COGNITIVE, MOTIVATIONAL, EMOTIONAL, AND SELF-ESTEEM DEFICITS OF DIVORCED MOTHERS AND FATHERS AT TWO TIME PERIODS FOLLOWING DIVORCE: IMPLICATIONS OF LEARNED HELPLESSNESS

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Introduction

In 1976 there were 2,133,000 marriages and 1,077,000 divorces in the United States--5 divorces for every 10 marriages. In each divorce there was an average of 1.08 children. Thus, more than two million adults and over one million children were affected by divorce in a single year (U. S. Bureau of the Census, 1977). Likewise, it is estimated that 40% to 50% of the current marriages of young adults will end in divorce and that 1/2 of the children born in the 1970s will spend some time living in a single-parent home (Hetherington, 1979). The median age of the oldest child in families granted divorce is 10 years. Ninety percent of these children reside with their mothers and 10% with their fathers. The average length of time spent by children in a single-parent home as a result of divorce is about 6 years. During these years, many of these single-parent families suffer from the combined disadvantages of low earnings

and little outside help (Guerney & Jordon, 1979). Thus, even though the birth rate in the United States has declined over the past 10 years, the number of divorces among parents of children is rising. The rate of remarriage is also rising, but it does not keep up with the divorce rate, especially in families that involve children. Therefore, there has been an increase in the proportion of divorced persons, particularly divorced parents.

These figures might have little interest except for the fact that more and more evidence is appearing which points to marital disruption, both separation and divorce, as profoundly stressful life events and relates them to a wide variety of physical and emotional disorders. Briscoe and Smith (1974) and Crago (1972) reported that the incidence of mental disorders was generally lowest among married persons, intermediate among the widowed and single, and highest among the divorced. Admission rates into psychiatric facilities, regardless of type of facility or sex of subject, was highest for those with disrupted marriages. The psychiatric disorders seen most frequently in divorced subjects were depression, antisocial personality, and hysteria (Briscoe, Smith, Robins, Marten, & Gaskin,

1973). Feelings of depression among the divorced have also been reported by Bloom, Asher, and White (1978), Hetherington, Cox, and Cox (1976, 1977), and Leff, Roatch, and Bunney (1970). A decline in feelings of competence both at work and in social interactions has been reported by Hetherington et al. (1976) and by White and Bloom (Note 1), as well as feelings of isolation, rejection, and loneliness. Hetherington, Cox, and Cox (1976) found that some of the parents in their study felt immobilized, highly anxious, and helpless following divorce. Lowered self-esteem was also experienced by many. Wallerstein and Kelly (1976, 1977) reported that divorced parents in their study often experienced diminished gratification, anxiety, and feelings of being unloved and unimportant. Hetherington et al. (1976) found that men, following divorce, often doubted their ability to adjust in future marital relationships and Weissman and Klerman (1977) have suggested that socially conditioned, stereotypical images produce in women a cognitive set against assertion and that young girls learn to be helpless during their socialization and thus develop a limited response repertoire when under the stress of divorce. Bloom, Asher, and White (1978) noted higher rates of illness,

disability, alcoholism, suicide, and homicide among the divorced than among any other marital status group.

When viewed as a whole, previous researchers have described the responses of a significant number of divorced persons to the trauma of divorce in terms that seem to parallel and, indeed, are often corollary to the symptoms and deficits described in learned helplessness. Seligman (1975) has postulated that learned helplessness is a model of depression and has suggested that persons who have been exposed to aversive, uncontrollable trauma often come to believe that their actions are futile and suffer deficits along cognitive, motivational, emotional, and self-esteem lines. He hypothesized that learned helplessness

> (1) reduces the motivation to control outcome; (2) interferes with learning that responding controls the outcome; (3) produces fear for as long as the subject is uncertain of the uncontrollability of the outcome, and then produces depression. (Seligman, 1975, p. 56)

Seligman (1975) has suggested that what links experiences such as failure, loss, rejection, separation, and financial difficulty and lies at the heart of depression is unitary: The depressed individual has

learned that those elements that provide nurture, bring gratification, and relieve suffering are no longer under his/her control. He stated:

> Learned helplessness need not characterize the whole spectrum of depressions, but only those primarily in which the individual is slow to initiate responses, believes himself to be powerless and hopeless, and sees his future as bleak--which began as a reaction to having lost control over gratification and relief from suffering. (Seligman, 1975, p. 81)

This study has explored the cognitive, motivational, emotional, and self-esteem deficits which characterize learned helplessness, in a sample of divorced mothers and fathers at two time periods following divorce and has attempted to identify some of the factors related to those deficits.

Learned Helplessness

Learned helplessness refers to the perception of independence between one's responses and the onset or termination of an aversive event (Maier & Seligman, 1976). To the extent that an individual in a failure situation views his/her behavior as irrelevant to the subsequent outcome (i.e., the probability of continued failure given a response is equal to the probability of

failure given no response), that individual may be said to display learned helplessness.

Historically, the learned helplessness hypothesis was formulated before helplessness experiments were performed with human subjects and was based on the results of experiments with rats, dogs, cats, and fish (Seligman, 1974, 1975; Seligman & Beagley, 1975; Seligman, Rosellini, & Kozak, 1975). Seligman and Maier (1967) found that dogs given inescapable shock were subsequently poorer at escaping shock than dogs given escapable shock or no prior shock.

Studies of learned helplessness in man have paralleled the animal helplessness paradigm by presenting subjects with an uncontrollable training task in the form of inescapable shock (Thornton & Jacobs, 1971), inescapable noise (Hiroto, 1974; Hiroto & Seligman, 1975; Miller & Seligman, 1975), or unsolvable cognition problems (Roth & Bootzin, 1974; Roth & Kubel, 1975). The performance of these subjects on a potentially solvable or escapable test task is then compared with those who were given experience with controllable outcomes or no prior experience. Helpless subjects have failed to escape noise and shock and have failed to solve simple anagram problems, providing evidence for

both the response initiation deficit and the cognitive deficit found in helpless animals.

A Model of Depression

The learned helplessness paradigm has been presented as a model of depression in humans (Seligman, 1975). A number of studies have shown that helplessness induced in the laboratory in nondepressed subjects produced deficits similar to those shown by mildly depressed subjects. Both groups showed deficits in solving anagram problems (Klein & Seligman, 1976; Miller & Seligman, 1975) and distorted perception of response-reinforcement independence (Miller, Seligman, & Kurlander, 1975).

Seligman (1975) hypothesized that a person's belief that he/she is helpless adversely affects mood, paralleling the mood changes accompanying depression. Roth and Kubel (1975) found that exposure to uncontrollable aversive stimuli increased feelings of anxiety, depression, and hostility. Gatchel, Paulus, and Maples (1975) obtained similar results, but found the changes in amounts of anxiety, depression, and hostility to be transient, dissipating rapidly after the solution of anagram problems.

To argue that laboratory induced helplessness is a suitable analogue of depression, one must demonstrate

that subjects generalize inappropriately from their helplessness training. Hiroto and Seligman (1975) demonstrated a generalization from unsolvable discrimination problems to a finger-shuttle box task. Roth and Kubel (1975) provided direct evidence suggesting that the debilitating effects of helplessness generalized across situations by pretraining subjects on concept formation problems and then switching to another task in a different room, using different apparati and a different experimenter.

Seligman (1975) also suggested that to assert confidently the similarity of learned helplessness and depression, one must show similarity along four lines: symptoms, etiology, cure, and prevention. Klein and Seligman (1976) reviewed the work on this problem and found that success therapy reversed both feelings of helplessness and clinically diagnosed depression.

Seligman (1975) postulated that the major symptoms of learned helplessness all have parallels in the symptoms of depression, suggesting that reactive depression as well as learned helplessness, has it roots in the belief that valued outcomes are uncontrollable. Seligman listed six symptoms of learned helplessness, each having its parallel in depression: (a) subjects who have

experienced uncontrollability exhibit reduced initiation of voluntary responses; (b) subjects have difficulty learning that responses produce outcomes and therefore have a negative cognitive set; (c) helplessness dissipates in time when induced by a single occurrence of an uncontrollable aversive event but after multiple occurrences, helplessness persists; (d) helpless subjects initiate fewer aggressive and competitive responses; (e) helpless subjects eat less and are sexually and socially deficient; and (f) helpless subjects experience certain physiological changes such as norepinephrine depletion and cholinergic activity.

Criticisms and Reformulation

Several inadequacies with the theoretical constructs originating in animal helplessness were noted by investigators of human helplessness (Miller & Norman, 1979). Problems have included facilitation effects (Thornton & Jacobs, 1971), problems with generalization (Cole & Coyne, 1977; Roth & Bootzin, 1972), individual differences (Dweck & Reppucci, 1973), importance of the task (Roth & Kubel, 1975), and attribution of performance (Dweck & Reppucci, 1973).

Recently, Abramson, Seligman, and Teasdale (1978) proposed a reformulation of the learned helplessness

hypothesis, based on a revision of attribution theory. According to the reformulation, once people perceive noncontingency, they attribute their helplessness to a cause. The kind of causal attribution they make for lack of control influences whether their helplessness will entail a lowering of self-esteem and whether it will generalize across situations and time. Abramson et al. proposed that three attributional dimensions are necessary for explaining human helplessness and depression: (a) internal-external; (b) stable-unstable; and (c) global-specific.

The reformulated hypothesis asserts that attributing lack of control to internal factors leads to lowered self-esteem, whereas attributing lack of control to external factors does not. Attributing lack of control to stable, long-lived or recurrent factors should lead to helplessness deficits extended across time, whereas attributing lack of control to unstable, short-lived or intermittent factors should result in short-lived helplessness deficits. Likewise, attributing lack of control to global factors should lead to wide generalization of helplessness and attributing lack of control to specific factors should lead to situation-specific helplessness.

Abramson et al. (1978) made four explicit statements concerning the reformulated model of depression: (a) depression consists of four classes of deficits: motivational, cognitive, self-esteem, and affective; (b) when highly desired outcomes are believed improbable or highly aversive outcomes are believed probable and the person believes that no response he/she might make will change the outcome, depression, or helplessness, results; (c) the generality of the helplessness deficit depends on the globality of the attribution for helplessness; the chronicity depends on the stability of the attribution for helplessness, and whether self-esteem is lowered depends on the internality of the attribution for helplessness; and (d) the intensity of the helplessness depends on the certainty of the expectation of uncontrollability and on the importance of the outcome.

Abramson et al. (1978) reasoned that individual differences should exist in attributional style and proposed the existence of a depressive style in which depressive prone individuals should tend to attribute bad outcomes to global, stable, and internal factors. Seligman, Abramson, Semmel, and von Baeyer (1979) tested this prediction, comparing depressed and nondepressed college students. They found that depressed college

students attributed bad outcomes to internal, stable, and global causes as measured by The Attributional Style Scale (Semmel, Note 2).

The reformulated model of depression has been criticized by Wortman and Dintzer (1978) who argued that unless it is possible to specify conditions under which a given attribution will be made, the model lacks predictive power; by Depue and Monroe (1978) and Buchwald, Coyne, and Cole (1978), who argued the validity of drawing conclusions about clinical depression on the basis of studies using nonclinical subjects; and by Costello (1978) who argued that there was no serious attempt to take the subtypes of depression into consideration.

