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# The Beavers Systems Model And The Relationship Between Family Competence And Team Effectiveness In Self-Managed Family Work Teams

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The Beavers Systems Model and The Relationship Between  
Family Competence and Team Effectiveness in Self-Managed  
*Family Work Teams*

By

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requirements of the Degree of Doctor of Philosophy  
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## ABSTRACT

### The Beavers Systems Model And The Relationship Between Family Competence And Team Effectiveness In Self-Managed *Family* Work Teams

The Beavers family systems model was used to evaluate the relationship between family competence and team effectiveness in self-managed *family* work teams. The sample consisted of 103 self-managed family work teams from a financial services company. This study attempted to answer the following questions: 1) Is there a relationship between how well the family members function together (family competence) and the effectiveness of the self-managed family work team in a service organization, and, 2) If there is a relationship, what family and team factors are related to self-managed work team effectiveness in a service organization?

Evidence was found to suggest that when a team had a high level of family competence it also had high levels of communication and group potency, and low levels of intragroup conflict. This same team also had high levels of quality of work life among team members. Second, teams with lower levels of communication and higher levels of group potency were more productive than teams with higher levels of communication and lower levels of group potency. Third, family competence was not found to be significantly related to the team's productivity. Finally, family competence, group potency, communication, and intragroup conflict were not found to be significantly related to customer satisfaction.

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Lastly, I am very proud of this accomplishment and the commitment I made to myself to complete this enormous task while working full-time. I hope that my dedication, diligence, creativity, and perseverance will inspire others to keep their hearts and minds focused on their goals and dreams.

It is over...Amen! On to the next stage of my life...

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## CHAPTER I

### Introduction

When families work together in business, there is an inextricable, interrelationship between the family system and the business system. To the degree the family can successfully manage both systems, is the degree to which the family and business will succeed. Family business consultants and researchers understand this relationship as illustrated by the following quotes: "We believe that a strong, healthy family enhances the possibility for a strong, healthy business, and visa versa" (Aronoff, Astrachan, Mendoza, & Ward, 1997, p. 3). "In family businesses, what is personal and what is business may be inseparably combined in an intense emotional interrelationship. When conflicts are severe, both the health of the family and the sustainability of the business may be at stake" (Bettis, 1997, p. 12).

When family members function well together in business, the business has a greater chance of being successful. When the families do not function well together, the family has the potential to cause the dissolution of the business. It is suggested that one reason why approximately 70% of family businesses are not able to survive the transition from the first generation to the next is because of an unhealthy (poor communication, unresolved conflict, sibling rivalry) family system (Ward, 1987). Levinson (1994) suggested that one reason why many large corporations have not succeeded might be the "unconscious recapitulation of family dynamics in the organization" (p. 428).

To better understand organizational and work team effectiveness, literature developed that attempted to apply family systems theory to organizations in general and family businesses specifically. Except in a small number of cases, (Neck, 1999;

Lansberg & Astrachan, 1994; Lee-Chua, 1997; Dunn, 1999), most of the literature has been theoretical or anecdotal in nature (Neck, Connerley, & Manz, 1997; Rodriguez, Hildreth, & Mancuso, 1999; Bilson, 1997; Whiteside, Aronoff, & Ward, 1993; Boverie, 1991; Comella, Bader, Ball, Wiseman, & Sagar, 1996; Bowen, 1978; McCombs, Elloy, & Flynn, 1991; Friedman, 1985; Wynne, McDaniel, & Weber, 1986). Because of what is at stake for families and businesses, there is a great opportunity for family therapists and family researchers to take their knowledge of systems and apply it to families that work together in business (Leahy, 1996).

The purpose of this study is to fill a gap in the family systems literature by attempting to provide the much-needed empirical support for the application of family systems in non-clinical settings. This study is unique in that it applies family systems theory to self-managed work teams that reside in service organizations. The self-managed work teams in this study are comprised of family, ("insiders"), and non-family, ("outsiders") members. This study is the *first* attempt to evaluate the relationship between the family and business systems in self-managed *family* work teams.

