

EFFECTIVENESS AND EFFICIENCY OF FAMILY FUNCTIONING:
AN EXPERIMENTAL COMPARISON OF GROUP DYNAMICS
AND FAMILY DYNAMICS

A DISSERTATION
SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF DOCTOR OF PHILOSOPHY
IN THE GRADUATE SCHOOL OF THE
TEXAS WOMAN'S UNIVERSITY

COLLEGE OF EDUCATION

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AUGUST 1978

The Graduate School
Texas Woman's University
Denton, Texas

July 12, 1978

We hereby recommend that the dissertation prepared under
our supervision by John Paul Sorrels
entitled Effectiveness and Efficiency of Family
Functioning: An Experimental Comparison of
Group Dynamics and Family Dynamics

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ACKNOWLEDGEMENTS

I would like to first and foremost express my appreciation to my wife, Cherry, for her encouragement, support, and emotional stability during my entire graduate school years. I am also deeply grateful to Bud Littlefield and Bettye Myers for the academic support and personal confidence they have shown me. Carol Miller, Liz Hall, Nancy Duncan, Sally Wright, Pat Kuentsler and Mike Lyons all deserve special thanks for the invaluable contribution they made to this study by serving as jurors. I am also grateful to my other committee members, Calvin Janssen, for his support, Basil Hamilton, for his excellent teaching and personal interest, Sam Brown for his worthwhile contributions in the final stages of the study, and Jon Fleming whose untimely departure was my loss. Special appreciation goes to Bob Lemley and Alan West for their numerous hours and technical assistance involved in video-taping. I also appreciate the meticulous proofreading by Joyce Allen and the skillful typing by Peggy Hatley. I am grateful to Elizabeth Snapp for answering questions and guiding me through the administrative complexities of completion. Finally, I would like to thank Tom, Laverna, George, Nellie, and all other relatives and friends who encouraged me along the way.

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Effectiveness and Efficiency of Family Functioning:

An Experimental Comparison of Group Dynamics and Family Dynamics

Abstract

To give empirical validity to the application of the concepts of group dynamics to family dynamics, entire families performed two tasks: (a) an object assembly task and (b) a family solution task. The process utilized by these families was evaluated by a jury trained in group dynamics and on the criteria used to evaluate non-family group functioning. An experimentally developed paired comparison instrument involving summary characteristics of group functioning, derived from the literature, comprised the instrument used to evaluate family dynamics. Time to completion for task (a) was correlated with group process rankings on the appropriate group dynamics characteristics. A panel of family experts determined a ranking of the family solutions on task (b). This ranking was correlated with group process rankings on the group dynamics characteristics also. Results indicate that no relationship exists between group process used by families and speed of completion on task (a). On task (b), analysis indicates four summary characteristics are unimportant or unobservable, two

influenced families and groups oppositely, and the remaining characteristics were detrimental to both. Suggestions for future research are included.

Effectiveness and Efficiency of Family Functioning:

An Experimental Comparison of Group and

Family Dynamics

Chapter 1

More than 400 studies published from 1968 to present have dealt with "non-family" group problem solving methods. However, only 16 studies have concerned themselves with "family" problem solving. Family researchers and practitioners would benefit from increased attempts to apply principles of non-family group interaction to family interactions. Projected gains would be twofold: (a) discovery of group dynamics models effective within family systems would improve the effectiveness and efficiency of therapy and research; and (b) failure to demonstrate generalizable models would illuminate the distinction between non-family group and family group processes.

Research has delineated 11 characteristics which influence non-family group (hereafter referred to as "group") functioning. Initial discussion will focus on group functioning; later emphasis will involve family functioning. The 11 characteristics will be listed succinctly, and discussed in detail with supporting research.

Research suggests the following 11 characteristics are detrimental to effective and efficient group functioning:

- (a) development of a "focus effect"
- (b) lack of self-competence feelings (self-depreciation and/or withdrawal from the group)
- (c) criticisms, especially during the early stages of the task
- (d) inflexible status levels
- (e) intragroup pressures to conform, especially during early stages
- (f) domination by one or more members
- (g) inadequately considered solutions
- (h) intolerant group members
- (i) hidden agendas by certain members
- (j) "solution-mindedness" rather than "problem-centeredness"
- (k) avoidance of emotional/personal content

Focus Effect

A focus effect develops when the group focuses on one aspect of the problem too long. Quality judgements involve solutions with graduated degrees of correctness. A given problem, therefore, may have a number of correct solutions, with accompanying degrees of correctness, most to least. Hall, Mouton, and Black (1963) compared group

decisions to individual decisions on quality judgment tasks. Individual group members were rated on decision correctness prior to group interaction, and an average score was obtained of individual correctness. Group interactive decisions were more correct, however, than the average individual correctness score, thus, emphasizing the need to consider all aspects presented by each group member before making a decision.

Brainstorming, a procedure whereby groups generate as many solutions as possible to one problem, produces more ideas when group members feel free to suggest very deviant ideas. Focusing on apparent rational ideas inhibits the production of ideas and lowers efficiency (Vroom, Grant, & Cotton, 1969; Dunnett, 1964; Dunnette, Campbell, & Faastad, 1962). All researchers agree that regardless of the type or task, a focus effect, i.e., discussing one topic to the exclusion of other topics, is a liability to the effectiveness and efficiency of the group.

Lack of Feelings of Competence

Individuals feeling less competent in a group will be less likely to participate. Feelings of incompetence, which suppress participation, arise when group members perceive themselves as having less to contribute to the group than other group members. Callaros and Anderson (1969) tested the effects of "experts" on group functioning.

Confederates of the experimenters were included in experimentally contrived groups; the confederates pretended to have previously participated in a similar task. Groups containing such "experts" produced significantly fewer ideas during brainstorming activities than did groups without "experts." The "non-expert" group members withdrew from participation, which accounted for the lower level of performance. Kelly and Thibaut (1954) similarly found that group members participated to the extent that they felt competent.

A group member suffering from feelings of incompetence, due to either lack of experience or ability, may (a) seek to gain new information and attempt to offer what knowledge and/or expertise he/she may have, (b) withdraw from the group either physically or cognitively, thus limiting any future participation on his/her part, or (c) continue to interact in the group in a self-depreciatory manner (inform other members how stupid he/she feels). The first option would constitute a group strength, while the other two would be detriments to the group process.

Criticisms

Optimum group efficiency and effectiveness requires that each group member feel able to participate without criticisms. Osborn (1956) found brainstorming (generating

as many solutions as possible to a problem, without evaluations or criticisms) produced significantly more solutions than traditional group problem-solving procedures. Groups with leaders who promoted systematic, non-evaluative discussions reached better decisions than did groups without this guidance (Maier & Maier, 1957; Maier & Hoffman, 1960). The presence of one or more experts in a brainstorming group inhibited the production of ideas and solutions due to unexpressed criticisms (Callaros & Anderson, 1969). Thus, criticisms, expressed or unexpressed, act to inhibit the group process, whether the group is brainstorming or dealing with a quality decision making task.

Inflexible Status Levels

Status levels characterized by inflexibility are detrimental to the group process. High rate contributors in a group problem solving task are perceived as exercising leadership (Sorrentino & Boutillier, 1974; Bass, 1949; Lucas & Jaffee, 1969) provided few negative comments were directed toward them (Morris & Hackman, 1975). Ginter and Lindsfold (1975) concluded that high rate contributors are seen as exercising leadership only if the group is without an expert in the field. High rate contributors, then, may be viewed either as leaders, or as exercising more leadership in the group.

Cammalleri, Hendrick, Pitman, Blout, and Prather (1973) used experimentally constituted groups with designated leaders who were confederates, and examined the effects of style and accuracy of leaders. These leaders were instructed to adopt either authoritarian or democratic leadership styles. Both authoritarian and democratic leaders were further instructed to pursue either correct or incorrect group decisions. Thus, four treatment groups were compared based on style and accuracy: authoritarian-correct; authoritarian-incorrect; democratic-correct; and democratic-incorrect. Authoritarian leaders, whether correct or incorrect, influenced the group more than democratic leaders. Groups with authoritarian-correct leaders produced the most correct decisions; groups with authoritarian-incorrect leaders produced the least correct decisions. Groups with democratic leaders, either correct or incorrect, produced moderately correct but not significantly differing solutions. Authoritarian leader groups displayed hostility, verbal aggression, and increasing conflict as the time limit for completion approached. Democratic groups demonstrated cooperation and harmony. Cammalleri et al. question the use of authoritarian leadership styles for enduring groups.