Depression and Divorce

Divorce has been compared to loss from death, in part because death and mourning have been widely studied in recent years (Wallerstein & Kelly, 1977). Froiland and Hozman (1977) explored the usefulness of Kubler-Ross's (1969) loss model in counseling divorced individuals and found that responses to loss brought about by death of a significant other and to loss of a relationship brought about by divorce were very similar. They reported that the type of depression in divorce is generally a combination of sadness and pessimism. The individuals

experiencing divorce often were despondent as they realized that the denial, anger, and bargaining stages had not been successful. They began to see themselves as failures, and to doubt their own ability in handling present and potential situations, especially in the areas of human interactions. Some lost confidence in their ability to make decisions and to function independently. They tended to overgeneralize the negative experience and to predict the future in a stereotypic negative manner.

The Divorced Parent

In a longitudinal study of 72 children and their divorced parents, Hetherington et al. (1977) found that divorced mothers and fathers encountered marked stresses in the areas of practical living problems, self-concept and emotional distress, and interpersonal relations following divorce. Low self-esteem, loneliness, depression, and feelings of helplessness were characteristic of the divorced couple.

Hetherington et al. (1977) also reported that in many divorced families, disruptions occurred in parent-child relations. Divorced parents tended to be less consistent, less affectionate and have less control over their children's behavior. The children in divorced

families were more dependent, disobedient, aggressive, demanding, and lacking affection.

Most investigators agree that the child's experience and degree of grief, depression, guilt, anxiety, and loss of self-esteem are directly influenced and can be dramatically exacerbated by parental reaction to the divorce. Based on his clinical experience with children, Gardner (1976) concluded that it was not divorce, per se, that produced psychopathology in the child, but exposure to a detrimental environment over a period of time.

In exploring the impact of divorce on children, Westman, Cline, Swift, and Kramer (1970) found that, in their study of 148 divorce cases, approximately half the divorces involving children were followed by additional legal contests. About 1/3 of these involved repeated and intensive interaction between the divorced couple during a 2-year period following divorce. Issues involving money and children shared almost equally in the postdivorce disputes. Furthermore, Westman et al. (1970) reported that children, with histories of divorce and seen in a child psychiatric clinic, came from divorces followed by parental conflict or by complete loss of contact with one parent, suggesting that the experience of divorce itself is less pathogenic than

the continued conflict between the parents and their relationships with their children.

Rosen (1979) examined the child's adjustment level in relation to sex of the custodial parent, access of the child to the noncustodial parent, and interparental turbulence. Interparental turbulence was defined as interparental conflict preceding and/or generated by the divorce and continuing into the postdivorce period. She found that interparental turbulence emerged as the single most significant factor, and would support the findings of Westman et al. (1970).

Tessman (1978) suggested that the experience of divorce for the child is affected by the quality of the parent-child relationship before separation, the developmental stage of the child, and the meaning the child attributes to the loss of a parent. The meaning of this loss is influenced by the changed relationship and, also, by the meaning given to it by others in the child's environment. Thus, the child is affected both by the parent's response to the divorce and by the image of the missing parent conveyed by the remaining parent, whether implicitly or explicitly.

Rosenthal (1979) suggested that when the remaining parent becomes depressed, withdrawn, or enraged, the child

views this behavior as his/her fault and feels guilty, fearful, and rejected. Rosenthal found that the child's ability to cope depended on the remaining parent's ability to deal with his/her own feelings and to convey to the child that he/she can express feelings for the departed parent.

Hetherington (1979) pointed out that since divorced adults have more health and emotional problems, even after the initial crisis period of divorce than do married adults, the child might therefore be coping with a mother or father who is not only confronting many stresses, but who may also be physically and emotionally less able to deal with adversity. Kelly and Wallerstein (1977) and Wallerstein and Kelly (1977) noted that, while some parents plan ways to help their children cope with their distress, others in their study were too preoccupied with their own bitterness, humiliation, and plans for revenge to be supportive.

Recent evidence suggests that not only do parents' reactions to divorce influence how children adapt and cope, but also, that children who are disturbed by parental separation may be a stress on their parent, and may influence how the parent adapts and copes with the divorce. Thus is formed an interactive, functional net

(Hetherington, 1979). Hetherington, Cox, and Cox (Note 3) suggested that children's behaviors, especially those of boys can cause mothers to experience feelings of anxiety, helplessness, incompetence, and despair. Furthermore, the mother who must cope with too many young children or with acting out, noncompliant behavior becomes increasingly distressed and inept in her parenting.

Symptoms of Learned Helplessness

Seligman (1975) has presented a theory of helplessness which claims that organisms, when exposed to uncontrollable trauma, learn that responding is futile. Such learning undermines the incentive to respond and produces interference with the motivation of instrumental behavior. This may be expressed by isolation and withdrawal, generally slowed behavior and/or feelings of being unable to act or make decisions. White and Bloom (Note 1) in their study of 40 men in the process of divorce, found that the most pervasive and debilitating problems experienced by their subjects were feelings of loneliness and isolation. They also found a strong relationship between poor adjustment to marital separation and poor job performance. Hetherington et al. (1976) also reported that over half of the divorced fathers in their study reported that they felt they were

functioning less well at work, coping less well socially, and were less competent in heterosexual relations. They also reported sleeping less and eating erratically. Hetherington, Cox, and Cox (Note 3) found that divorced mothers had significantly less contact with adult friends than did married parents and described themselves as prisoners who were "walled-in" or "trapped."

Seligman (1975) postulated that believing that responding is futile also proactively interferes with learning that responding works when events become controllable, and so produces cognitive distortions. Hetherington et al. (1977) reported that one of the most marked changes in divorced parents in the first year following divorce was a decline in feelings of competence. They felt they had failed as parents and spouses, and they expressed doubts about their ability to adjust well in any future marriages. Froiland and Hozman (1977) suggested that when the marriage relationship ends, the individual whose concept of personal self-worth is dependent upon the maintenance of the marriage often feels like a failure and believes that no other relationship in which he/she might be involved will ever be successful.

The learned helplessness hypothesis claims that depressed affect is a consequence of learning that outcomes are uncontrollable. Hetherington et al. (1977) have examined emotional reactions to marital disruption and found that divorced parents felt more anxious, depressed, angry, and rejected than married persons. In a review of the literature on marital disruption, Bloom et al. (1978) reported that the ratio of admission rates for divorced and separated persons to those for married persons into inpatient psychiatric facilities varies from 7:1 to 22:1 for males and from 3:1 to 8:1 for females. He also reported excess vulnerability to motor vehicle accidents among the divorced as well as a relationship between marital disruption and death from suicide, homicide, and specific diseases.

Finally, the learned helplessness hypothesis suggests that depressed individuals who believe their helplessness is personal show lowered self-esteem. Hetherington et al. (1977) reported that both divorced men and women experienced changes in self-concept. Fathers felt a lack of identity while mothers complained of feeling unattractive. Working with 60 families of divorce, Wallerstein and Kelly (1977) reported that often fathers who had been rejected by their wives presumed

that they were equally unwanted and unneeded by their children and felt unimportant and expendable.

Certainly the impact of divorce and the depression that is experienced may be exacerbated by a number of other demographic factors. Of special interest to this study are the factors of sex of the parent and time since the divorce.

Sex of the Parent

Recent evidence indicates that men and women may react differently to the trauma of divorce. Literature dealing with the effects of divorce on women indicates that marital disruption is often seriously stressful and creates more visible problems for them than for men (Brandwein, Brown, & Fox, 1974). However, this seems incongruent with the finding that the relationship between marital disruption and physical and emotional illness appears to be significantly stronger for men than for women. Bloom et al. (1978) concluded that in virtually every correlate of marital status reviewed, including psychopathology, disease morbidity, disease mortality, suicide, and homicide, the stresses of marital disruption appeared greater for males than for females. Also, Bloom (1975), in his epidemiological study of Pueblo, Colorado, found that psychiatric first admission

rate differentials for males with disrupted marriages as compared with males with nondisrupted marriages were on the order of 9:1, while rates for females differed by only a 3:1 ratio.

Using a sample of 309 persons who had filed for a divorce, Chiriboga, Roberts, and Stein (1978) found that 31% of the men and only 16% of the women reported themselves to be "not too happy." On the other hand, women tended to feel angrier, prouder, and more uneasy about things without knowing why. The men tended to be more restless. Compared with survey results, the separated women reported a rate of unhappiness that is not out of line with the rate for the nation as a whole. Men, on the other hand, reported a rate that is approximately twice that found nationwide.

Hetherington et al. (1977) reported that men seemed to experience greater initial stress following divorce. This was attributed to the fact that they were usually the ones to leave familiar surroundings. Women, on the other hand, retained a sense of security from familiar surroundings and the continued presence of their children. Stress and changes in self-concept evolved more slowly, but the effects were longer lasting.

In her investigation of the effects of father absence on adolescent girls, Hetherington (1972) reported that divorced mothers tended to have negative attitudes toward their ex-spouses, themselves, and life in general, and they worried about their adequacy as mothers.

Tooley (1976) suggested that the divorced mother suppresses as "unmaternal" her resentment at having to care for children with reduced financial income. She reported that before divorce, family incomes in her study ranged from $10,000 to $35,000 a year. After divorce, the average income of the divorced mothers was $5,000 a year, resulting in their feeling overwhelmed, frightened, and angered by the emotional and economic pressures of raising a family and maintaining a household on their own.

Time Since Divorce

Time also seems to be an important factor in any discussion dealing with the effects of divorce. Westman (1972) pointed out that divorce does not "end everything" as so many discover, after the fact. Hetherington (1979) has described divorce as a sequence of experiences involving transition. Family members shift from the family situation before divorce to the disequilibrium and disorganization associated with separation and divorce,

and then through a period of experimenting with different defenses for dealing with the new situation. This is followed by reorganization and, eventually equilibrium. In a longitudinal study, Hetherington et al. (1976) found that immediately following divorce the family system was in a state of disequilibrium. Disorganization and disrupted functioning seemed to peak at a period about 1 year after divorce and began restabilizing by the end of the second year. Poor parenting seemed most marked, particularly for divorced mothers, 1 year after divorce. A similar pattern was noticed for divorced fathers in maturity demands, communication, and consistency with their children. The noncustodial father tended to become less nurturant and more detached with time, whereas a process of reequilibrium seemed to take place in the mother-child relationship by the end of the second year following divorce.

Wallerstein and Kelly (1977) agreed that a period of several years of disequilibrium can be expected before new relationships can become stable enough to provide comfort and continuity. In studies comparing the impact of divorce shortly after the initial parental separation and 1 year later on preschool children (Wallerstein & Kelly, 1975), latency-age children (Kelly & Wallerstein,

1976; Wallerstein & Kelly, 1976) and adolescents (Wallerstein & Kelly, 1974), it was found that among the preschool sample, 44% were found to be in significantly deteriorated psychological condition 1 year after divorce. Among the latency age group, 50% had either improved in overall function or had at least maintained their previous developmental stride. The other half, however, exhibited troubled and conflicted behavior patterns. Among the adolescent group, most were able, within the year following family disruption, to take up their own agendas and proceed toward adulthood. Kelly and Wallerstein (1977) reasoned that the outcomes at the end of 1 year were related to the nature of the post-divorce family structure, the changing tensions and gratifications of the parent-child relationship, and the interaction over time of these factors with the developmental needs and personality structure of the child.