This is an opportune time to conduct this study because of the two different but related trends taking place in today's business milieu. The first is the increasing number of self-managed work teams in service organizations (Jong, Ruyter, & Lemmink, 2001; Spreitzer, Cohen, & Ledford, 1999). The second trend is taking place in family businesses. Family businesses have traditionally been managed using a "single-owner manager" model (Fischetti, 1999). In recent years there has been a shift to a family-team management model (Fischetti, 1999; Aronoff, 1998):

More and more family businesses are moving away from the old leadership model of the single owner-manager. Adult siblings of company founders are setting up partnerships. Cousins from different family branches are establishing consortia...husbands and wives are increasingly becoming co-preneurs. (Fischetti, 1999, p. 1)

Both of these trends are similar in that the shift to the work team paradigm is largely driven by the organization's attempt to adapt to today's business milieu (Fischetti, 1999; Spreitzer, et al., 1999; Tansik, 1990; Radding, 1989). Organizations are moving toward a flatter organizational structure, (eliminating layers of management), in order to more quickly adapt to the highly competitive challenges and customer demands of today's high-speed, global economy. Appelbaum and Batt (1994) argue that in order for organizations to be competitive they need to compete on quality, cost, innovation, and customization. Self-managed work teams are seen as a way to remove organizational layers between the customer and the organization, and help organizations compete on quality, cost, innovation, and customization. Self-managed work teams have the authority and resources to meet the needs of the organization and the customer (Hackman, 1986).

Self-managed work teams and family teams who manage family businesses are similar in that they are comprised of members who share common goals and are identified and identifiable as a social unit in an organization (Cohen & Bailey, 1997; Guzzo & Dickson, 1996; Alderfer, 1977). In addition, both teams are autonomous in that they either have, (family team), or are given, (self-managed work team), significant authority to carry out their work. The concept of autonomy has been shown an important

factor in the work team effectiveness literature. Evidence suggests that autonomy is positively associated with attitudinal outcomes such as team member satisfaction, (Corderey, Mueller, & Smith, 1991; Cohen & Ledford, 1994; Cohen et al., 1996), organizational commitment, (Cordery et al., 1991; Cohen, Ledford, & Spreitzer, 1996) and trust in management (Cohen et al., 1996). Autonomy has also been shown to be positively associated with behavioral outcomes such as higher team and manager performance ratings (Cohen & Ledford, 1994; Cohen et al., 1996), increased productivity (Campion, Medsker, & Higgins, 1993; Campion, Papper, & Medsker, 1996) and customer satisfaction (Kirkman & Rosen, 1999; Campion et al., 1996; Jong et al., 2001).

Socio-technical theory (Pasmore, Francis, Haldeman, & Shani, 1982; Trist & Bamforth, 1951) posits that self-managed, also referred to as self-regulated or self-directed, work teams are given the authority to make most or all of the decisions related to the work. This allows the team to decide on the technical aspects like tools, work procedures, strategies and skills needed to accomplish the work, as well as consider the social needs, motivation, preferences and personal needs of team members. Since the self-managed work team has firsthand knowledge of the work, customers, and employees involved, they are considered the best source to make the most effective decisions. This is especially important for self-managed work teams in service organizations who are responsible for providing service and quality to existing customers, whether internal or external, selling products and services, and attaining new customers. In order to meet the objectives the teams need the knowledge, resources, skills, discretion, and autonomy to effectively function on the "front-line", i.e., in direct interaction with customers. Griffin, Baldwin, and Sumichrast (1994) posited that "self-management may improve service

performance and customer satisfaction because it lends itself to work encounters that are variable, uncertain, and complex. Services are often variable and uncertain because they involve customer participation" (p.115). Mills (1983) suggests that self-management teams are best suited for these types of organic and dynamic work environments.

Goodstein and Butz (1998) argue that delivering customer value, thereby creating satisfied and loyal customers, is the most important thing an organization can do in today's business milieu. Heskett, Jones, Loveman, Sasser, and Schlesinger, (1994) point out that delivering high levels of customer service and quality is especially important in industries where competition is great. In their service-profit chain model, they posit that customer service is ultimately related to the profitability of the organization. Therefore, it is very important that self-managed work teams in service organizations are effective in meeting and exceeding the needs of their customers.

It is also important that as the management structure of family businesses changes to a family-team management model, the family members understand what factors will contribute to their effectiveness. This is important because of the significant impact family businesses have on the United States economy. Shanker and Astrachan (1996) estimate that 20.3 million of the 22 million United States businesses are family-owned and controlled. Shanker & Astrachan have reported that small family businesses represent 60% - 90% of all United States businesses. A study conducted by Arthur Anderson Enterprise Group found that small to midsize family businesses employ nearly 60% of the private-sector workforce, are responsible for 60% of private-sector output, and generate 54% of United States sales and 40% of gross domestic product (Arthur Anderson Enterprise Group, 1996).