Sex differences reflect a different type of status

level. Males historically hold higher status positions (higher pay, job promotions, political appointments, corporation executives, etc.). Sashkin and Maier (1971) found that males, designated as leaders, took more liberty to act as they saw fit than did females. Females were more likely to follow instructions exactly than were males. The researchers postulated that males (a) had more experience as leaders; and (b) were more often looked upon as leaders. Wright (1976) found similar results using experimentally constituted groups. Females participated significantly less than did males in groups that did not have assigned leadership roles. Additionally, assigned age roles and amount of participation were closely related; younger age roles participated significantly less than older age roles.

Cartwright and Zander (1968) characterize all groups as naturally developing to the point that each member in the group specializes in some aspect of group functioning. This specialization results in differing status levels, amounts of power, position or other such designation. Each member may be located inside or outside each part or subgroup, and certain behaviors are associated with each part. This process occurs in the most briefly formed experimental groups as well as enduring groups. Emergence of leadership and other roles is considered an

identifying characteristic of a group.

Differing group roles and consequently differing status levels are not detrimental of themselves. If these status levels are inflexible, they may detrimentally affect the effectiveness and/or efficiency of the group.

Pressures to Conform

Pressures on group members to conform influence the accuracy of a group decision or solution (Dalkey & Hilmer, 1963; Hoffman, 1965), especially during early stages of the group process. The lack of these pressures to conform aids in preventing a focus effect. Maier and Solem (1952) concur, and state the absence of these pressures allows minority members to contribute to the quality of the group solution. Additionally, minority opinions are not a danger in a group; rather, they serve to improve the quality of group thinking. Minority members influenced the direction of the group process only when realistic; they were ignored when they were incorrect. Van de Ven and Delbecq (1974) contend group members often emphasize conforming behavior. These tendencies frequently foster inefficiency and lower quality decisions, especially in enduring groups. Shaw (1954) has also shown that groups which allow maximum participation by all members are more efficient. Thus, pressures to conform by group members inhibit free participation and consequently lower the

efficiency and effectiveness of the group process.

Dominating Persons

Pelz (1956) demonstrated that under dominating leaders scientists are less creative and less productive than in groups with a participating leader. When group members receive unequal amounts of reward, status, etc., this results in more inefficiency, longer time to completion, and more errors (Goldman, Bolen, & Martin, 1961). Tuckman and Lorge (1962) suggest that groups using facilitative processes produce better solutions because the superior members' ideas emerge rather than being suppressed by other less superior but more dominant members.

Numerous researchers conclude that groups with dominant members produce fewer solutions, take longer to reach a decision or finish a task, generate poorer quality solutions, or foster other inhibiting factors (Van de Ven & Delbecq, 1974; Morris & Hackman, 1969; Ginter & Lindsfold, 1975; Bass, 1949; Riecker, 1958; Sorrentino & Boutillier, 1974; Maier & Maier, 1957b; Guetzkow & Gyr, 1954).

Inadequately Considered Solutions

A group reaches a higher quality decision when the decision is neither hurried nor inadequately considered (Shaw, 1954). Maier and Hoffman (1960), in their trained discussion leader study, found that the presence of the

trained discussion leader assured that all aspects of the problem were adequately considered. This condition resulted in higher quality decisions. Delbecq and Van de Ven (1971) suggest an experimentally derived problem-solving method which allows all members of the group, and all important contributors to the solution of the problem, adequate time and opportunity to contribute. This process produces higher quality solutions. Reddy (1975) used a unique type task that first called for planning by the group, and then completion according to the planned solution. The impact of inadequately considered solutions is to lower the effectiveness and efficiency of the group and the group's decision.

Intolerant Group Members

Certain group processes and behaviors by group members tend to increase the tension and conflict present in all group functioning. Primary among these behaviors is intolerance of conflicting and/or incompatible ideas. The presence of tolerance helps defuse affective as well as substantive conflicts (Guetzkow & Gyr, 1954). Vroom, Grant, and Cotton (1969) using nominal and interacting groups, found that nominal groups (minimal interaction between members) produced significantly more high quality solutions. This difference was attributed to the absence of criticisms of differing ideas in the nominal groups.

Deutsch (1949) found similar results using cooperative and competitive groups. Cooperative groups had freer inter-communications, fewer criticisms, and not only were more productive, but were also more satisfying to the group members. Maier and Solem (1952) found that the encouragement of minority opinions produced better group decisions. Torrance (1957), in explaining this phenomenon, said fear of judgement from other group members produced less participation, and consequently less information. This produced poorer solutions and less enjoyment for all group members.

Intolerance may be destructive to group functioning and prevent the group from reaching a decision, produce lower quality decisions, and/or cause longer decision times. In general, intolerance of conflicting and incompatible ideas decreases group effectiveness and efficiency.

Hidden Agendas

Few people, at one time or another, have not attended a meeting expecting one thing, and abruptly discovered that other group members had different ideas for the meeting. These covert policies and hidden agendas cause groups to be less effective and efficient (Torrance, 1957). Foureizos and Guetzkow (1950) in formulating an experimental method to measure self-oriented needs of

individual group members, suggest that the satisfaction of these needs precludes their interfering with group processes, and the group can function more effectively and efficiently. Callaros and Anderson (1969) state that these covert judgements and policies are probably impossible to completely eliminate even with specific instructions, as in the case of brainstorming groups. Thus, the degree to which hidden agendas are present will correspondingly influence group functioning.

Whether an individual group member has self-oriented needs, such as a need for power, or simply wishes to change the direction of the group process without the knowledge of the other group members, hidden agendas or covert policies side track the group. If these self-oriented needs can be dealt with and satisfied, and unspoken agendas can be verbalized, the group will function at a higher level of effectiveness and efficiency.

Solution-mindedness Rather than Problem-centeredness

There are several opinions concerning the best procedure for group problem-solving. Recent research suggests greater effectiveness is achieved when ideation and evaluation are separated as in brainstorming. Meadow and Parnes (1959), Meadow, Parnes, and Reese (1959), and Brilhart and Jochem (1964) have demonstrated that when ideation and evaluation are separated not only are more

ideas produced but the quality of the ideas is higher. It is assumed that this difference in quality is due to the lack of evaluation during ideation which encourages freer flow of ideas. This assumption is supported since the quality of ideas improves as more ideas are suggested (Parnes & Meadow, 1959; Parnes, 1961). The effect of dealing more completely with the problem was examined by Maier and Maier (1957) with free flowing leader-led discussions. These free flowing discussions of the problem produced better solutions than evaluating discussions due to a more adequate coverage of relevant aspects. Reddy (1975) and Shaw (1954) have shown that groups which spend more time considering the problem produce faster and better solutions. These results are supported by Maier and Hoffman (1960), Maier and Solem (1952), Maier (1964), and Van de Ven and Delbecq (1971).

Separation of ideation and evaluation and more time spent considering the problem results in a more "problem-centered" group. Better, higher quality solutions are reached when the group adequately understands the problem. Thus, efficiency and effectiveness is lower when the group is solution-minded, rather than problem-centered.

Emotional/Personal Content

Attention to the emotional and personal dimensions of the task or group members contribute to the effectiveness

and efficiency of the group process. Foureizos, Hutt, and Guetzkow (1950) contend groups which satisfy self-oriented needs of individual members, produce solutions which are more satisfactory to the group. Shaw (1954) indirectly refers to the relationship between group satisfaction and efficiency. Groups which allow fuller and freer expression also have more satisfied members, who produce better decisions. Delbecq and Van de Ven (1971) and Van de Ven and Delbecq (1974) support this contention, stating, groups which identify and deal with personal and emotional dimensions are more effective. Additional evidence of the importance of dealing with emotional content is provided by Klimoski and Karol (1976). In creative problem-solving, groups with high levels of trust produced significantly more ideas than did groups with low levels of trust.