Data gathered as a part of a major epidemiological study in the southwestern United States by Warheit, Holzer, Bell, and Arey (1976) supported the idea that time is a factor that must be considered in any study of the effects of divorce. They found that for all marital status groups except the widowed, those in a status for less than 1 year had higher mean scores on measures of

psychological distress than those who held their status for 1 to 4 years.

The findings of these studies converge on identifying a number of deficits experienced by persons undergoing marital disruption that seem to parallel the deficits postulated by Seligman (1975) which underlie the learned helplessness hypothesis. Evidence is also presented that men and women experience the trauma of divorce differently and that the critical period in the marital disruption process is not a point in time, but extends form the time of separation and peaks at around 1 year after divorce.

Demographic Data

Of interest to this study, also, are other factors that may relate to the total adjustment of the individual following divorce such as age, length of marriage, who initiated divorce proceedings, number, sex, age, and custody of children, income, job status, and perceived support systems. In their study of divorcing men, White and Bloom (Note 1) reported that age or length of marriage did not significantly differentiate men on any of the adjustment measures used. They did find that men who perceived themselves as having made the initial decision to divorce scored significantly higher on

adjustment ratings than those who did not perceive themselves as initiators. Weiss (1976), however, reported that being the spouse who initiated the divorce did not seem to be an important factor in determining the amount of stress produced by the divorce. Chiriboga et al. (1978), in their sample of 309 men and women aged 20 to 79, found that age was an important variable in adjustment, with older respondents reporting greater unhappiness than the younger. Work, finances, and length of marriage had some relationship to adjustment, but not significantly so. Warheit, Holzer, Bell, and Arey (1976) reported that in their sample, low socioeconomic status was the strongest predictor of high scores on a measure of mental health problems among the divorced. Perlin and Johnson (1977) found that it was the combination of economic strain, social isolation, and parental responsibility that was most productive of psychological distress. Colletta (1979) reported that in her study of divorced mothers, low income was a key factor in predicting psychological distress along with having two or more children or a male child. Hetherington et al. (1977) has also noted that divorced mothers of sons felt more helpless, depressed, angry, and self-doubting. Support systems, such as grandparents, siblings, or close

friends have been reported to be related to the divorced parent's effectiveness and good adjustment (Hetherington et al. 1977; Kelly & Wallerstein, 1977). This was especially true when the divorced individual had established a new intimate, heterosexual relationship.

Since many of the effects of divorce, both observed and measured by prior researchers, appear to parallel those cited in the learned helplessness model of depression, it seems appropriate to explore the differences of divorced mothers and fathers at two time periods following divorce on measures of cognitive set, motivation, depression, self-esteem, and attributional style. The value of such information is: (a) to add empirical information, of which there is little, concerning the responses of men and of women to the trauma of divorce; (b) to better identify temporal sequences of stress; (c) to make implications for treatment and prevention strategies that modify or eliminate the deleterious sequelae of divorce, and (d) to add validity to the Attributional Style Scale.

The purposes of this study are:

1. To determine whether measures of cognitive style, motivation, depression, and self-esteem of divorced mothers and fathers differ systematically.

2. To examine the reported temporal sequence of the effects of divorce on mothers and fathers and to determine whether measures of cognitive style, motivation, depression, and self-esteem of divorced parents change or modify across time following divorce.

3. To examine the relationship between attributional style and measures of cognitive set, depression, motivation, and self-esteem.

4. To accumulate demographic data and investigate the relationship between those data and the measures of cognitive style, motivation, depression, and self-esteem.

To fulfill this purpose, male and female subjects have been enlisted from the Parents Without Partners, Inc. organization and also from a large singles Sunday School class within a major-denomination church. Only those parents who had been divorced 1 year or less or 2 or more years have been selected in order to fulfill the requirements of the time-since-divorce variables.

The null hypotheses under investigation in this study are as follows:

1. It is hypothesized that there is no significant difference of mean scores between male and female

divorced parents on measures of cognitive set, motivation, depression, and self-esteem.

2. It is hypothesized that there is no significant difference of mean scores between the short-term divorce group (divorced 1 year or less) and the long-term divorce group (divorced 2 or more years) on measures of cognitive set, motivation, depression, and self-esteem.

3. It is hypothesized that there is no significant interaction between the variables sex of parent and time-since-divorce on measures of cognitive set, motivation, depression, and self-esteem.

4. It is hypothesized that no significant relationship exists between attributional style and measures of cognitive set, motivation, depression, and self-esteem.

Method

Subjects

Subjects included 83 divorced parents who belong to the Parents Without Partners, Inc. organization in a large urban city or to the Singles Sunday School class within a large, major denomination church. The total membership of these two organizations was 2,600 men and women. Five hundred names were selected randomly from the membership roles of these organizations and a letter

explaining the nature and value of the study and asking for volunteers was sent to each name selected (see Appendix A). Ninety-four persons responded to this initial letter and indicated that they would be willing to take part in this study. Eleven of these volunteers did not fit into the less-than-1-year or over-2-year time variable and were contacted by telephone and informed that they would not be used in the study. The remaining 83 subjects were personally contacted and arrangements were made to receive the questionnaires. Each subject received directly from the examiner a packet containing the six questionnaires and an oral presentation of the intent of the study (see Appendix A). Each subject was instructed as to the procedure for completing each of the questionnaires and was given a consent form to sign (see Appendix A). Subjects were able to withdraw from the experiment at any time. There were no restrictions on subject selection due to race, ethnic origin, age, or sex.

Of the 83 subjects, 10 were men who had been divorced less than 1 year, 21 were men who had been divorced 2 or more years, 23 were women who had been divorced less than 1 year and 29 were women who had been divorced two or more years. Two subjects from this latter group were

discarded from the analysis because they did not complete the questionnaires. All of the subjects were between the ages of 25 and 54 years and all had children under 21 years of age.

One subject from the male, divorced more than 2 years group, three subjects from the female, divorced less than 1 year group, and two subjects from the female, divorced more than 2 years group were randomly discarded from the analysis. Thus 75 subjects, 10 males, divorced less than 1 year; 20 males, divorced 2 or more years; 20 females, divorced less than 1 year; and 25 females, divorced more than 2 years were included in the final analysis.

Apparatus

1. The Beck Depression Inventory, hereafter referred to as the BDI (Beck, 1967) was selected to assess negative cognitive set because it is self-administered, relatively short, provides information for assessing depression, and is relatively well validated. Split-half reliability with a Spearman-Brown correction is .93.

2. The Motivation Analysis Test, hereafter referred to as the MAT (Cattell, Horn, Sweney, & Radcliffe, 1964) was selected to measure total motivation and life

interest. It is self-administered and is constructed to provide a context within which four objective behaviors can be measured in relation to 10 drive areas. The 10 psychologically meaningful motivation systems have been established by comprehensive and objective factor analysis research. Raw scores on each factor are converted to normalized sten scores and norms are given for a total personal interest score. The 10 major drives and interests measured by the MAT include:

1. Mating (sexual love)
2. Assertiveness (achievement)
3. Fear (alertness to external dangers)
4. Narcism (self-indulgent satisfaction)
5. Pugnacity-sadism (aggressiveness)
6. Self-concept
7. Superego
8. Career
9. Sweetheart/spouse (attachment)
10. Home/parental

Reliability and validity for the 10 MAT scales has been determined and the multiple R's obtained in research show validities for all 10 factors which lie in the .90s.

3. The IPAT Depression Scale (Krug & Laughlin, 1976), was used to measure depression. It is a

self-administered, 40-item questionnaire. Test validation blended two distinct strategies, factor analysis and contrasted groups, to ensure both construct and empirical validity in the final scale. Reliabilities average .93.

4. The Tennessee Self Concept Test (Fitts, 1964), was selected to measure self-concept. The test is self-administered and consists of 100 self description statements which the subjects use to portray their own picture of themselves. The reliability coefficient for the total positive score is .88.

5. The Attributional Style Scale (Semmel, Note 2), was selected to measure attributional style. The scale consists of 12 hypothetical situations, six describing good outcomes and six describing bad outcomes. For each situation the subject is asked to name the major cause of the described outcome and then to rate each cause on a 7-point scale for degree of internality, stability, and globality. The coefficient alpha reliabilities for the six subscales average .54.

6. A self-report inventory was constructed by the experimenter (see Appendix B) and was administered for the purpose of collecting demographic data on each subject.

Procedure

Each subject was contacted by telephone and was informed that the testing would be conducted at the Parents Without Partners, Inc. meeting hall between 6:00 and 10:00 p.m., Monday through Friday, on three consecutive weeks. Each subject was given the choice of time and day to best suit his/her schedule. If the subject did not show up for his/her appointment, he/she was contacted again and rescheduled for another time. At the time of testing each subject received a numbered packet containing the Beck Depression Inventory, the Motivation Analysis Test, the IPAT Depression Scale, the Tennessee Self-Concept Test, the Attributional Style Scale, and the Self-report Inventory. Each measuring instrument carried the same number as the packet and served to identify the individual subject. The six measuring instruments were randomly ordered for each packet.

At the time of testing each subject was asked to fill out a consent form and procedures for completing the questionnaires were explained orally by the experimenter. Each subject was asked to complete all six questionnaires, proceeding at his/her own pace. An attempt was made to collect the questionnaires at the end of the testing session. However, due to the time

required to complete the questionnaires, many of the subjects were unable to complete all six questionnaires in one session. Those who needed additional time were either allowed to take their packet of questionnaires home and complete them at their earliest convenience, returning them at an appointed time, or were rescheduled for another testing session during the 3 weeks of testing at the center.

Data were analyzed in a 2 X 2 multivariate analysis of variance with sex (male/female) and time since divorce (1 year or less and 2 or more years) as the independent variables. Subjects' scores on the Beck Depression Inventory, the Tennessee Self Concept Test, the IPAT Depression Scale, and on each of the 10 factors of the Motivation Analysis Test were the dependent variables. Thus, there were 13 scores for each subject in the analysis.

Pearson product-moment correlations were employed to determine the relationship between subjects' scores on the Attributional Style Scale and scores on the BDI, MAT, IPAT Depression Scale, and Tennessee Self Concept Test. Stepwise Multiple Regression was employed to determine the relationship between demographic variables

and these same measures. Alpha level for all statistical procedures was set at .05.

Results

The 2 X 2 multivariate analysis of variance of subjects' scores revealed a significant main effect for time since divorce ($F = 2.38$, $df = 13, 59$, $p < .05$). There was no significant main effect for sex and no significant time-since-divorce by sex interaction (see Table 1).

