05

Setting	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Hospital	0	EMPTY		Qb2&3 = 78.35	p < .05
(2) Clinic	9	0.316		Qb2&4 = 64.31	p < .05
(3) School/Community	1	0.020		Qb2&5 = 78.35	p < .05
(4) Other	10	0.099		Qb3&4 = 243.89	p < .05

# Self-esteem Meta-Analysis

471

Setting	Ki	MEAN Zr	ANALYSIS	SIGF
(5) Long Term Facility	1	-0.035	Qb3&5 = 257.93	p < .05
(6) University	0	EMPTY	Qb4&5 = 243.89	p < .05
(7) Unknown	1	0.126	Qb2&7 = 78.35	p < .05
			Qb3&7 = 257.94	p < .05
			Qb4&7 = 243.89	p < .05
			Qb5&7 = 257.93	p < .05

Nursing Theory	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Yes	1	0.126	Qb1&2 = 0.13	NSD .05
(2) No/	22	0.182		

Other/NonNursing Theory	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Yes	11	0.204	Qb1&2 = 16.89	p < .05
(2) No/	12	0.158		

Standardized Instrument	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Standardized instrument in the literature	13	0.116	Qb1&2 = 1.66	NSD .05
(2) Nonstandardized instrument	10	0.262		

Statistic Used	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Frequency, percentage, means, variance	3	0.148	Qb1&2 = 177.12	p < .05
			Qb1&3 = 230.92	p < .05
(2) Chi-square, Fisher's Exact, McNemar	2	0.661	Qb1&4 = 250.65	p < .05
			Qb1&5 = 250.65	p < .05
(3) ANOVA, t	15	0.116	Qb1&6 = 250.65	p < .05
(4) ANCOVA	1	0.078	Qb2&3 = 164.67	p < .05
(5) Multivariate correlation, r <sup>2</sup> , etc./	1	0.126	Qb2&4 = 184.40	p < .05
			Qb2&5 = 184.41	p < .05
(6) Other/	1	0.416	Qb2&6 = 184.40	p < .05
			Qb3&4 = 238.20	p < .05
			Qb3&5 = 238.20	p < .05
			Qb3&6 = 238.20	p < .05
			Qb4&5 = 257.93	p < .05
			Qb4&6 = 257.93	p < .05
			Qb5&6 = 257.94	p < .05

Observation Type	Ki	MEAN Zr	ANALYSIS	SIGF
(1) Chi-Square	2	0.740	Qb1&2 = 103.28	p < .05
(2) Z-value	1	0.471	Qb1&3 = 89.68	p < .05
(3) t-value	10	0.116	Qb1&4 = 91.62	p < .05
(4) F-value	6	0.167	Qb1&5 = 101.02	p < .05
(5) Other/	1	0.005	Qb2&3 = 244.33	p < .05
			Qb2&4 = 246.27	p < .05
			Qb2&5 = 255.67	p < .05
			Qb3&4 = 232.67	p < .05
			Qb3&5 = 242.07	p < .05
			Qb4&5 = 244.01	p < .05

# Social Responsibility Meta-Analysis

472

## SOCAC ANOVA TABLE

STUDIES IN THE ANALYSIS; K = 16

MODERATOR VARIABLE	F RATIO	F PROB.	Cochrans C p =	Homogeneity	SIGNIFANCE
PUBYR	2.166	0.154	0.028	HETEROG	SEE Qt ANALYSIS
PUBFORM	7.022	0.019	0.010	HETEROG	SEE Qt ANALYSIS
JOURTYP	7.022	0.019	0.010	HETEROG	SEE Qt ANALYSIS
SOURCE	2.039	0.162	0.033	HETEROG	SEE Qt ANALYSIS
AUTHOR	2.170	0.145	0.006	HETEROG	SEE Qt ANALYSIS
STUDYFLD	1.345	0.314	0.039	HETEROG	SEE Qt ANALYSIS
RETYPE	0.905	0.429	0.398	HOMOG	NTGSD 0.05
FUNDING	0.803	0.548	0.070	HOMOG	NTGSD 0.05
DESIGN	0.064	0.803	HCNP	UNKNOWN	SEE Qt ANALYSIS
SAMPMTHD	0.227	0.641	0.014	HETEROG	SEE Qt ANALYSIS
CGSMSE	1.188	0.336	0.149	HOMOG	NTGSD 0.05
PGSMSE	2.400	0.144	0.041	HETEROG	SEE Qt ANALYSIS
SPMSIZT	1.245	0.320	0.069	HOMOG	NTGSD 0.05
QUALSTD	0.442	0.652	0.443	HOMOG	NTGSD 0.05
CGAGE	0.007	0.785	0.908	HOMOG	NTGSD 0.05
CGETH	16.958	0.000	0.426	HOMOG	SEE Scheffe Analysis
CGMAR	1.774	0.208	0.079	HOMOG	NTGSD 0.05
CGFAMS	1.274	0.313	0.335	HOMOG	NTGSD 0.05
CGED	0.021	0.979	0.067	HOMOG	NTGSD 0.05
PGAGE	0.244	0.629	0.610	HOMOG	NTGSD 0.05
PGETH	2.562	0.115	0.088	HOMOG	NTGSD 0.05
PGMAR	1.072	0.371	0.159	HOMOG	NTGSD 0.05
PGFAMS	1.698	0.221	0.409	HOMOG	NTGSD 0.05
PGED	1.974	0.178	0.060	HOMOG	NTGSD 0.05
SETTING	0.031	0.970	0.166	HOMOG	NTGSD 0.05
NSGTHRY	ONLY ONE GROUP			NA	NA
MONSGTH	2.288	0.153	0.000	HETEROG	SEE Qt ANALYSIS
STAND	ONLY ONE GROUP			NA	NA
STATUSD	0.064	0.803	HCNP	UNKNOWN	SEE Qt ANALYSIS
OBTYPE	0.030	0.970	0.545	HOMOG	NTGSD 0.05