The attention to and resolution of personal/emotional needs of groups members, precludes their interference with the group process. Dealing with emotional/personal dimensions of the task also contributes to the group effectiveness and efficiency.

The results of most studies in group problem-solving can be explained by one or more of these 11 empirically demonstrated characteristics. Even though all are present, some of the 11 characteristics may not be equally observable

in all groups and/or types of tasks. Many group dynamics researchers utilize a primarily cognitive, neutral type task, unrelated to any members personal situation (building a model, NASA decision-making problem, Moon landing problem, Lego Man, etc.). The neutral-cognitive task, combined with experimentally formed groups (not enduring) hinders observation of six of the 11 characteristics. The use of strangers in forming the experimental groups, combined with short duration tasks, almost precludes the development of status levels. Criticisms as well as pressures to conform are minimal among brief meetings of strangers. The effectiveness of the group on the type of task generally used is frequently measured by time to completion, thus making observation of hurried solutions difficult. These cognitive type tasks completed by short term groups rarely give opportunity for either hidden agendas or emotional/personal content to surface. Additionally, the presence of these characteristics, even temporarily, would likely have minimal impact on these experimental groups and these types of tasks. Situations utilizing enduring groups and realistic, relevant tasks would exhibit these 11 characteristics in a more observable way.

Empirical support for these characteristics is not available for family problem solving. Most studies in

family dynamics (and they are few) deal with personality variables such as externalness-internalness, dogmatism, or authoritarianism. The results have succeeded in confusing the field of family problem-solving. A second type of family study has focused on 'normal' versus 'abnormal' families. These studies, though enlightening and beneficial, are difficult to interpret and utilize primarily because a base line of normal family functioning has not been clearly established.

In the discussion which follows, each of the 11 characteristics will be viewed from a family perspective. Much of the supporting evidence is indirect, and when direct, it deals only with one or perhaps two of the characteristics. Some of the evidence is from normal-abnormal family studies, and some from case studies and/or practitioners' impressions and experiences.

Focus Effect

In families a focus effect occurs in various ways (a) members focus on one aspect of the problem or task, and/or (b) members focus primarily on one member of the family as the problem. Focusing on one member is more commonly discussed in the literature. Many families having difficulty come to therapy designating one member of the family as the problem, i.e., the "identified patient," even though the family system is responsible

for the difficulties (Satir, 1967; Beels & Ferber, 1973). However, Peck (1973) in studying families with a member who has reading problems concluded that these families focused on avoiding conflict during decision making tasks, which accounted for the family's ineffectiveness. Thus, families, like groups, may focus on one member or aspect of the problem, and lower their effectiveness as well as efficiency.

Lack of Self-competence Feelings

Haley (1959), discussing the families of schizophrenics, based on research, observation, and therapy, states that these schizophrenic family members withdraw from the family interactions. They experience themselves as totally incompetent in the family situation. Many times this self-perception is produced by the "double bind," whereby the member is consistently and forcefully placed under contradicting rules and behavior. An example of a schizophrenic daughter will illustrate this concept.

A twenty-one year old schizophrenic daughter arrived home from the hospital for a trial visit and her parents promptly separated.... When the parents reunited later that week, the girl was returned to the hospital because mother said she could not stand daughter in the room watching, and she could not stand daughter out of the room thinking about her. (p. 370-371)

The ultimate method of withdrawal for a husband or wife

is through divorce. This option is not available to children; they can only run away. Alexander (1973) characterizes runaway children as having very low feelings of competence. They feel incompetent to handle their family situations and consequently run away. As in groups, family members suffering from feelings of incompetence may withdraw, i.e., divorce, runaway, schizophrenia, etc., thus contributing to family ineffectiveness.

Criticisms

Ferriera and Winter (1968), in a comparison study of 'abnormal' and 'normal' families, found that abnormal families were significantly less efficient in decision making than normal families. This difference was attributed to the type of family system the abnormal families had. They were characterized as volunteering much less information and having lower levels of communication due to covert criticisms of potential contributors. The abnormal families had much longer periods of non-productive silence, which seemed to offer a chance for the members to adjust to the expectation of these potential criticisms. The most researched form of covert (sometimes overt) criticism is rejection, especially parental. Males who had rejecting mothers (low nurturance and high controlling) performed poorer on verbal and concept for-

mation tasks (Heilbrun, Orr, & Harrell, 1966). Conversely, male college students who perceived their mothers as accepting, were more highly motivated and more realistic in amounts of risk they would take (Heilbrun & Orr, 1956). Though these studies focused on the individual and not on the family system, the effects of a rejecting family member can readily be seen. Additionally, the families of schizophrenic children are characterized as having a rejecting mother and sometimes a rejecting father (Haley, 1959b). These criticisms, rejection being the strongest, contribute to family ineffectiveness and inefficiency.

Inflexible Status Levels

The conflict between the need for clearly defined family roles and the need for democratic leadership patterns has produced a wealth of research. Baldwin (1948, 1949), in a study of nursery school children, concluded that children from democratic families were more competent, self assured, exhibited more leadership behavior, and were higher in creativity. Yet the need for legitimate exercise of authority by parents and boundary setting is seen as equally important to the development of children (French, Morrison, & Levinger, 1960; Hoffman, 1960; Pikas, 1960). Haley (1959a) characterizes the mothers of schizophrenic families as domineering, and the fathers as weak. Thus, a basis for shared power seems justified.

However, Alkine (1969) had normal and disturbed (a child with school problems) families to play a communications game in which the accuracy of communications was measured. The results showed that disturbed family members were more equally accurate than were normal family members. This, then, seems to justify differing status levels as beneficial. Wright (1976), using college students in family roles and non-family roles, found significantly differing status levels for family role members when participating in problem-solving. Groups with family roles were less efficient than non-family role groups.

Through the maze of confusion of these and other studies, two concepts consistently appear: (a) the necessity for shared power or status, e.g., equalitarian authority structure rather than authoritarian, and (b) the positive contribution of clear roles to the developmental process of children. The answer to this apparent paradox, seems to lie in the prime characteristic of healthy families: flexibility (Williamson, 1977). The family structure or system must be flexible enough to allow freedom of growth to its members. As with groups, differing status levels is equally necessary.

Pressures to Conform

Pressures to conform in families are readily apparent,

even to a casual observer. Parental attempts at discipline, i.e., spanking, withdrawal of some privilege, harsh looks, verbal threats of punishment are but a few examples. Certainly some of these pressures to conform to acceptable standards are desirable if not needed. However, when these pressures are carried to extremes, disastrous consequences can result. Dysfunctional families maintain their dysfunctional system of relating through overt and covert pressure on its members resulting in the persistence of the symptoms exhibited by the identified patient or scapegoat, which brought the family to therapy in the first place (Haley, 1959b; Napier, 1976). R. D. Laing (1971) in his small but potent book The Politics of the Family, summarizes this concept with the following example and commentary:

This is a conversation between a mother and her fourteen-year old daughter.
 M (to fourteen-year old daughter): You are evil.
 D: No, I'm not.
 M: Yes, you are.
 D: Uncle Jack doesn't think so.
 M: He doesn't love you as I do. Only a mother really knows the truth about her daughter, and only one who loves you as I do will ever tell you the truth about yourself no matter what it is. If you don't believe me, just look at yourself in the mirror carefully and you will see that I'm telling the truth.

The daughter did, and saw that her mother was right after all, and realized how wrong she had been not to be grateful for having a mother who so loved her that she would tell her the truth about her self, whatever it might be.

This example may appear somewhat disturbing, even sinister. Suppose we changed one word in it: replace 'evil' by 'pretty.'

M: You are pretty.

D: No, I'm not.

M: Yes, you are.

D: Uncle Jack doesn't think so.

M: He doesn't love you as I do. Only a mother really knows the truth about her daughter, and only one who loves you as I do will ever tell you the truth about yourself no matter what it is. If you don't believe me, just look at yourself in the mirror carefully, and you will see that I'm telling you the truth.

The technique is the same. Whether the attribution is pretty, good, beautiful, ugly, or evil, the structure is identical. The structure is so common that we hardly notice it unless the attribution jars. We all employ some recognizably similar version of this technique and may be prepared to justify it. I suggest that we reflect upon the structure of the induction, not only the content thereof. (p. 121-123).