Table 1

Multivariate Analysis of Variance on BDI, 10 MAT Factors, IPAT Depression, and Tennessee Self Concept Scores

(n = 75)

	Summary Table	
Variable	F	df
Sex	.95	13, 59
Time since divorce	2.38*	13, 59
Interaction (sex X time)	1.25	13, 59

*Significant at the .05 level

A post hoc investigation of the significant main effect was performed by means of discriminant analysis to determine which of the dependent variables were involved at the .05 significance level (see Table 2).

Factors which proved to be significant for the time-since-divorce variable were cognitive set (Beck Depression Inventory), motivation toward self-indulgent satisfaction (Narcism), motivation to avoid external changes (Fear), motivation toward mating (Mating), motivation toward career (Career), and depression (IPAT Depression Scale), in that order. Subjects who had been divorced 1 year or less were found to have more negative cognitive set, were more motivated toward self-indulgence, were less motivated to escape external dangers, were less motivated toward sexual love, were less motivated toward their career, and were more depressed than subjects who had been divorced 2 or more years.

Pearson product-moment correlations of subjects' scores on the Attributional Style Scale with scores on the BDI, MAT, IPAT Depression Scale, and Tennessee Self Concept Test are described in Table 3. As can be seen, the correlations for bad outcomes were significant ($p < .05$) on all subscales with the BDI and the IPAT Depression Scale. The more depressed the subjects were

Table 2

Discriminant Analysis on Subjects' Scores

Summary Table					
Step Entered	Factor	1 year or less $\bar{X}$	2 or more years $\bar{X}$	SDFC*	p
1	BDI	11.93	5.53	-1.28	<.0007
2	Narcism	7.90	6.91	-.48	<.0001
3	Fear	4.37	5.40	.45	<.0001
4	Mating	6.13	7.04	.43	<.0001
5	Career	3.53	4.53	.41	<.0001
6	IPAT Depression	5.40	4.42	.62	<.0001

*Standardized discriminant function coefficients.

Table 3

Correlations of Attributional Style Subscales with BDI, MAT Total Personal Interest, IPAT Depression Scale and Tennessee Self Concept Test Scores (n = 75)

Subscale	BDI r	MAT r	IPAT Depression r	Tennessee Self Concept r
Bad Outcome				
Internality	.29*	.20	.20*	-.26*
Stability	.27*	.15	.32*	-.18
Globality	.31*	.10	.21*	-.20*
Total	.40*	.18	.34*	-.28*
Good Outcome				
Internality	-.12	.07	-.18	.21*
Stability	-.21*	.11	-.34*	.32*
Globality	-.22*	.08	-.28*	.29*
Total	-.21*	.10	-.31*	.32*

*$p < .05$

on both the BDI and the IPAT Depression Scale, the greater were their ratings of the internality, stability, and globality of causes of bad outcomes. The internality and globality subscales also showed significant negative correlation ($p < .05$) with the Tennessee Self Concept Test. Thus, the lower the subjects' ratings of self-concept, the greater were their ratings of internality and globality of causes of bad outcomes. On the other hand, the more depressed the subjects scored on the BDI and IPAT Depression Scale, the lower were their ratings of the stability and globality of the causes of good outcomes. There was no significant correlation between BDI and IPAT Depression scores and the subjects' ratings of the internality of the causes of good outcomes. The correlations for good outcomes were significant ($p < .05$) on all subscales with the Tennessee Self Concept Test. Thus, the higher the rated self-concept, the greater subjects rated the internality, stability, and globality of the causes of good outcomes. There was no significant correlation between any of the Attributional Style subscale scores and the Total Personal Interest score of the MAT. The subjects' ratings of the internality, stability, and globality of the causes of good and bad outcomes were summed and correlated with BDI,

IPAT Depression, total MAT and Tennessee Self Concept scores. There was a significant positive relationship between total scores for bad outcomes with BDI and IPAT Depression scores and a significant negative relationship between total scores for bad outcomes and scores on the Tennessee Self Concept. For good outcomes there was a significant negative correlation between total scores and BDI and IPAT Depression Scale scores and a significant positive correlation with Tennessee Self Concept Test scores. Again, the Total Personal Interest scores of the MAT were not significantly correlated with either good or bad total outcome scores. Overall, those subjects who were more depressed and had greater negative cognitive set reported internal, stable, and global attributions for bad outcomes and unstable, specific attributions for good outcomes. Those subjects with lower self-esteem reported internal, global attributions for bad outcomes and external, unstable, and specific attributions for good outcomes.

Data analysis for the final part of this study reports on demographic variables found to be significantly associated with subjects' scores on the BDI, MAT, IPAT Depression Scale, Tennessee Self Concept Test, and also on self-reported level of satisfaction and

adjustment. As Table 4 indicates, of those variables studied, the ones that account for the most variance in negative cognitive set among divorced parents as measured by the BDI are number of children, present income, receiving child support, age of children, number of marriages, and custody of child/children. The adjusted Multiple R sq. at the end of Step 6, when the final significant variable ($p < .05$) was entered, is 0.24453. Number of children and visitation rights are the strongest predictors of subjects' depression scores as measured by the IPAT Depression Scale. The adjusted Multiple R sq. at Step 2, when the last significant variable ($p < .05$) was entered, is 0.19728. Of these variables examined, only receiving child support explained a significant amount of variance in subjects' motivation as measured by Total Personal Interest score on MAT. The adjusted Multiple R sq. is 0.06923. Also, only number of children accounts for a significant amount of variance among subjects' Tennessee Self Concept Test scores. The adjusted Multiple R sq. is 0.08129. On subjects' reported level of satisfaction, income and number of children are the strongest predictors of satisfaction. The adjusted Multiple R sq. at Step 2, when the last significant variable ($p < .05$) was entered,

Table 4

Stepwise Multiple Regression Analysis on Demographic Variables with Subjects' BDI, Total MAT, IPAT Depression Scale, and Tennessee Self Concept Test Scores and Self-reported Level of Satisfaction and Adjustment (n = 75)

Scale	Step	Variable	Multiple R	R Square	R Square Adjusted	Beta	F	p
BDI	1	number of children	0.3228	0.10387	0.09159	0.32228	8.46	<.05
	2	present income	0.38589	0.14891	0.12527	-0.21248	3.81	<.05
	3	child support	0.43547	0.18964	0.15540	0.22510	3.57	<.05
	4	age of children	0.47877	0.22922	0.18518	-0.21446	3.60	<.05
	5	number of marriages	0.52299	0.27351	0.22087	-0.22752	4.21	<.05
	6	custody	0.55297	0.30578	0.24453	-0.20157	3.16	<.05
IPAT Depression Scale	1	number of children	0.39891	0.15913	0.14761	0.39891	13.81	<.05
	2	visitation rights	0.46795	0.21898	0.19728	-0.24471	5.52	<.05
MAT	1	child support	0.28603	0.08181	0.06923	0.28603	6.50	<.05
Tennessee Self Concept Test	1	number of children	0.30612	0.09371	0.08129	-0.30612	7.54	<.05
Satisfaction	1	income	0.29794	0.08877	0.07629	0.29794	7.11	<.05
	2	number of children	0.39060	0.15257	0.12903	0.25477	5.42	<.05
Adjustment	1	number of children	0.34172	0.11677	0.10467	0.34172	9.65	<.05
	2	number of marriages	0.42250	0.17850	0.15568	-0.25415	5.41	<.05

is 0.25477. Number of children and number of marriages accounts for the most variance in subjects' reported level of adjustment. The adjusted Multiple R sq. at Step 2, when the last significant variable ($p < .05$) was entered, is 0.15568. Overall, number of children is a significant predictor of variance on five of the six scales with income, receiving child support, and number of marriages being significant predictors on two scales each. Age of children, custody of children, and visitation rights each account for a significant amount of variance on one scale each.

For descriptive purposes, the correlation of each demographic variable is contained in Table 5.

Based on the results of this study, the null hypothesis that divorced parents' scores on cognitive, motivational, depression, and self-concept scales do not differ significantly according to time-since-divorce is rejected, while the null hypothesis that divorced parents' scores do not differ according to sex is accepted. Also, evidence fails to support a sex by time-since-divorce interaction. A significant correlation was found between subjects' scores on attributional style and their scores on cognitive, depression, and self-concept scales. Further, number of children, income, receiving child

Table 5

Pearson r Correlations of Demographic Variables with BDI, MAT Total Personal Interest, IPAT Depression Scale and Tennessee Self Concept Test Scores, and Self-reported Level of Satisfaction and Adjustment (n = 75)

Demographic Variable	BDI	IPAT	MAT	Tenn.	Satisfaction	Adjustment
age	-0.06	-0.004	0.12	-0.06	0.16	0.08
number of children	0.32*	0.40*	-0.12	-0.31*	0.29*	0.34*
sex of children	0.12	0.16	0.13	-0.14	0.02	0.10
age of children	-0.16	-0.07	0.02	-0.009	-0.01	-0.08
predivorce income	0.13	0.08	0.17	-0.06	0.30*	0.04
present income	-0.23*	-0.20*	0.06	0.15	0.14	-0.06
pay child support	0.05	0.009	-0.22*	0.07	0.04	0.13
receive child support	0.04	0.05	0.29*	-0.07	0.20*	-0.18
custody	-0.09	-0.12	0.11	0.09	0.04	-0.11
visitation	-0.15	-0.25*	0.10	0.15	-0.14	-0.11
number of marriages	-0.18	-0.24*	0.17	0.24*	0.02	-0.31*
length of last marriage	-0.07	-0.01	0.11	-0.04	0.09	0.12
divorce initiator	-0.04	-0.13	0.10	0.02	0.09	-0.06
residence change	-0.08	-0.05	-0.02	0.10	-0.09	-0.15
job change	-0.06	-0.11	0.003	0.14	-0.04	-0.12
employment added	-0.09	-0.08	0.25*	0.18	0.04	-0.10
family attitude	0.10	-0.006	0.03	0.03	0.08	-0.05

p = <.05

support, number of marriages, age of children, custody of children, and visitation rights were identified as demographic variables accounting for a significant amount of variance among subjects' scores on cognitive, motivation, depression, and self-concept scales and also on self-reported levels of satisfaction and adjustment.