NTGSD 0.05 = NO TWO GROUPS ARE SIGNIFICANTLY DIFFERENT AT THE 0.05 LEVEL

HCNP = Tests for homogeneity of variance cannot be performed.

Only one group has a computed variance.

ONLY ONE GROUP = Fewer than two non-empty groups; ANOVA cannot be performed.

UNKNOWN = Homogeneity of variance not known.

HOMOG = Cochrans C (p GT 0.05) indicates variance Homogenous at 0.05 level; ANOVA is appropriate.

HETEROG = Cochrans C (p LT 0.05) indicates variance is Heterogenous at 0.05 level.

SEE Scheffe Analysis = See associated Scheffe analysis table for results.

SEE Qt ANALYSIS = See associated Qt analysis table for results.

# Social Responsibility Meta-Analysis

## Qt / Scheffe Analysis Table

473

### SOCAC VARIABLES

K = 16

QT = 79.19

Publication Year	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) LOW THRU 1979	2	-0.01		Qb1&2 =	28.07 p < .05
(2) 1980 THRU 1989	9	0.23		Qb1&3 =	70.96 p < .05
(3) 1990 THRU HIGH	5	0.10		Qb2&3 =	34.56 p < .05

Publication Form	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Journal	6	0.03		Qb1&2 =	35.86 p < .05
(2) Dissertation	10	0.24			

Journal Type	Ki	MEAN	Zr	ANALYSIS	SIGF
(2) Speciality	6	0.03		Qb2&3 =	35.86 p < .05
(3) NA/	10	0.24			

Source	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) CINAL	0	EMPTY		Qb3&4 =	79.19 p < .05
(2) ERIC	0	EMPTY		Qb3&5 =	71.00 p < .05
(3) MEDLINE	1	0.55		Qb3&6 =	44.06 p < .05
(4) PsychLit	1	0.48		Qb4&5 =	70.99 p < .05
(5) REF List	4	0.15		Qb4&6 =	44.06 p < .05
(6) Dissertation Abstracts/	10	0.24		Qb5&6 =	35.87 p < .05

Author	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) 1	10	0.24		Qb1&2 =	44.07 p < .05
(2) 2	1	0.06		Qb1&3 =	42.91 p < .05
(3) 3	3	-0.01		Qb1&4 =	43.93 p < .05
(4) 4	2	0.07		Qb2&3 =	78.04 p < .05
(5) 5	0	EMPTY		Qb2&4 =	79.06 p < .05
				Qb3&4 =	77.90 p < .05

Study Field	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Nursing	2	0.15		Qb1&2 =	78.78 p < .05
(2) Sociology	3	0.05		Qb1&3 =	74.36 p < .05
(3) Medicine	0	EMPTY		Qb1&4 =	55.24 p < .05
(4) Psychology	7	0.20		Qb1&6 =	58.44 p < .05
(5) Education	4	0.17		Qb2&3 =	74.01 p < .05
(6) Public Health/	0	EMPTY		Qb2&4 =	54.89 p < .05
				Qb2&6 =	58.09 p < .05
				Qb3&4 =	50.47 p < .05
				Qb3&6 =	53.68 p < .05
				Qb4&6 =	34.55 p < .05

# Social Responsibility Meta-Analysis

474

Design	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Descriptive	1	0.11	Qb1&2 =	-0.19	NSD .05
(2) Correlational	15	0.16			
Sampling Method	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Matched	0	EMPTY	Qb2&3 =	1.91	NSD .05
(2) Random and matched	2	0.22			
(3) Convenience/	14	0.15			
Pregnant Group Sample Size	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Low thru 99	14	0.13	Qb1&2 =	16.99	p < .05
(2) 100 thru 299	2	0.34			
(3) 300 thru High	0	EMPTY			
Comparison Group Ethnic	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) White	2	0.56	SCHEFFE 1&2		p < .05
(2) Black	4	0.13	SCHEFFE 1&4		p < .05
(3) Other/Unknown	0	EMPTY	SCHEFFE 2&4		NSD .05
(4) Mixed group/	10	0.09			
Other/NonNursing Theory	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Yes	11	0.20	Qb1&2 =	6.52	p < .05
(2) No/	5	0.06			
Statistic Used	Ki	MEAN	Zr	ANALYSIS	SIGF
(1) Frequency, percentage, means, variance	1	0.11	Qb1&3 =	-0.19	NSD .05
(2) Chi-square, Fisher's Exact, McNemar	0	EMPTY			
(3) ANOVA, t	15	0.16			
(4) ANCOVA	0	EMPTY			
(5) Multivariate correlation, r2, etc./	0	EMPTY			
(6) Other/	0	EMPTY			