Even in normally functioning families, these pressures to conform limit certain members contributions, which invariably lowers the family efficiency. In dysfunctional families, these conforming pressures are so strong that not only are effectiveness and efficiency lower, but the capability of the family to function is absent or nearly absent.

Dominating Persons

Using an international sample, Strauss (1968) found middle class families to be more efficient in a game of motor type tasks requiring cooperation among players. This difference was attributed to higher levels of communication and a more equalitarian social structure. Families

in which husband and wife had an equalitarian relationship, not marked by conflict for dominance, produced the most effective male high school achievers. The presence of one parent dominant or both attempting to dominate, produced significantly less effective achievers (Strauss, 1962). Walsh (1968), in examining adaptability with a temptation situation, found that children with dominate mothers, i.e., (a) felt children have very few rights to privacy, (b) avoided communication with the child, and (c) felt children should be obedient and act grown up, were more inflexible, more controlled and less adaptable than were children with less dominating mothers. Families with equalitarian leadership, but not competing, are more productive, efficient, and effective (Murrel & Stachowiak, 1967; Haley, 1959b). Families, as in groups, are less effective and efficient when one or more members attempt to dominate.

Inadequately Considered Solutions

Very little research has been done in the area of problem solving with families, especially in terms of adequacy of deliberation. One exception is Leik (1963) who used triads of parents and college age daughters (rather than whole families) as one condition and non-family triads as a second, comparison condition. These groups were compared on task behavior and emotionality.

Accuracy of perception was found to be significantly correlated with adequate time for consideration. In this one study, then, adequate time for consideration influenced group effectiveness.

Intolerant Family Members

Cross (1966) examined parental styles of the parents of junior and senior high school boys. He defined interdependent parents as granting autonomy to learn from the environment and, also, giving feedback on successes as well as errors. Conversely, unilateral parents forced the child to fit a preconceived mold or to attain a completely externally determined standard. Cross found that boys, with unilateral (intolerant) parents, were more uncreative and restrictive, while boys with interdependent (tolerant) parents, were more creative and adaptable. Peck (1973) examined differences between families of a child with a reading problem and normal families on a consensus decision task. He found reading problem families were inefficient (took longer to reach consensus decisions) than normal families because they wasted more time in silence. The reading problem families avoided discussing differing points of view. "They could handle only so much heat in their families" (p. 46). Their inefficiency due to avoiding the very conflict which had to be resolved in order to make a decision, was a result

of intolerance. Lidz and Lidz (1949) found that in families with a schizophrenic child, the parents were incompatible and did not exhibit the mutual acceptance present in normal families. Gerard and Siegal (1950) found strife in 87% of the 81 parents of a male schizophrenic sample as contrasted to 13% in a control group. Other researchers characterize families of schizophrenics as full of discord and conflict (Reichard & Tillman, 1950; Lidz, Cornelison, Fleck & Terry, 1957; Bowen, Dysinger, & Basaminia, 1958; Wynne, Richoff, Day, & Hirsch, 1958). Intolerance by one or more family members affects both the individual recipient of the intolerance, as well as the efficiency of the family.

Hidden Agendas

Any group of people will come to have accepted standards for behavior. Many of these standards or rules are clear, understood, and discussed. However, other rules are not discussed, and if discussed, it is only by a few rebels or in low voices in secluded places. An example of this is the usually unspoken rule about incest. Each family has rules it follows, and deviations from the rules promises discipline or punishment. In some families, this discipline is arbitrarily applied without explanation, rationale, or justification. This type of family system often has an implied, and occasionally spoken rule that

children do not question the authority or fairness of their parents. The decision as to when, where, and how discipline is to be applied, becomes a covert policy. The effect of covert discipline policies on children has been examined by Elder (1963). Children whose parents explained their disciplinary actions were more self confident and independent on decision making. Furthermore, families in which parents included children in the decision making process were characterized by more harmonious relationships, less rebellion, less bitterness, and less aggressive behavior (Elder, 1962). Rules in the family have long been examined by family researchers and practitioners. Laing (1971) discusses the concept of rules about rules, and rules that say other rules do not exist. The following example illustrates this confusing state of affairs.

Rule A: Don't. Rule A_1 : Rule A does not exist.
 Rule A_2 : Rule A_1 does not exist.

This type of ruling applies only to some rules. One can talk about certain rules (when one can cross the street). But there are others that one cannot talk about without breaking the rule that one should not talk about them.

If one obeys these rules, one will not know that that they exist. There is no rule about putting one's finger into one's mouth. No rule against talking about putting one's finger into the custard pie. No rule against recognizing the rule: don't put your finger into the fire. Why not? Because you will burn yourself. There is no rule against talking about it and giving reasons for it.

But, I may say, I have never put my finger into a number of ...(unmentionable) places.¹ What places? I can't mention them. Why not? When one cannot talk about a rule about which one cannot talk, we have reached a limit to what we can talk about.

I have thought about the problem of how not to think a thought one is not supposed to think. I cannot think of any way to do so except, in some peculiar way, to 'think' what one must not think in order to ensure that one does not think it...

If some thoughts cannot be thought: and among the thoughts that cannot be thought is the thought that there are certain thoughts that cannot be thought, including the aforementioned thought, then: he who had complied with this calculus of antithoughts will not be aware he is not aware that he is obeying a rule not to think that he is obeying a rule not to think about X. So he is not aware of X and not aware that he is not aware of the rule against being not aware of X. By obeying a rule not to realize he is obeying a rule, he will deny that there is any rule he is obeying. (p. 113-116).

Other family experts agree that this type of rule structure contributes to inefficient and ineffective family functioning (Bateson, Jackson, Haley, & Weakland, 1956; Jackson, 1957; Haley, 1958, 1959a; Satir, 1967). Similarly to groups, efficient and effectively functioning families have a minimum of covert policies and hidden agendas, including rules about rules.

Solution-mindedness rather than Problem-centeredness

Just like groups, when families immediately commence solution seeking at the onset of a problem, many dimen-

¹'Unmentionable' only in relation to what cannot be related to it (my finger) in this particular context.

sions of the problem are ignored and/or inadequately considered. This solution mindedness produces lower quality solutions. The evidence in families of this phenomenon is inferred from practitioners since research data are in short supply. The following example will illustrate this phenomenon which family practitioners frequently encounter.

The pattern can be observed most frequently in families where (sic) the parents so firmly subscribed to the idea that a well brought-up child should be a happy child that they will see a silent imputation in even the most normal, temporary mood of sadness or crankiness of their child, and the 'sadness equals badness' equation is thereby established. The command, 'Go to your room and don't come out until you have a smile on your face' is just one of the many similar ways in which the parents may try to bring about a change. The child's mood is now one of guilt for being unable to feel what he 'should' feel in order to be acceptable and 'good', but presumable also one of impotent rage at what is being done to him - two more feelings which the parents can then add to the list of those which he should not have. Once the pattern of mishandling a basically harmless difficulty has been set and has become a habitual expectation, the outside reinforcement (here the parental attempts at bringing about change) is no longer necessary. Clinical experience shows that the individual will eventually apply the depression-engendering 'solution' to himself and thereby become fit to be labeled a patient. (Watzlawick, Weakland, Fisch, 1974, p. 34-35)

The problem was sadness in the child. The parents applied the seemingly logical solution, "change your attitude" without the slightest attempt to comprehend the nature, etiology, or relative seriousness of the problem. This example highlights the benefits for problem-

centeredness in families as well as groups.

Emotional/Personal Content

Consideration of emotional content would logically seem to be more important in families than in non-family groups. Liek (1963), in comparing families to non-family groups, found that families have a higher level of consideration for emotional dimensions than do groups. This consideration of emotional content was more closely related to member satisfaction in families than it was in groups. One indication of ineffective family functioning is if the family has a runaway child. Alexander (1973) found that families of runaways gave significantly less emotional support to its members when compared to families without a runaway. Individual family member performance is also related to emotional and personal dimensions. Males, with less nurturant and more controlling mothers, performed significantly poorer on verbal and concept formation tasks than did males with high nurturant mothers (Heilbrun, Orr, Harrel, 1966; Heilbrun & Orr, 1956).