Discussion

The results of this study add to our knowledge concerning the experience and accompanying distress of divorce for couples with children. Previous research has reported that marked changes occur following divorce in feelings of future competence (Froiland & Hozman, 1977), motivation (Hetherington et al., 1976; Hetherington et al., Note 3; White & Bloom, Note 1), emotional stability (Bloom et al., 1978; Hetherington et al., 1977), and self-esteem (Hetherington et al., 1977; Wallerstein & Kelly, 1977). While there is relatively extensive literature dealing with the effects of divorce on women indicating that marital disruption is often seriously stressful, the literature on the effects of marital disruption on men is extremely limited. The lack of discovery of significant sex differences in this study, nevertheless, was unexpected since the few studies that have been conducted on

divorcing men have suggested possible differences (Bloom, 1975; Bloom et al., 1978; Chiriboga et al., 1978; Hetherington et al., 1977; Weissman & Klerman, 1977). Upon comparison of this study with others, it is possible that the lack of significance of results may be due to the difference in method of measurement employed in the present study. For example, Chiriboga et al. (1978) used a method of interview schedules and differentiated between feeling depressed and feeling unhappy. Results indicated that men experienced a more or less enduring sense of unhappiness whereas women experienced more temporary encounters with depression and general unrest. In the present study, scores on the BDI and IPAT Depression Scale were more indicative of general, overall feelings of discomfort, turbulence, and sadness, and may have included both variables in the Chiriboga et al. (1978) study. Lack of similarity of results may also be due in part to differences between the samples of the various studies. Bloom's (1975) sample, for example, was gathered from the files of psychiatric inpatients. In the present study, the sample was drawn from two social organizations. Membership in these organizations may imply a different level of functioning among the present populations. Also, in the present study, men divorced 1

year or less were the most difficult subjects to obtain and therefore the fewest in number among the four subject groups, suggesting that perhaps they are less able or willing to reveal their feelings. A further possibility for consideration is the lack of available empirical research concerning men's responses to divorce on which to base an hypothesis. Considering the few studies that have been conducted, this study must be considered exploratory in nature and the possibility must be considered that on measures of depression, negative thinking, motivation, and self-esteem, men and women experiencing divorce do not differ significantly.

Significant time-since-divorce differences were found on 6 of the 13 variables in the present study. In comparison with parents divorced 2 or more years, those divorced 1 year or less scored significantly higher in negative thinking, depression, and motivation towards self-indulgence, and significantly lower in motivation to escape internal dangers, motivation toward intimate relationships, and motivation toward career. These results lend support to the longitudinal studies of Hetherington et al. (1976) who suggested that disorganization and disrupted functioning seem to peak at a period about 1 year after divorce and begin restabilizing

by the end of the second year. Wallerstein and Kelly (1980) divided the time periods involving adjustment into three stages and demonstrated that the timetable of the divorcing process may be considerably longer than supposed. They described an initial period, which includes the legal separation and divorce process; a transition period, lasting 2 to 3 years; and a third period, measured at the 5th year, involving either restabilization, remarriage, or continued stress. The present study defined only two time variables, divorced 1 year or less and divorced 2 years or more and found subjects coping better emotionally, cognitively, and motivationally at the 2 or more year level than at the 1 year or less level. Interestingly, there were no significant differences in self-concept scores between the two time periods. This does not suggest that self-concept is not affected by the divorce process, but may imply that deficits in self-concept are more complex than cognitive, emotional, or motivational deficits and may require more time and attention for restabilization.

The variable yielding the highest discriminant value between the time-since-divorce periods was

subjects' scores on the BDI. Beck (1967) postulated three concepts to explain the psychological substrate of depression: (a) negative cognitive distortions, (b) dysfunctional cognitive structures, and (c) faulty information processing. Past research has not reported specifically on differences in cognitive processes between people of differing marital status. This study suggests that those persons who have been divorced 1 year or less are more likely to experience negative cognitive distortions, dysfunctional cognitive structures, and faulty information processing, resulting in more depression than those persons who have been divorced 2 or more years.

In the discriminant analysis, four factors of the MAT yielded significant differences between the two time-since-divorce groups. Subjects divorced 1 year or less were more motivated toward narcism or self-indulgence and comfort. Cattell et al. (1964) described the basic need for comfort as following the basic law of deprivation and satisfaction which govern other psychological need systems. These needs, when satisfied, seem to recede to make room for more urgent ones (Cattell et al., 1964). Subjects' high scores on this scale may reflect the loss and deprivation that they

experience immediately following divorce and the primacy of dealing with the more primitive need of comfort before moving on to more sophisticated ones.

Subjects divorced 1 year or less were less motivated to escape danger or be cautious than those subjects divorced 2 years or more. According to Cattell et al. (1964), subjects' lower scores on the MAT Fear scale would suggest that they are more haphazard and less self-disciplined. These same subjects were also less motivated toward sexual love and intimacy in relationships. These results support Hetherington et al.'s (1976) findings that during the first year following divorce, men and women experience increased opportunity for sexual experience with a variety of partners but with little satisfaction and accompanied by feelings of desperation, depression, and low self-esteem. By the end of the first year, however, both men and women were expressing an increased need for intimacy and more stable love relationships.

In the present study, subjects divorced 1 year or less were less motivated toward their career. White and Bloom (Note 1) reported finding a strong relationship between poor adjustment to marital disruption and poor job performance for men. Results of this study would

infer that the same relationship exists for women, especially in the first year following divorce.

Finally, results of the discriminant analysis with respect to the IPAT Depression Scale lend support to other researchers (Bloom et al., 1978; Hetherington et al., 1977) who have described depression as a major emotional reaction to marital disruption and also to those who have compared divorce to loss from death (Froiland & Hozman, 1977; Wallerstein & Kelly, 1977).

In general, the deficits demonstrated by persons undergoing marital disruption parallel the deficits postulated by Seligman (1975) and later by Abramson et al. (1978) which underlie the learned helplessness model of depression. Furthermore, the construct of attributional style was supported. According to the reformulated hypothesis of learned helplessness, a certain attributional style, when combined with bad outcomes, leads to depression. The present results demonstrate only a correlation between attributional style, depression, negative thinking, and self-concept. An alternative hypothesis would be that emotional, motivational, and cognitive deficits cause people to attribute bad outcomes to internal, stable, and global causes and good outcomes to external, unstable, and specific

causes. In this study, no significant correlation was found between Attributional Style Scale scores and scores on the MAT. A possible explanation could be that the Total Personal Interest score was used in the analysis rather than the 10 factor scores. The 10 factor scores measure specific drives and interests rather than overall motivation.

Demographic variables identified in this study as accounting for a significant amount of variance in BDI, MAT, IPAT Depression Scale, Tennessee Self Concept Test scores, and self-reported levels of satisfaction and adjustment were number of children, income, receiving child support, age of children, number of marriages, child custody, and visitation privileges. Of the demographic variables measured, those contributing most to high BDI and IPAT scores were more than two children and under $10,000 annual income. Colletta (1979), Perlin and Johnson (1977), and Warheit et al. (1976) reported similar results. Of special interest, however, is the indication that those subjects with more children also perceive themselves as being more satisfied and better adjusted. This is paradoxical to the scores they project on the BDI, IPAT Depression Scale, and Tennessee

Self Concept Tests. Also contributing to higher levels of depression were having visitation rights and experiencing the first divorce. Hetherington et al. (1976) noted that affectionate parents reported almost unendurable pain at seeing their children only intermittently and often coped with this stress as time passed by seeing less and less of their children. Age and custody of children also predicted negative cognitive thinking and supports Hetherington's (1979) view that parents who must cope with too many young children become increasingly distressed.

Child support was a factor that contributed to differences between subject's BDI and MAT scores, and would seem to be a factor in level of income. Little attention has been given this variable and future researchers might want to consider its importance.

Bloom (Note 1) suggested that the initiator of the divorce would score higher on adjustment ratings. This was not supported. Chiriboga et al. (1978) found age to be an important factor in reports of adjustment. This also was not supported in the present study.

Limitations

Several limitations must be noted in this study. The population to which results may generalize is

limited by the white, middle-class suburban sample utilized. Another limitation encountered in obtaining subject volunteers was the nonavailability of subjects, especially men, in the divorced 1 year or less category. Obviously, the two subject pools entered, the Parent Without Partners organization and the Singles Sunday School class are social organizations and some coping with divorce trauma has already occurred to allow the divorced person's reentry into the social scene. Those persons recently divorced and still suffering dramatic cognitive, motivational, and cognitive deficits would not be as likely to be a part of a social group.

Yet another limitation was discovered in administering the tests to the subjects. Many had difficulty in completing the tests in one session due to the number and length of the tests.

Implications

The results of this study contribute to an evolving understanding of the experience of marital disruption. Additional investigation is urgently needed, in part because divorce is, as has been indicated, exceedingly and increasingly common and, also, because of the likelihood that preventive programs organized around

this stressful life event may be able to be developed economically and effectively.

The implication that the divorced parent displays the symptoms of helplessness as described by Abramson et al. (1978) was supported. Thus, the attributional framework proposed to resolve the problems of human helplessness and the therapeutic implications of the reformulated hypothesis may be applicable as strategies in dealing with the stressed divorced parent. Abramson et al. (1978) suggested: (a) reducing the estimated likelihood for aversive outcomes and increasing the estimated likelihood for desired outcomes; (b) reducing the aversiveness of aversive outcomes and reducing the desirability of desired outcomes; (c) changing the expectation from uncontrollability to controllability; and (d) changing attributions for failure toward external, unstable and specific factors and attributions of success toward internal, specific, and global factors. In dealing with the divorced parent these strategies might include environmental manipulation by social agencies to provide desired outcomes such as temporary housing, job placement, financial assistance, and child care facilities. Therapeutic implications might include

providing more realistic goals and norms, assistance in attainment of alternative desired outcomes, and imagery and rehearsal of successful response-outcome sequences.

This study has addressed itself to only two time periods following divorce. Future researchers may want to think in terms of comparing subjects at more than two time periods. Including the separation period and a period 5 years after divorce might help to better identify changes in self-concept as well as changes in other variables that modify across time.

Another problem in understanding the relationship between marital disruption and psychological distress is that most studies have focused on current marital status rather than on marital history. Future research may want to take number of marriages and divorces into consideration.

Finally, research in the areas of marital satisfaction and adjustment is severely lacking and seems vitally necessary if the problems of separation and divorce are to be understood and dealt with more effectively.

APPENDIXES

APPENDIX A

Letter to Parents Without Partners Membership

Dear P.W.P. Member,

During the next three weeks, Norma Barnes, a doctoral candidate in Psychology at Texas Woman's University, will be with us investigating the problems that divorced parents encounter. This type of research is important and can help us to understand and cope with the stress that is generated within our families by the divorce process. When the research is completed, a presentation will be available to us and will provide us with valuable information concerning some of the factors that contribute to our personal satisfaction and adjustment.

Your important contribution will be the completion of a series of 5 simple questionnaires. Mrs. Barnes will be at our center to explain the questionnaires to you and to facilitate your participation. Each individual's privacy will be protected and no personal identification will be required on any of the questionnaires.

If you are willing to participate in this study, please fill out the following form and return it to Mrs. Barnes. To insure reliability of the research, selection of the participants must be random; therefore not all persons returning the form will be used. If you are selected, you

will be contacted and you will be able to select a time convenient to you to come to our center and fill in the questionnaires.

Thank you for your cooperation.

Mary Lou Spurlock
President, PWP

Norma Barnes
Norma Barnes, Experimenter

Please Return This Form To:

Norma Barnes

3626 Garden Brook Dr.

Apt. 238
247-2927
Dallas, Texas 75234

Your Name _____

Your Address _____

Telephone number: Home _____; Business _____

Time since divorce: _____

When is the best time to contact you? _____

ORAL PRESENTATION TO SUBJECT

I am Norma Barnes, a doctoral candidate in Psychology at Texas Woman's University. I am conducting research in the area of the problems encountered by divorced parents. I am asking you to complete 5 questionnaires, each of which will be explained to you when you open your packet. There is no risk or discomfort involved. You do not need to put your name anywhere on the questionnaire. At any time you may withdraw your consent and discontinue participation in the project. Any inquiries concerning the procedures will be answered and a presentation of the group's results will be available to you following the study.