This research again points to the similarity between families and groups as to the necessity of dealing with emotional/personal content for optimum efficiency and effectiveness.

If the knowledge in this large body of group dynamics literature could be applied to family dynamics, it could

save family researchers many years. Family problem-solving research has been slow, averaging about six studies per ten years. Aside from the research field, it would greatly benefit family therapists, social workers, and others dealing with families, to have increased knowledge of family dynamics. This study focused on determining the degree to which these experimentally derived group dynamics characteristics apply to families. It was hypothesized that these same characteristics which influence effectiveness and efficiency in groups are equally applicable to families.

Complete families participated in two tasks. One task, an object assembly task, called for a single correct solution; the other task, a verbal problem, required a high quality solution. The families were rated by group dynamics experts according to those of the 11 characteristics which are appropriate to each task.

Chapter 2

Method

Subjects

Six middle class families with children in at least the fourth grade served as subjects. The families consisted of all persons residing in the same household. Families with grandparents or non-child relatives living at home were excluded from the study, as were families with an unwilling member. Families with children away at college, were allowed to participate without the college student provided the student visited home less often than twice monthly. All families were white upper-middle class.

Procedure

Each of the six families participated as a unit on three tasks. The family members were seated at a table in a room with video cameras and lighting equipment. They were asked to sign a consent form (Appendix A). The first task was a modified version of Twenty Questions. A family member drew from an envelope one of several words. The other family members then had two and one half minutes to guess the word by asking "yes" and "no" questions. When the word had been correctly guessed, or time had expired,

another family member drew a word and the procedure was repeated until all members had drawn a word. All words were one-syllable common nouns from a fourth grade spelling book. The purpose of this task was to allow the family to relax and become accustomed to the setting.

The second task was a building task calling for the formulation of a plan and the carrying out of the plan. The families duplicated a model, "The Wheel-less Truck," with Lego building blocks. The following instructions were given:

As a family, you are to make a model exactly like this one, same size, shape, and colors (the experimenter showed the model to all family members, then placed it behind a screen on a table behind the family). The rules for doing this are:

- 1) only one of you at a time may get up and look at the model,
- 2) you may not shout or say anything while looking at the model, you will have to return to the table before saying anything,
- 3) you may take as long to plan how you will build your model as you want, and as long to build it as you want. However, when you are ready to begin building, please signal to me. Please do not put any blocks together before you signal to me that you are ready to begin building.
- 4) You may look at the model as many times as you want, both during planning and during building. When you think you have finished the model, tell me, and I will check it.

Any questions?

After questions were answered, the experimenter emptied a box of unassembled blocks onto the table, and began timing.

Planning times and building times were taken with a stop watch. When the family signaled completion, the experimenter noted the time and then inspected the model built by the family for accuracy. If any errors were found, the experimenter noted the number of blocks which were out of place or were the wrong color. He then returned the family's model to the table and announced, "Your model is not correct; please find what is wrong and correct it. Please signal me when you are through." The experimenter then began timing again. This process was repeated until the model was correct. When the model was correct, the experimenter said to the family, "Very good, it is right."

The third task was a verbal solution task dealing with the father being offered a new job, in another city, in the middle of the children's school semester. Each family member received a piece of paper with the problem printed on it (see Appendix B). The experimenter read aloud the problem while the family members followed. When he had finished reading, he said:

Suppose that this happened to your family. Discuss this problem and decide what you would do. Record your answer on the paper provided. Make your answer as complete and detailed as necessary. If you decide to move, indicate how, when, etc. If you decide to stay, please record your reasons.

Any questions?

All families participated in the word guessing game first. In order to control for possible order effects, one half the families built "The Wheel-less Truck" second and completed the moving problem last. The other half of the families completed the moving problem second and "The Wheel-less Truck" last.

Instrument

Many evaluation measures utilize a Liekert type scale and attempt to produce interval or ratio data. This procedure is questionable in light of the fact that behavioral research tools, e.g., I.Q. tests, anxiety scales, personality inventories, prejudice tests, etc., are relatively crude. This and other underlying assumptions, i.e., normality, homogeneity of variances, sample size, etc., often place severe restrictions on the interpretation of results based on parametric techniques (Siegel, 1956; McSweeney, 1977).

Since most behavioral research primarily yields ordinal data, or perhaps "ordered metric" (Siegel, 1956, p. 77) data, which is based on ranks, the end goal of this instrument was a ranking of the elements under study, i.e., the six families.

In the process of ranking even as few as six items with respect to some characteristics, certain difficulties arise. The extremes are usually easy to establish, but

the finer discriminations of the several items which lie close to the median often pose great difficulty. This problem resulted in the development of the paired comparison technique. This instrument calls upon the examiner to make discriminations between only two items at a time. After all possible pairs of items have been examined and the one item of each pair which possesses the most of the desired characteristic has been noted, an overall rating for all six times can easily be determined. The paired comparison instrument has been demonstrated to yield reliable, accurate data, and to simplify evaluation (Ghisselli & Brown, 1948; Guilford, 1931; Guilford, 1936; Lowry, 1972).

Juries

Two juries were formed; (a) group dynamics jury and (b) family decision jury.

The group dynamics jury consisted of three individuals with at least a masters degree and who had successfully completed at least six hours of training in group dynamics. Pilot data indicated fairly extensive training of the jury was necessary. The jury viewed a training tape which defined and illustrated the five characteristics relevant to "The Wheel-less Truck" task; focus effect, lack of self-competence feelings, dominating persons, intolerant group members, and solution-mindedness. Each characteristic

was briefly explained and then illustrated with an excerpt of a family building "The Wheel-less Truck." A discussion of the characteristics followed the viewing of the tape. Jury members then viewed tapes of two families building "The Wheel-less Truck" and made judgments as to which family exhibited the most of each of the five characteristics. Jury members' judgments were compared and differences discussed, tapes reviewed if necessary, until a consensus was reached. This procedure was repeated three times with three pairs of families.

The identical procedure was followed for the remaining six of the eleven characteristics. Illustrative examples were taken from families discussing the "Family Moving Problem." Jury members then viewed tapes of families discussing the "Family Moving Problem" to practice making and reconciling judgments.

Following jury training, the jury members were given paired comparison forms for six groups for each task to be evaluated (see Appendix C). They were instructed to make individual judgments by viewing the tapes which were circulated among them. After the jury members made their individual ratings, the degree of agreement was determined by computing Kendall's Coefficient of Concordance. On each characteristic which did not show statistically significant agreement, the jury was required to reach a

consensus decision.

A second jury, composed of two family therapists and a sociologist with training in family dynamics, judged the solutions to the "Family Moving Problem." The solutions were typed to aid unbiased judging. Each of the three jurors was given a copy of the "Family Moving Problem." They individually listed the criteria of a "good" solution, detailing all necessary aspects. Jurors then interacted in a group with rotating leadership to reach a consensus decision on each criterion. These criteria, reached by consensus decision, constituted the criteria that the jury used to rate the family solutions. This procedure was used to insure a higher quality criteria (Hall, Mouton, & Blake, 1963; Hackman, Brousseau, & Weiss, 1976; Van de Ven & Delbecq, 1971). The jury members then rated the family solutions according to the established criteria. They used a paired comparison instrument designed for this purpose (see Appendix D). Since statistically significant agreement did not occur, jury members were required to reach consensus decision on the family solutions.

Chapter 3

Results

The paired comparison ratings easily yielded rank orderings of the families on each of the five characteristics associated with "The Wheel-less Truck" task, the 11 characteristics associated with the "Family Moving Problem," and the quality of solution on the "Family Moving Problem." These rank orderings combined with the planning, building, and total times of the families on "The Wheel-less Truck" task were used in the analysis.

Kendall's rank-order correlation coefficient was computed between each of the five characteristics associated with "The Wheel-less Truck" task and planning, building, and total times. None of the correlations were significant (Table 1). An over-all ranking was determined by summing the ranks for all five characteristics. Kendall's correlation coefficient was again computed between this over-all rank and planning, building, and total time. None of these correlations were significant (planning $S=7$, $p>.05$; building $S=-1$, $p>.05$; total $S=5$, $p>.05$).

Kendall's rank-order correlation coefficient was computed between each of the eleven characteristics

Table 1
Kendall's Rank-order Correlation Coefficients
Between Planning, Building, Total Times and
the Five Characteristics Associated with "The
Wheel-less Truck" Task

Characteristic	Values of S		
	Planning	Building	Total
Focus Effect	9	7	9
Feelings of a Lack of Self-competence	5	-1	5
Dominant Group Members	-3	-9	-3
Members Intolerant of Conflicting and Incompatible Ideas	9	1	5
Solution-mindedness	-7	7	3

Note: 1. None are significant since $S=11$ at $p=.05$.
2. Values of Tau are given in Table 1 in
Appendix E.

associated with the "Family Moving Problem" and the quality of solution rank. These coefficients are given in Table 2. Intolerance of conflicting and incompatible ideas, criticisms, and hidden agendas showed significant positive correlations ($S=11$, $p<.05$, in each case). Solution-mindedness and inadequately considered solutions showed significant negative correlations ($S=13$, $p<.01$, for both). An over-all rank for the "Family Moving Problem" was determined by summing the rankings of all eleven characteristics. The ranks of those characteristics which individually showed significant negative correlations with the quality of solutions rank were summed in as negative ranks. Kendall's Rank-order correlation coefficient was used to compute the correlation between this over-all rank and the quality of solution rank. This correlation was significant ($S=11$, $p<.05$).

Elimination of the four characteristics with the lowest correlations (focus effect, dominating members, inflexible status levels, and avoidance of emotional/personal content) from the over-all ranks results in a perfect correlation ($S=15$, $p=.001$). Eliminating any other characteristic destroys this relationship.

The degree of agreement between jury members was examined with Kendall's Coefficient of Concordance for both

Table 2
Kendall's Rank-order Correlation Coefficients
Between Quality of Solutions and the Eleven
Characteristics Associated with the "Family
Moving Problem"

Characteristic	Value of S
Focus Effect	-3
Feelings of a Lack of Self-competence	7
Dominant Group Members	-3
Members Intolerant of Conflicting and Incompatible Ideas	11*
Solution-mindedness	-13**
Criticisms	11*
Inflexible Status Levels	-3
Intragroup Pressures to Conform	7
Inadequately Considered Solution	-13**
Hidden Agendas	11*
Avoidance of Emotional/Personal Content	-3

Note: 1. * $p < .05$

** $p < .01$

2. Values of Tau are given in Table 2 in Appendix E.

juries. These coefficients are given in Tables 3 and 4, for the group dynamics jury. The "Family Moving Problem" jury did not have significant agreement and were required to reach a consensus decision. A comparison of the averaged decisions and the consensus decisions of the jury members is displayed in Tables 5 and 6.

The raw data are displayed in Appendix E. Table 1 in Appendix E exhibits the raw data from the "Wheel-less Truck." Table 2 in Appendix E displays raw data from the "Family Moving Problem."

Table 3
Kendall's Coefficient of Concordance for
Judgments by the Group Dynamics Jury on
each of the Five Characteristics Associated
with "The Wheel-less Truck" Task

Characteristic	Value of S
Focus Effect	89.5
Feelings of a Lack of Self-competence	119.5*
Dominant Group Members	77.5
Members Intolerant of Conflicting and Incompatible Ideas	109.5*
Solution-mindedness	37.5

Note: 1. *Denotes agreement significant at $p < .05$.
2. Non-significant judgments required consensus
decision by jury members.

Table 4
Kendall's Coefficient of Concordance for
Judgments by the Group Dynamics Jury on each
of the Eleven Characteristics Associated
with the "Family Moving Problem"

Characteristics	Value of S
Focus Effect	41.5
Feelings of a Lack of Self-competence	31.5
Dominant Group Members	23.5
Members Intolerant of Conflicting and Incompatible Ideas	27.5
Solution-mindedness	123.5**
Criticisms	133.5**
Inflexible Status Levels	59.5
Intragroup Pressures to Conform	15.5
Inadequately Considered Solution	119.5*
Hidden Agendas	73.5
Avoidance of Emotional/Personal Content	63.5

Note: 1. *Denotes significance at $p < .05$.
 2. **Denotes significance at $p < .01$.
 3. Non-significant judgments required consensus
 decision by jury members.

Table 5
Comparison of Consensus Decisions
with Averaged Decisions of Jury
Members on the Five Characteristics
Associated with "The Wheel-less Truck"

Characteristic	Order From Least to Most
Focus Effect	
Averaged	Y R O B G P
Consensus	R Y O B G P
Feelings of a Lack of Self-competence	
Averaged	G R O B Y P
Consensus	not required
Dominant Group Members	
Averaged	G R <u>B</u> <u>P</u> Y O
Consensus	G R B P Y O
Members Intolerant of Conflicting and Incompatible Ideas	
Averaged	G R O Y P B
Consensus	not required
Solution-mindedness	
Averaged	<u>B</u> <u>G</u> O Y R P
Consensus	B <u>G</u> O <u>Y</u> <u>R</u> P

Notes: 1. Letters BYOGPR represent colors assigned to families.

2. Underlined letters indicate tied ranks.

Table 6
Comparison of Jury Decisions, Consensus
and Averaged, from the "Family Moving
Problem" for the Eleven Characteristics
and the Quality of Solution

Characteristic	Order From Least to Most
Focus Effect	
Averaged	<u>P O</u> Y B R G
Consensus	P Y <u>B O</u> R G
Feelings of a Lack of Self-competence	
Averaged	G R <u>Y P</u> <u>O B</u>
Consensus	Y <u>G R</u> <u>P O</u> B
Dominant Group Members	
Averaged	<u>R B</u> G <u>Y P</u> O
Consensus	B R G Y P O
Members Intolerant of Conflicting and Incompatible Ideas	
Averaged	O Y G R <u>B P</u>
Consensus	<u>O Y</u> <u>G R</u> B P

Table 6 continued next page

Table 6 Continued

Characteristic	Order From Least to Most
Solution-mindedness	
Averaged	P G B <u>O</u> R Y
Consensus	not required
Criticisms	
Averaged	R Y O <u>B</u> <u>P</u> G
Consensus	not required
Inflexible Status Levels	
Averaged	P <u>Y</u> <u>R</u> G B O
Consensus	P Y R G B O
Intragroup Pressures to Conform	
Averaged	R O <u>B</u> <u>Y</u> <u>P</u> G
Consensus	R <u>O</u> <u>B</u> <u>Y</u> <u>P</u> G

Table 6 continued next page

Table 6 Continued

Characteristic	Order From Least to Most
Inadequately Considered Solution	
Averaged	G P R B O Y
Consensus	not required
Hidden Agendas	
Averaged	<u>Y</u> B O R <u>G</u> P
Consensus	Y B O R P G
Avoidance of Emotional/Personal Content	
Averaged	G R <u>P</u> <u>Y</u> O B
Consensus	G R <u>P</u> <u>Y</u> O B
Quality of Solution	
Averaged	Y O R B G P
Consensus	Y O R B P G

- Notes: 1. Letters BYOGPR represent colors (Blue, Yellow, Orange, Green, Purple, and Red) assigned to the six families.
2. Underlined letters indicate tied ranks.

Chapter 4

Discussion

The results of this study indicate that families are neither identical to nor totally dissimilar from groups for the aspects under consideration. Aspects of the type of task as well as dynamic characteristics of the family must be jointly considered in any discussion of effectiveness and efficiency of family functioning.

Although the literature indicates that the group dynamic characteristics associated with the model building (focus effect, feelings of a lack of self-competence, dominant group members, intolerance of conflicting and incompatible ideas, and solution mindedness) are accurate predictors of efficiency and effectiveness of groups for simple information tasks (i.e., building a model) based on the results of this study, the same conclusion cannot be drawn for families.