No medical service or compensation is provided to subjects by the University as a result of injury from participation in research. No legal suit can be brought against the University.

Consent Form
TEXAS WOMAN'S UNIVERSITY
HUMAN RESEARCH REVIEW COMMITTEE

(Form B)

Title of Project: Cognitive, Motivational, Emotional and Self-Esteem Deficits in Divorced Parents at Two Time Periods Following Divorce: Implications of Learned Helplessness

Consent to Act as a Subject for Research and Investigation:

I have received an oral description of this study, including a fair explanation of the procedures and their purpose, any associated discomforts or risks, and a description of the possible benefits. An offer has been made to me to answer all questions about the study. I understand that my name will not be used in any release of the data and that I am free to withdraw at any time.

_____ _____
Signature Date

_____ _____
Witness Date

Certification by Person Explaining the Study:

This is to certify that I have fully informed and explained to the above named person a description of the listed elements of informed consent.

_____ _____
Signature Date

_____
Position

_____ _____
Witness Date

TEXAS WOMAN'S UNIVERSITY
DENTON, TEXAS 76204
DEPARTMENT OF PSYCHOLOGY AND PHILOSOPHY

AGENCY- PERMISSION FOR CONDUCTING STUDY

PARENTS WITHOUT PARTNERS, INC. grants to NORMA BARNES (or representative), a student enrolled in Texas Woman's University and presently working toward a Doctorate in Educational Psychology in the Department of Psychology and Philosophy, the privilege of its facilities in order to conduct the following:

To administer four (4) standardized personality tests requiring approximately two hours to approximately eighty (80) members. The tests will be administered on three nights of the week for two weeks. They will be group administered during the month of September, 1980.

The conditions mutually agreed upon are as follows:

1. The agency (may) ~~(may not)~~ be identified in the study.
2. The names of consultative or administrative personnel in the agency (~~may~~) (may not) be identified in the study.
3. The agency (~~does~~) (does not) want a conference with the student on completion of the study.
4. The agency (does) ~~(does not)~~ want a written report of results of the study.
5. Other _____

Mary Lou Spurlock Pres. 9-4-80
Signature of Agency Personnel Date

_____ _____
Signature of Student Date

_____ _____
Signature of Faculty Advisor Date

APPENDIX B

Self-Report Interview

(Please check the correct answer.)

Sex: __M, __F.

Age: __Under 25; __25-34; __35-44; __45-54; __over 55.

Time since divorce: __One year or less; __ Two or more years.

Number of Children: __1; __2; __3; __4; __5; __6; __over 6.

Sex of Children: __M; __F; __M & F.

Ages of Children: __0-5; __6-8; __9-12; __13-18; __over 18.

Pre-divorce Family Income per year: __under $10,000; __over $10,000

Annual Income now: __under $10,000; __ over $10,000.

Were you ordered to pay child support? __yes; __no.

Do you pay child support? __yes; __no.

Are you supposed to receive child support? __yes; __no.

Do you receive child support? __yes; __no.

Do you have custody of your children? __yes; __no; __joint.

Do you have visitation privileges with your children?__yes;__no.

Number of previous marriages: __1; __2; __3; __4; __over 4.

Length of last marriage: __0-2 yr.;__3-5 yr.; 6-10yr.; __over 11 yr.

Who instigated divorce procedings? __self; __spouse.

Did you change residence as a result of divorce? __yes; __no.

Did you change jobs as a result of divorce? __yes; __no.

Were you forced to seek employment or take on extra work as a result of divorce? __yes; __no.

Do you perceive the attitudes of friends and family as supportive?

__very supportive

__somewhat supportive

__not very supportive

__not at all supportive

Rate the degree of personal satisfaction that you experience since your divorce:

__much more personal satisfaction

__some increased satisfaction

__about the same personal satisfaction

__less personal satisfaction

__much less personal satisfaction

Rate the degree of adjustment that you feel you are experiencing compared to other divorced males/females that you know.

__much better adjusted

__somewhat better adjusted

__about the same

__less well adjusted

__much less well adjusted

APPENDIX C

Table A

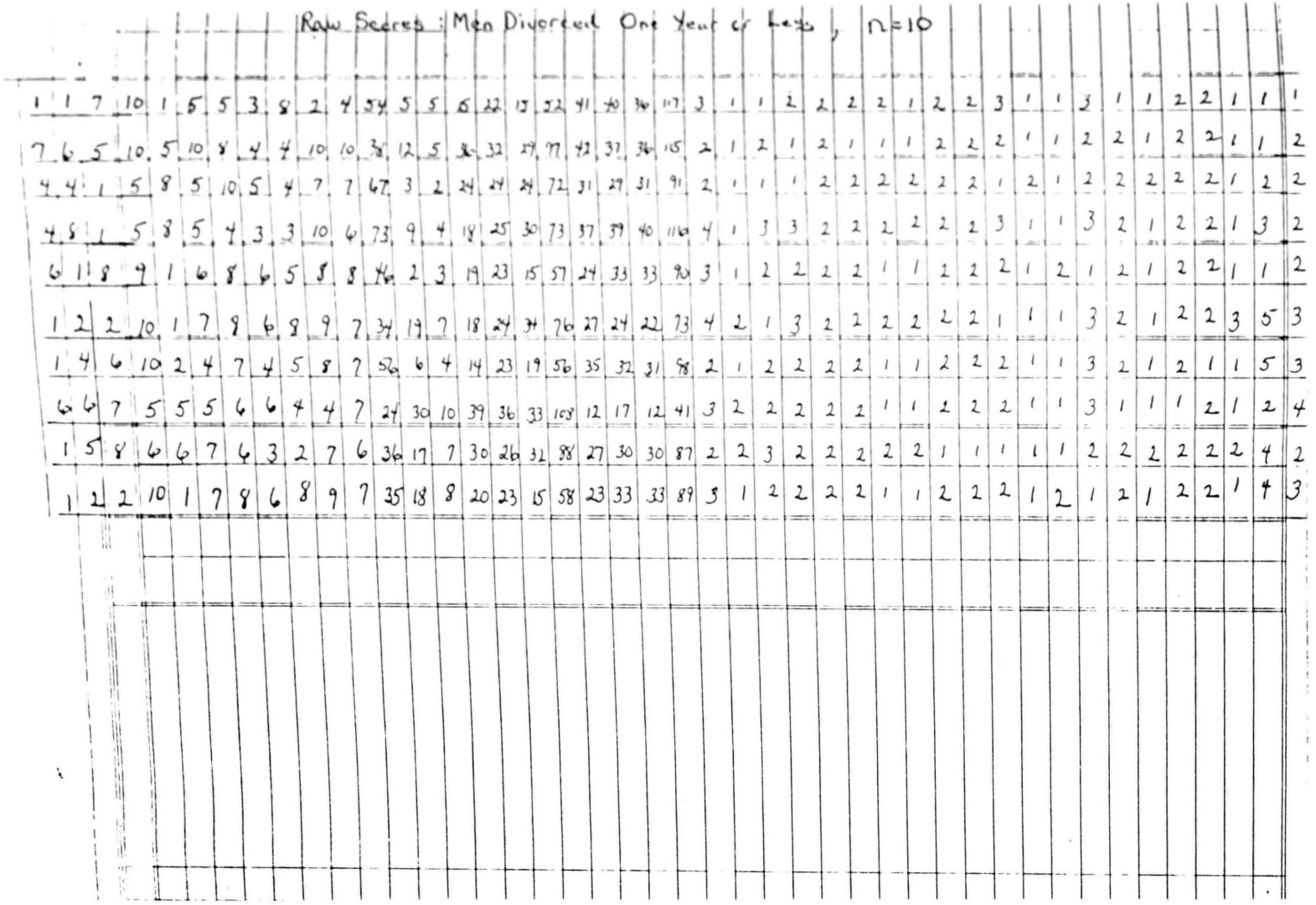
Means and Standard Deviations of Subjects' Scores on Discriminant Analysis

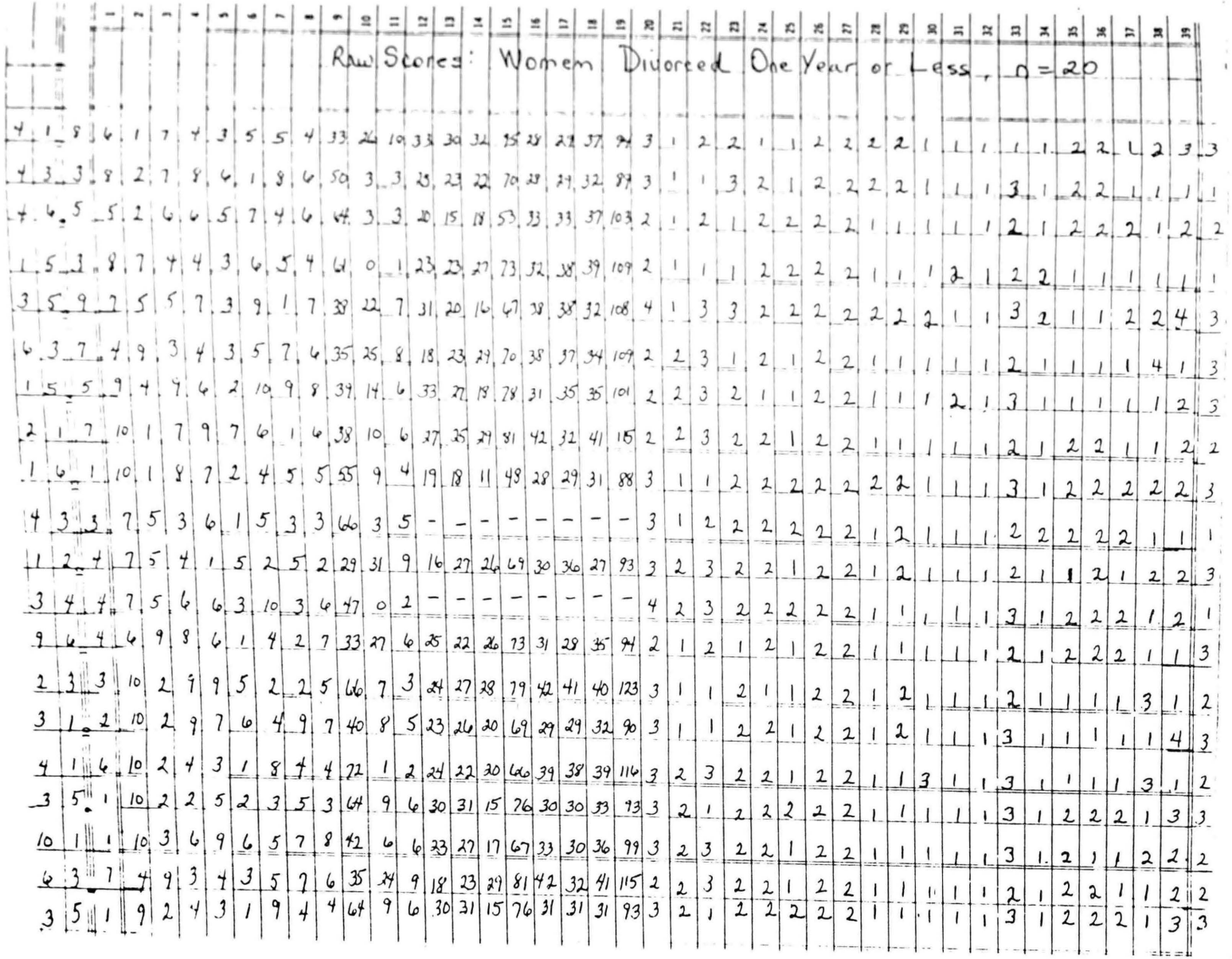
	Time-Since-Divorce			
	1 Year or Less (n = 30)		2 Years or More (n = 45)	
	Mean	SD	Mean	SD
MAT				
Career	3.53	2.45	4.53	2.54
Home/Parental	3.60	2.01	3.73	1.71
Fear	4.37	2.59	5.40	2.42
Narcism	7.90	2.16	6.91	3.12
Superego	3.87	2.76	3.84	2.24
Self-sentiment	5.83	2.07	5.44	2.53
Mating	6.13	2.13	7.04	2.30
Pugnacity	3.90	1.86	4.38	2.60
Assertiveness	5.37	2.47	5.36	2.63
Sweetheart	5.67	2.75	6.06	6.62
Tennessee Self Concept Test	47.80	14.41	51.56	12.90
Beck Depression Inventory	11.93	9.59	5.53	6.01
IPAT Depression Scale	5.40	2.46	4.42	2.15