The differences between groups and families extend to quality solution type tasks (such as the "Family Moving Problem"). The first of these differences is the apparent inconsequential effects of the important group dynamics characteristics of (a) focus effect, (b) dominating members, (c) inflexible status levels, and (d) avoidance of emotional/personal content. That these four characteristics

important to group functioning appear to be unimportant to family functioning warrants further discussion. Although focus effect is known to inhibit the production of ideas by group members by virtue of self-evaluation, very likely members of normal families do not experience, or at least experience to a lesser degree, the need for self-evaluation of ideas. Dominating members and inflexible status levels deprive the group of the contributions of quiet members and of members who are creative but unassertive. The nature of the task ("Family Moving Problem") may in itself have precluded observation of these characteristics. The task was finished by most families within 5 to 10 minutes. This short amount of time may have made observation by the jury difficult. To mention a few other possibilities, these differences may be a function of the family members' extensive past history, day to day interactions, emotional involvement, intricate and subtle communication mechanisms, society's imposed roles, or extended family involvements.

Further differences between families and groups in this study are represented by the significant negative correlations between quality of solution and the group dynamics characteristics of solution-mindedness and inadequately considered solution. The similarity between these two characteristics raises questions as to confusion by the

jurors and that the two characteristics may, in fact, be the same. The non-significant intercorrelation between solution-mindedness and inadequately considered solution indicate that the two are not the same ($S=9$, $p>.05$). To conclude that solution-mindedness and inadequately considered solution are facilitative in family functioning, may be an unwarranted conclusion in light of the literature. Perhaps the jury, composed of three single women, did not have sufficient knowledge of family functioning to observe these characteristics. Equally possible is that solution-mindedness and inadequately considered solution are detrimental in families (as the literature indicates), but the manner in which these characteristics are exhibited in families is opposite from groups. Again, the shortness of the task may have influenced observation of these two characteristics. Conversely, children show less concern for goal attainment than do adults, and are more likely to pursue peripheral issues. The appearance of solution-mindedness and/or inadequately considered solution may in fact be balancing forces introduced by the parents and more mature children.

Similarities between families and groups in this study are the detrimental effects of (a) feelings of a lack of self-competence, (b) intolerance of conflicting and incompatible ideas, (c) criticisms, (d) intragroup pres-

asures to conform, and (e) hidden agendas. Researchers have found that the development of a healthy self-concept (which embodies feelings of self-competence) begins in childhood in the family. Developmental psychologist Erick Erickson contends that the stage of development during the grade school years (7-12) is characterized by a conflict of industry versus inferiority. Successful negotiation of this stage results in the child's developing a sense of mastery and competence.

Intolerance of differentness (conflicting and incompatible ideas) is recognized as a characteristic of dysfunctional families (Haley, 1959; Laing, 1971; Peck, 1973). The inability of family members to accept and appreciate differentness causes the members of these dysfunctional families to behave ineffectively. In normal families the more tolerance, the more effective the family would function. These results support the need for acceptance of differentness within the family.

Criticisms, intragroup pressures to conform, and hidden agendas are also ways families inhibit certain contributions. The absence of these characteristics produces more efficient and more effective family functioning. The perfect correlation between quality of solution and over-all rank (the ranking which accounted for all seven relevant characteristics, the lowest

correlated characteristics omitted) indicates that family functioning, like group functioning, is complex and cannot be explained by a unitary concept.

The results of this study may be summarized as follows:

- 1) Families and groups function differently on tasks requiring gathering, assimilating, and validating information.
- 2) Families and groups considering quality solution type tasks are both detrimentally influenced by:
 - a) members with a lack of self-competence feelings
 - b) intolerance of conflicting and incompatible ideas
 - c) criticisms
 - d) intragroup pressures to conform
 - e) hidden agendas
- 3) The following influences while detrimental in groups appear to be either less observable or less detrimental in families considering quality solution type tasks:
 - a) focus effect
 - b) dominant members
 - c) inflexible status levels

- d) avoidance of emotional/personal content
- 4) The following influences detrimental to group functioning may be facilitative in families, but more likely are exhibited in a radically different manner:
 - a) solution-mindedness
 - b) inadequately considered solution
- 5) Adequate understanding of family functioning involves a complex and interacting set of concepts.

Future research in this area could answer many of the newly raised questions by utilizing family members as both members in a family and members in groups which are carefully formed to match relevant characteristics such as age, sex, and developmental levels. Perhaps the use of religious orders (priests, nuns) or family-like communes would provide a more comparable group to families relative to status relationships and enduring membership. Development of tasks equally applicable to groups and families appears to be a major stumbling block to family/group comparison studies. Model building is frequently used in group research, rarely in family research. Moving problems and family vacations are almost never used with groups. Perhaps the use of picture puzzles or motor coordination tasks requiring group cooperation could fill this need. Adaptation of simple games, such as croquet, might produce

useful tasks. Tasks applicable and equal to both groups and families are desperately needed.

Future research could also focus on the differences between married females, married males, and unmarried males compared to single female jury members as used in this study. Additionally, studies which compared groups and families on each of these characteristics would further illuminate similarities and differences. Studies comparing normal and abnormal families on each of the characteristics may facilitate an understanding of differences between and causes of dysfunctional families and normal families.

The question related to the solution-mindedness and inadequately considered solutions obviously needs further examination. Some additional variables not addressed in this study are: age of family members, number and sex of children, educational level of the parents, religious background, and extended family ties and influences. These factors, known to influence family functioning, need further clarification.

Appendix A

Participant Consent Form

Participant Consent Form

I, the undersigned, give my consent to participate in this research by J. Paul Sorrels. I consent to the recording of my voice and image. I understand that all information obtained in this study is for the express purpose of research and will be held in the strictest of confidence. I have been informed that I will be in no physical or emotional danger. I also know that I will receive only the rewards of participating in furthering the knowledge of science for my cooperation in this study. I consent to allow my children under 18 years of age to participate with me. I also understand that these results will be used in conjunction with the writing of a doctoral dissertation by J. Paul Sorrels, who is enrolled at Texas Woman's University.

Signature_____Date_____

* * *

The above consent form was read, discussed if needed, and signed in my presence. In my opinion, the person signing this form did so freely and with full knowledge and understanding of its contents.

Signature_____Date_____

Appendix B

Family Moving Problem

You are all members of a family whose father has been offered a new job. This job is in another state at least 850 miles away. It represents a promotion and an increase in salary of \$2500 a year. However, if the decision to accept the job is made, your father/husband must start to work within 4 weeks. You have lived at your present home for 6 years. You (children) like your school very much and are involved in several sports, clubs, and other extra-curricular activities. All of you have many good friends. Inflation has hurt your standard of living like everyone else, and though you are by no means broke, things are tight. You have two cars and a boat (or camper). Your children are getting older and will be entering high school and/or college (or perhaps already are). If the decision is made to accept this new job and the family moves, you (children) will have to change schools in the middle of the school year. As the father of the family you know that you may get as much as a \$1000 raise in your present job at the end of the year, but more likely it will be less. You enjoy your present job and the new job promises to be just as enjoyable, maybe more. As the mother, you know that things are tight when you buy groceries, clothes, and pay the bills. You also are involved in church activities and several clubs perhaps even tennis. The new company has promised to pay for moving costs and realtor fees both to sell your present home and to buy another one.

Suppose this happened to your family,

Would you move or stay,

If you move how would you do it, when, etc.?

Please record your answer on the paper provided.

Appendix C

Group Dynamics

Jury Evaluation Forms

The Wheel-less Truck

Family Moving Problem

The Wheel-less Truck

Jury Evaluation Form

Circle the color of the group from each pair of colors which exhibits the most of each of the following characteristics.

1. Focus effect - discuss one topic or aspect too long.

Blue or Purple	Yellow or Purple
Yellow or Orange	Green or Yellow
Orange or Green	Purple or Orange
Blue or Yellow	Red or Blue
Orange or Red	Orange or Blue
Yellow or Red	Green or Purple
Blue or Green	Red or Green
Purple or Red	

2. Feelings of a lack of self-competence by group members withdrawal from participation or participate in a self-depreciatory manner.

Blue or Green	Purple or Red
Orange or Blue	Orange or Green
Orange or Red	Blue or Purple
Green or Purple	Green or Yellow
Red or Blue	Blue or Yellow
Red or Green	Yellow or Orange
Yellow or Purple	Purple or Orange
Yellow or Red	

3. Dominant group members.

Blue or Green

Red or Green

Yellow or Purple

Yellow or Red

Blue or Purple

Red or Blue

Orange or Green

Blue or Yellow

Orange or Blue

Purple or Orange

Purple or Red

Yellow or Orange

Green or Purple

Orange or Red

Green or Yellow

4. Members intolerant of conflicting and incompatible ideas.

Orange or Blue

Blue or Green

Orange or Green

Blue or Purple

Yellow or Red

Orange or Red

Blue or Yellow

Purple or Red

Green or Purple

Red or Green

Yellow or Purple

Yellow or Orange

Green or Yellow

Purple or Orange

Red or Blue

5. Solution-mindedness rather than problem-centeredness.

Blue or Green

Green or Purple

Orange or Red

Purple or Orange

Purple or Red

Blue or Yellow

Yellow or Purple

Red or Green

Red or Blue

Yellow or Red

Yellow or Orange

Blue or Purple

Orange or Green

Orange or Blue

Green or Yellow

Family Moving Problem

Jury Evaluation Form

Circle the color of the group from each pair of colors which exhibits the most of each of the following characteristics.

1. Focus effect - discuss one topic or aspect too long.

Blue or Purple

Yellow or Purple

Yellow or Orange

Green or Yellow

Orange or Green

Purple or Orange

Blue or Yellow

Red or Blue

Orange or Red

Orange or Blue

Yellow or Red

Green or Purple

Blue or Green

Red or Green

Purple or Red

2. Feelings of a lack of self-competence by group members withdrawal from participation or participate in a self-depreciatory manner.

Blue or Green

Purple or Red

Orange or Blue

Orange or Green

Orange or Red

Blue or Purple

Green or Purple

Green or Yellow

Red or Blue

Blue or Yellow

Red or Green

Yellow or Orange

Yellow or Purple

Purple or Orange

Yellow or Red

3. Dominant group members.

Blue or Green

Red or Green

Yellow or Purple

Yellow or Red

Blue or Purple

Red or Blue

Orange or Green

Blue or Yellow

Orange or Blue

Purple or Orange

Purple or Red

Yellow or Orange

Green or Purple

Orange or Red

Green or Yellow

4. Members intolerant of conflicting and incompatible ideas.

Orange or Blue

Blue or Green

Orange or Green

Blue or Purple

Yellow or Red

Orange or Red

Blue or Yellow

Purple or Red

Green or Purple

Red or Green

Yellow or Purple

Yellow or Orange

Green or Yellow

Purple or Orange

Red or Blue

5. Solution-mindedness rather than problem-centeredness.

Blue or Green	Green or Purple
Orange or Red	Purple or Orange
Purple or Red	Blue or Yellow
Yellow or Purple	Red or Green
Red or Blue	Yellow or Red
Yellow or Orange	Blue or Purple
Orange or Green	Orange or Blue
Green or Yellow	

6. Criticisms - expressed or unexpressed, especially during early stages of the task.

Orange or Red	Yellow or Red
Red or Green	Orange or Blue
Orange or Green	Green or Purple
Yellow or Orange	Yellow or Purple
Purple or Orange	Blue or Purple
Red or Blue	Purple or Red
Blue or Green	Green or Yellow
Blue or Yellow	

7. Inflexible status levels.

Green or Yellow	Blue or Yellow
Yellow or Red	Red or Blue
Purple or Orange	Blue or Green
Purple or Red	Green or Purple
Orange or Red	Yellow or Purple
Red or Green	Orange or Green
Orange or Blue	Blue or Purple
Yellow or Orange	

8. Intragroup pressures to conform - especially during early stages of the task or problem.

Red or Green	Green or Purple
Orange or Red	Yellow or Orange
Blue or Yellow	Green or Yellow
Blue or Green	Blue or Purple
Red or Blue	Yellow or Purple
Purple or Orange	Purple or Blue
Orange or Green	Orange or Blue
Yellow or Red	

9. Solution inadequately considered.

Orange or Red	Purple or Red
Green or Yellow	Yellow or Purple
Blue or Yellow	Orange or Green
Red or Green	Red or Blue
Orange or Blue	Yellow or Orange
Green or Purple	Blue or Green
Blue or Purple	Purple or Orange
Yellow or Red	

10. Hidden agendas by certain members.

Orange or Red	Blue or Purple
Blue or Yellow	Red or Blue
Blue or Green	Orange or Blue
Red or Green	Green or Purple
Yellow or Purple	Green or Yellow
Orange or Green	Purple or Orange
Yellow or Orange	Yellow or Red
Purple or Red	

11. Avoidance of emotional/personal content - of group members and in the problem.

Yellow or Orange

Blue or Yellow

Blue or Purple

Blue or Green

Yellow or Red

Orange or Red

Red or Green

Green or Purple

Yellow or Purple

Red or Blue

Purple or Orange

Orange or Blue

Green or Yellow

Purple or Red

Orange or Green

Appendix D

Jury Evaluation Form
for Family Solution Jury
Family Moving Problem

Family Problem Solutions

Jury Forms

Choose the one color from each of the following pairs of colors which represents the family with the best solution, i.e., matches closest the criteria the jury established.

Blue or Green

Red or Blue

Yellow or Orange

Blue or Purple

Purple or Orange

Green or Purple

Orange or Green

Yellow or Red

Purple or Red

Green or Yellow

Orange or Blue

Blue or Yellow

Orange or Red

Red or Green

Yellow or Purple

Appendix E
Raw Data and Additional
Statistical Tables

Table 1
Kendall's Tau for Values of S Given
in Table 1 in the Results Section

Characteristic	Values of Tau		
	Planning	Building	Total
Focus Effect	.60	.47	.60
Feelings of a Lack of Self-competence	.33	-.07	.33
Dominant Group Members Members Intolerant of Conflicting and Incompatible Ideas	-.20	-.60	-.20
Solution-mindedness	.60	.07	.33
	-.47	.47	.20

Table 2
Kendall's Tau for Values of S given
in Table 2 in the Results Section

Characteristics	Values of Tau
Focus Effect	-.20
Feelings of a Lack of Self-competence	.47
Dominant Group Members	-.20
Members Intolerant of Conflicting and Incompatible Ideas	.73
Solution-mindedness	-.87
Criticisms	.73
Inflexible Status Levels	-.20
Intragroup Pressures to Conform	.47
Inadequately Considered Solution	-.87
Hidden Agendas	.73
Avoidance of Emotional/Personal Content	-.20

Table 3
Raw Data
Rankings of the Six Families on Planning,
Building, and Total Times and the Five
Characteristics Associated with "The
Wheel-less Truck" Task

Variable	Order From Least to Most
Planning Time	B P G Y O R
Building Time	P G R B Y O
Total Time	P B G Y R O
Focus Effect	R Y O B G P
Feelings of a Lack of Self- competence	G R O B Y P
Dominant Group Members	G R B P Y O
Intolerance of Conflicting and Incompatible Ideas	G R O Y P B
Solution-mindedness	B <u>G</u> <u>O</u> <u>Y</u> <u>R</u> P

- Notes: 1. Letters BYOGPR represent colors assigned to families
2. Underlined letters indicate tied ranks.

Table 4
Raw Data for Family Moving Problem Rankings
of the Six Families on the Eleven
Characteristics and Quality of Solution

Variable	Order From Least to Most
Focus Effect	P <u>B</u> <u>Y</u> <u>O</u> R G
Feelings of a Lack of Self-competence	Y <u>P</u> <u>G</u> <u>R</u> <u>B</u> O
Dominant Group Members	B R G Y P O
Members Intolerant of Conflicting and Incompatible Ideas	<u>Y</u> <u>O</u> <u>G</u> <u>R</u> B P
Solution-mindedness	P G B <u>O</u> <u>R</u> Y
Criticisms	R Y O <u>B</u> <u>P</u> G
Inflexible Status Levels	P Y R G B O
Intragroup Pressures to Conform	R <u>B</u> <u>O</u> <u>Y</u> <u>P</u> G
Inadequately Considered Solution	G P R B O Y
Hidden Agendas	Y B O R P G
Avoidance of Emotional/Personal Content	G R <u>Y</u> <u>P</u> <u>O</u> <u>B</u>
Quality of Solution	Y O R B P G

Notes: 1. Letters BYOGPR represent colors assigned to the families.

2. Underlined letters indicate tied ranks.

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