Table B

Means and Standard Deviations of Subjects' BID, MAT, IPAT Depression Scale, and Tennessee Self Concept Test Scores

	1 Year or Less				2 or More Years			
	Men (n = 10)		Women (n = 12)		Men (n = 20)		Women (n=25)	
Factor	Mean	SD	Mean	SD	Mean	SD	Mean	SD
MAT								
Career	3.20	2.49	3.70	2.47	5.65	2.43	3.64	2.29
Home/Parental	3.90	2.38	3.45	1.85	3.90	2.17	3.60	1.26
Fear	4.70	2.90	4.20	2.48	5.50	2.63	5.32	2.29
Narcism	8.00	2.40	7.85	2.08	6.75	3.06	7.04	3.22
Superego	3.80	2.94	3.90	2.75	3.80	2.40	3.88	2.15
Self-sentiment	6.10	1.73	5.70	2.25	4.70	2.92	6.04	2.03
Mating	7.00	1.76	5.70	2.20	6.95	2.74	7.12	1.92
Pugnacity	4.60	1.35	3.55	2.01	5.65	2.81	3.36	1.91
Assertiveness	5.10	2.18	5.50	2.65	4.60	2.80	5.96	2.37
Sweetheart	7.40	2.59	4.80	2.44	5.05	2.21	6.88	8.66
Tennessee Self Concept Test	46.30	15.80	48.55	14.03	51.40	12.84	51.68	13.20
Beck Depression Inventory	12.10	8.88	11.85	10.15	5.65	5.28	5.44	6.63
IPAT Depression Scale	5.50	2.46	5.35	2.52	4.15	2.30	4.64	2.04


Raw Scores: Men Divorced One Year or Less, n=10


Raw Scores: Women Divorced One Year or Less, n = 20

Raw Scores: Men Divorced Two or More Years, n = 20

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6	7	5	2	7	1	8	7	3	4	6	77	2	7	15	26	26	67	34	35	38	112	4	2	3	2	2	2	1	1	2	2	2	1	2	1	1	1	1	2	2	1	1
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3	1	10	8	1	8	4	6	6	7	7	36	5	6	28	28	31	87	29	34	33	96	5	2	3	3	2	2	1	1	2	2	2	1	1	3	2	1	1	2	4	2	2
9	3	8	10	1	4	9	10	4	5	9	60	1	1	29	32	25	86	34	38	35	107	4	1	3	2	2	2	1	1	2	2	1	2	1	3	2	1	2	2	2	1	1
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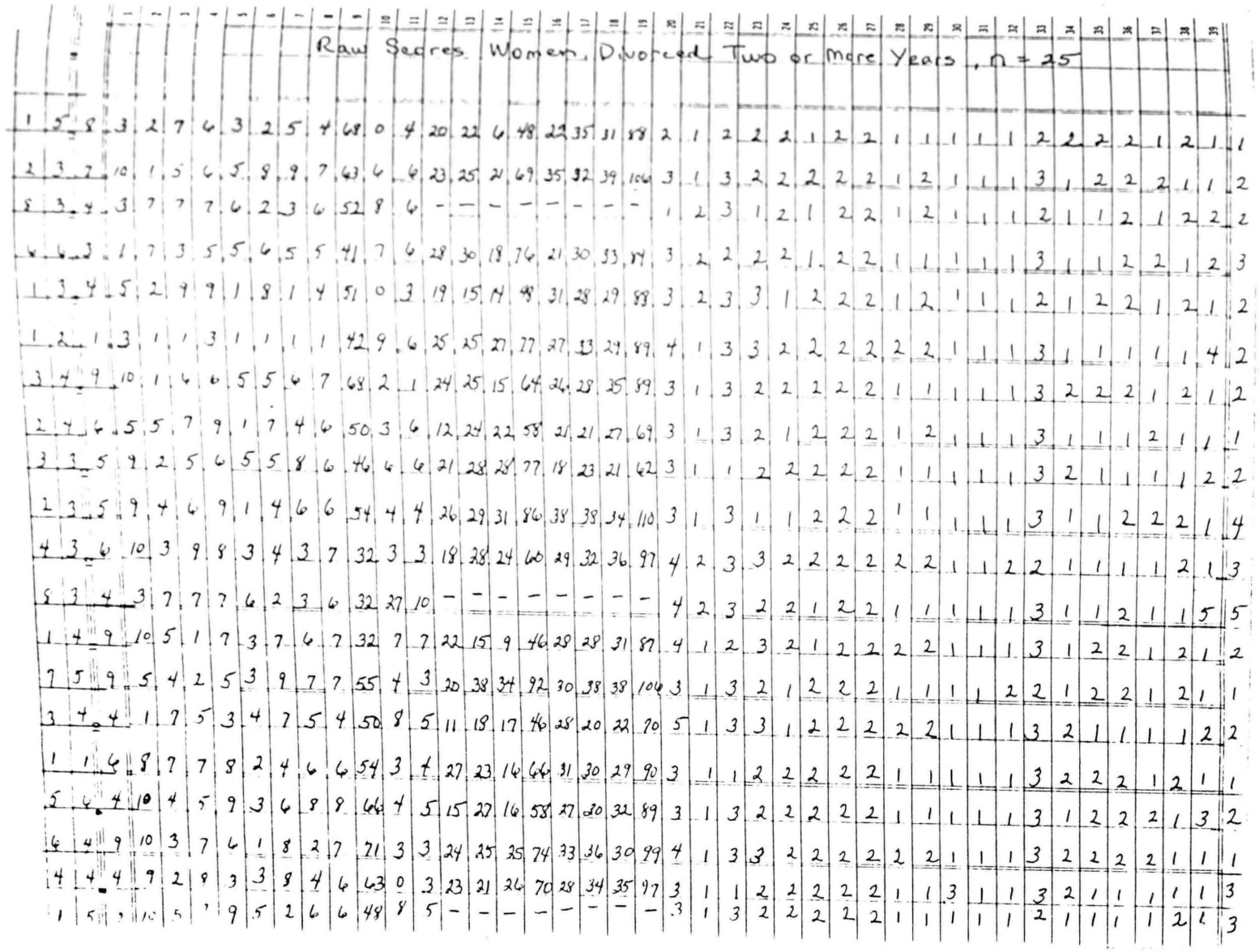
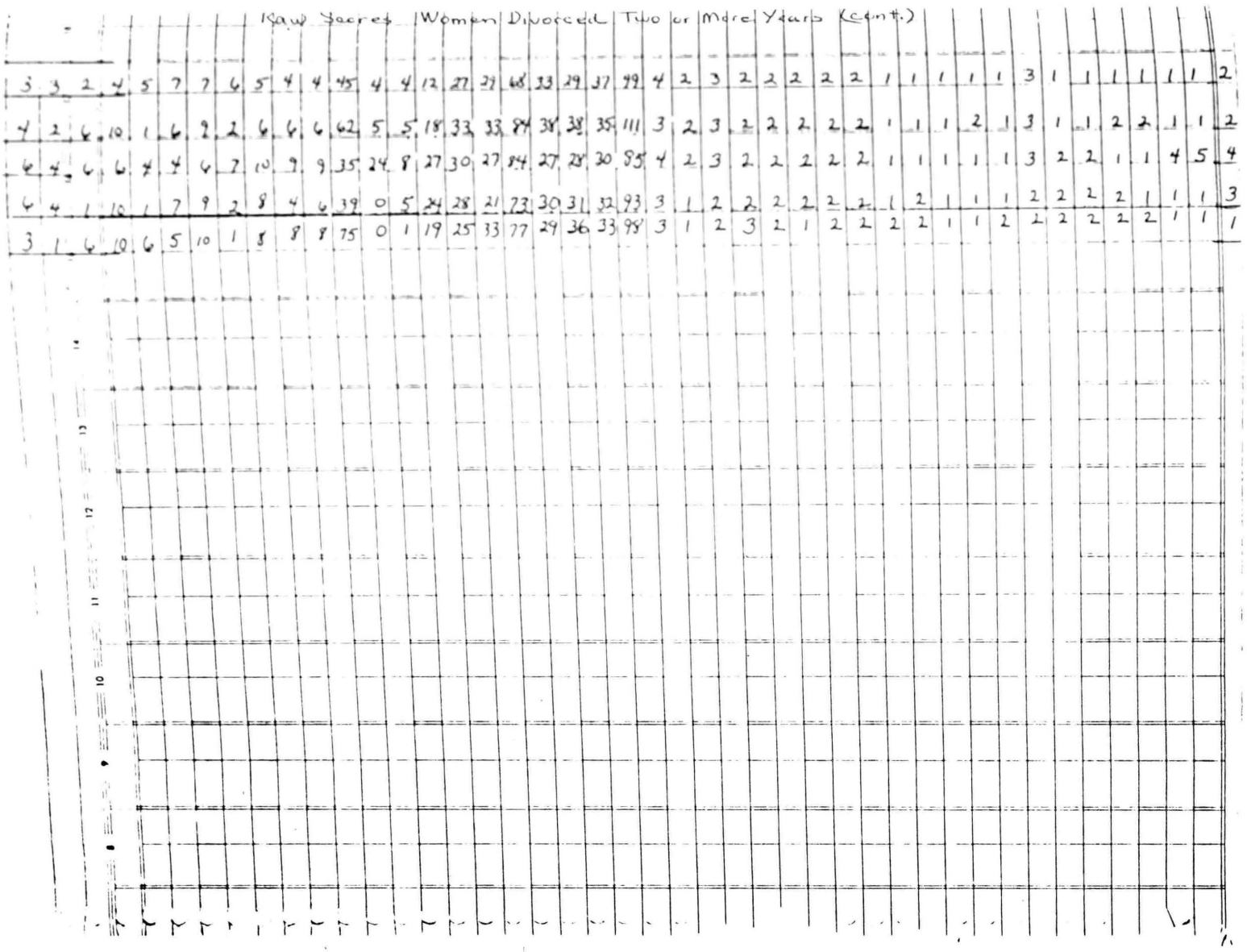

Raw Scores Women, Divorced Two or More Years, n = 25


Raw Scores Women Divorced Two or More Years (cont.)

REFERENCE NOTES

Reference Notes

1. White, S. W., & Bloom, B. L. Factors related to the adjustment of divorcing men. Unpublished manuscript, 1979. (Available from S. W. White, Department of Psychology, University of Colorado, Boulder, Colorado 80309.)
2. Semmel, A. An attributional style scale. Unpublished manuscript, 1978. (Available from M. E. P. Seligman, Department of Psychology, University of Pennsylvania, 3815 Walnut Street, Philadelphia, Pennsylvania 19104.)
3. Hetherington, E. M., Cox, M., & Cox, R. Stress and coping in divorce: A focus on women. Unpublished manuscript, 1977. (Available from E. M. Hetherington, Department of Psychology, University of Virginia, Charlottesville, Virginia 22901.)

REFERENCES

References

Abramson, L. Y., Seligman, M. E. P., & Teasdale, J. D. Learned helplessness in humans: Critique and reformulation. Journal of Abnormal Psychology, 1978, 87, 49-74.

Beck, A. T. Depression: Clinical, experimental, and theoretical aspects. New York, Harper & Row, 1967.

Bloom, B. L. Changing patterns of psychiatric care. New York: Human Sciences Press, 1975.

Bloom, B. L., Asher, S. G., & White, S. W. Marital disruption as a stressor: A review and analysis. Psychological Bulletin, 1978, 85, 867-894.

Brandwein, R. A., Brown, C. A., & Fox, E. M. Women and children last: The social situation of divorced mothers and their families. Journal of Marriage and the Family, 1974, 36, 498-513.

Briscoe, E. W., & Smith, J. B. Psychiatric illness: Marital units and divorce. Journal of Nervous and Mental Disease, 1974, 158, 440-445.

Briscoe, E. W., Smith, J. B., Robins, E., Marten, S., & Gasken, F. Divorce and psychiatric disease. Archives of General Psychiatry, 1973, 29, 119-125.

Buchwald, A. M., Coyne, J. C., & Cole, C. S. A critical evaluation of the learned helplessness model of depression. Journal of Abnormal Psychology, 1978, 87, 180-193.

Cattell, R. B., Horn, J. L., Sweney, A. B., & Radcliffe, J. A. Handbook for motivation analysis test. Champaign, Ill.: Institute for Personality and Ability Testing, 1964.

Chiriboga, D. A., Roberts, J., & Stein, J. A. Psychological well-being during marital separation. Journal of Divorce, 1978, 2, 21-36.

Cole, C. S., & Coyne, J. C. Situational specificity of laboratory-induced learned helplessness. Journal of Abnormal Psychology, 1977, 86, 615-623.

Colletta, N. D. The impact of divorce: Father absence or poverty? Journal of Divorce, 1979, 3, 27-35.

Costello, C. G. A critical review of Seligman's laboratory experiments on learned helplessness and depression in humans. Journal of Abnormal Psychology, 1978, 87, 21-31.

Crago, M. A. Psychopathology in married couples. Psychological Bulletin, 1972, 77, 114-128.

Depue, R. A., & Monroe, S. M. Learned helplessness in the perspective of the depressive disorders:

Conceptual and definitional issues. Journal of Abnormal Psychology, 1978, 87, 3-20.

Dweck, C. S., & Reppucci, N. D. Learned helplessness and reinforcement responsibility in children. Journal of Personality and Social Psychology, 1973, 25, 109-116.

Fitts, W. N. Tennessee self concept scale manual. Nashville, Tenn.: Counselor Recordings and Tests, 1964.

Froiland, D. J., & Hozman, T. L. Counseling for constructive divorce. Personnel and Guidance Journal, 1977, 525-529.

Gardner, R. A. Psychotherapy with children of divorce. New York: J. Aronson, 1976.

Gatchel, R. J., Paulus, P. B., & Maples, C. W. Learned helplessness and self-reported affect. Journal of Abnormal Psychology, 1975, 84, 732-734.

Guerney, L., & Jordon, L. Children of divorce: A community support group. Journal of Divorce, 1979, 2, 283-294.

Hetherington, E. M. Divorce: A child's perspective. American Psychologist, 1979, 34, 851-858.

Hetherington, E. M. Effects of father absence on personality development in adolescent daughters. Developmental Psychology, 1972, 7, 313-326.

Hetherington, E. M., Cox, M., & Cox, R. The aftermath of divorce. In H. H. Stevens, Jr. and Marilyn Matthews (eds.) Mother-child, father-child relations. Washington, D. C.: National Association for the Education of Young Children, 1977.

Hetherington, E. M., Cos, M., & Cox, R. Divorced fathers. The Family Coordinator, 1976, 25, 417-428.

Hiroto, D. S. Locus of control and learned helplessness. Journal of Experimental Psychology, 1974, 102, 187-193.

Hiroto, D. S., & Seligman, M. E. P. Generality of learned helplessness in man. Journal of Personality and Social Psychology, 1975, 31, 311-327.

Kelly, J. B., & Wallerstein, J. S. Brief interventions with children in divorcing families. American Journal of Psychiatry, 1977, 47, 23-39.

Kelly, J. B., & Wallerstein, J. S. The effects of parental divorce: Experiences of the child in early latency. American Journal of Orthopsychiatry, 1976, 46, 20-32.

Kline, D. C., & Seligman, M. E. P. Reversal of performance deficits in learned helplessness and depression. Journal of Abnormal Psychology, 1976, 85, 11-26.

Krug, S. E., & Laughlin, J. E. IPAT depression scale handbook. Champaign, Ill.: Institute for Personality and Ability Testing, 1976.

Kubler-Ross, E. On death and dying. New York: Macmillan, 1969.

Leff, M. J., Roatch, J. F., & Bunney, W. E. Environmental factors preceding the onset of severe depression. Psychiatry, 1970, 33, 292-311.

Maier, S. F., & Seligman, M. E. P. Learned helplessness: Theory and evidence. Journal of Experimental Psychology, 1976, 105, 3-46.

Miller, I. W., & Norman, W. H. Learned helplessness in humans: A review and attribution theory model. Psychological Bulletin, 1979, 86, 93-118.

Miller, W. R., & Seligman, M. E. P. Depression and learned helplessness in man. Journal of Abnormal Psychology, 1975, 84, 228-238.

Miller, W. R., Seligman, M. E. P., & Kurlander, H. M. Learned helplessness, depression and anxiety.

Journal of Nervous and Mental Disease, 1975, 161, 347-357.

Perlin, L. I., & Johnson, J. S. Marital status, life strains and depression. American Sociological Review, 1977, 42, 704-715.

Rosen, R. Some crucial issues concerning children of divorce. Journal of Divorce, 1979, 3, 19-25.

Rosenthal, P. A. Sudden disappearance of one parent with separation and divorce: The grief and treatment of preschool children. Journal of Divorce, 1979, 3, 43-53.

Roth, S., & Bootzin, R. R. Effects of experimentally induced expectancies of external control: An investigation of learned helplessness. Journal of Personality and Social Psychology, 1974, 29, 253-264.

Seligman, M. E. P. Depression and learned helplessness. In R. J. Friedman & M. M. Katz (eds.) The psychology of depression: Contemporary theory and research. New York: John Wiley & Sons, 1974.

Seligman, M. E. P. Helplessness: On depression, development, and death. San Francisco: Freeman Press, 1975.

Seligman, M. E. P., Abramson, L. Y., Semmel, A., & von Baeyer, C. Depressive attributional style. Journal of Abnormal Psychology, 1979, 88, 242-247.

Seligman, M. E. P., & Beagley, G. Learned helplessness in the rat. Journal of Comparative and Physiological Psychology, 1975, 88, 534-541.

Seligman, M. E. P., & Maier, S. F. Failure to escape traumatic shock. Journal of Experimental Psychology, 1967, 74, 1-9.

Seligman, M. E. P., Rosellini, R. A., & Kozak, M. Learned helplessness in the rat: Reversibility, time course, and immunication. Journal of Comparative and Psychological Psychology, 1975, 88, 542-547.

Tessman, L. H. Children of parting parents. New York: Jason Aronson, Inc., 1978.

Thornton, J. W., & Jacobs, P. Learned helplessness in human subjects. Journal of Experimental Psychology, 1971, 87, 369-372.

Tooley, K. Antisocial behavior and social alienation post divorce: The "man-of-the-house" and his mother. American Journal of Orthopsychiatry, 1976, 46, 33-42.

U. S. Bureau of the Census. Current population reports. Marital status and living arrangements: March, 1976. (Series P-20, No. 306) Washington, D. C.: U. S. Government Printing Office, 1977.

Wallerstein, J. S., & Kelly, J. B. Surviving the breakup. New York: Basic Books, Inc., 1980.

Wallerstein, J. S., & Kelly, J. B. Divorce counseling: A community service for families in the midst of divorce. American Journal of Orthopsychiatry, 1977, 47, 4-22.

Wallerstein, J. S., & Kelly, J. B. The effects of parental divorce: Experiences of the child in later latency. American Journal of Orthopsychiatry, 1976, 46, 256-269.

Wallerstein, J. S., & Kelly, J. B. The effects of parental divorce: Experiences of the pre-school child. Journal of the American Academy of Child Psychiatry, 1975, 14, 600-616.

Wallerstein, J. S., & Kelly, J. B. The effects of parental divorce: The adolescent experience. In E. J. Anthony and C. Koupernick (eds.) The child and his family: Children at psychiatric risk. Vol. 3. New York: John Wiley & Sons, 1974.

Warheit, G. J., Holzer, C. E., Bell, R. R., & Arey, S. A. Sex, marital status and mental health: A reappraisal. Social Forces, 1976, 55, 459-470.

Weissman, M. M., & Klerman, G. L. Sex differences and the epidemiology of depression. Archives of General Psychiatry, 1977, 34, 98-109.

Westman, J. C. Effects of divorce on a child's personality development. Medical Aspects of Human Sexuality, 1972, 6, 38-55.

Westman, J. C., Cline, D. W., Swift, W. J., & Kramer, D. A. Role of child psychiatry in divorce. Archives of General Psychiatry, 1970, 23, 416-420.

Wortman, C. B., & Dintzer, L. Is an attributional analysis of the learned helplessness phenomenon viable?: A critique of the Abramson-Seligman-Teasdale reformulation. Journal of Abnormal Psychology, 1978, 87, 75-86.