In comparison to what researchers knew about self-managed work team effectiveness in non-service oriented organizations, a scant amount of empirical research existed regarding self-managed work team effectiveness in service organizations (Spreitzer et al., 1999; Cohen et al., 1996; Jong et al., 2001; Batt, 1999). Although there was no empirical research that focused specifically on family work teams, researchers, family therapists, and family-business consultants found that family dynamics play an important role in the health of the family business (Gilding, 2000; Swogger, 1991; Friedman, 1991; Lansberg & Astrachan, 1994; Lee-Chua, 1997; Dunn, 1999). This study focuses on self-managed family work team effectiveness in a financial service organization. The self-managed family work teams in this study are given the authority to manage themselves, their work, and their customers. They are primarily responsible for providing financial services directly to the retail public. This study attempts to answer the following questions: 1) Is there a relationship between how well the family members function together and the effectiveness of the self-managed family work team in a service organization, and, 2) if there is a relationship, what family and team factors are related to self-managed work team effectiveness in a service organization?

### *Background Information*

The first trend addressed in this study is the growing number of self-managed work teams in service organizations (Jong et al., 2001; Spreitzer et al., 1999). This trend is part of a larger trend of the increasing number of self-managed work teams in organizations in general (Devine, Clayton, Philips, Dunford, & Melner, 1999; Lawler, Mohrman, & Ledford, 1995). Devine et al. (1999) found that about one half of the

organizations in the United States now use teams. The Center for Effective Organizations conducted national surveys that examined the practices of Fortune 1000 companies (Lawler, Mohrman, & Ledford, 1995). They reported frequency data on the use of self-managed work teams and problem-solving groups three times over a 6-year interval (1987; 1990; 1993). In general, the use of both types of teams in the Fortune 1000 rose steadily during this period. Self-managed work teams rose from 27% in 1987, to 47% in 1990, and then to 68% in 1993. As part of a survey concerning trends in the workplace, a large sample (12,000) of organizations with more than 100 employees was extracted from Dunn & Bradstreet's Directory of U.S. Businesses and Training subscription list (Gordon, 1992). In 1992, 82% of organizations with 100 or more employees reported using some type of team, with 45% reporting the use of permanent work teams, 35% reporting the use of one or more self-managed teams, 30% reporting the use of temporary project teams, and 18% using permanent, cross-functional teams. In those organizations that used teams, on average, 53% of employees were reported to be involved in some type of team, and 32% were said to be in a self-managed team.

Because of this growing trend of work teams in organizations in general, and service organizations specifically, researchers have begun to focus their research on assessing the affects of the new team paradigm on the organization (Guzzo & Dickson, 1996; Cohen & Bailey, 1997). Although the findings have not been definitive, research suggests that work teams are effective, especially self-managed work teams. The Macy & Izumi (1993) meta-analysis study determined that self-managed work teams had a significant effect on an organization's financial and overall performance, while other team types (e.g., general work teams) did not. Cotton (1993) and Cotton, Vollrath, Froggatt,

Lengnick-Hall, and Jennings (1988) also found that self-managed work teams had a stronger effect on performance than had parallel teams. This research focus has also provided evidence to suggest that work teams have positively contributed to productivity (Campion et al., 1996; Cohen & Ledford, 1994; Gladstein, 1984; Hackman, 1987; Pearce & Ravlin, 1987; Shea & Guzzo, 1987a), employee satisfaction (Kirkman & Rosen, 1999; Cohen & Ledford, 1994; Corderey et al., 1991; Wall, Kemp, Jackson, & Clegg, 1986), cost savings (Cohen et al., 1996; Wall et al., 1986), organizational commitment (Cordery et al., 1991; Kirkman & Rosen, 1999), quality (Banker, Field, Schroeder, & Sinha 1996; Cohen et al., 1996; Hackman, 1987; Shea & Guzzo, 1987a), and customer service (Kirkman & Rosen, 1999; Shea & Guzzo, 1987b; Manz, Sims, & Bateman 1993).

Other than a relatively small number of studies (Jong et al., 2001; Spreitzer et al., 1999; Gladstein, 1984; Manz et al., 1993; Hackman, 1990; George & Bettenhausen, 1990; Campion et al., 1996), an overwhelming amount of knowledge about work team effectiveness was derived from non-service oriented organizations (e.g., manufacturing organizations or "blue-collar settings"). Since the research derived from non-service oriented organizations has emphasized productivity improvements and cost control, it is not clear if these findings can be generalized to service organizations that focus more on customer satisfaction (Spreitzer et al., 1999; Griffin et al., 1994; Batt, 1999).

Hackman (1990) recommends that the following criteria are used to assess team effectiveness: 1) the productivity of the team, 2) the customer's satisfaction with the output of the team and, 3) the effects of the work and team member interaction on the team members. With few exceptions (Jong et al., 2001; Kirkman & Rosen, 1999; Cohen & Ledford, 1994) much of the self-managed work team research has not included a

customer satisfaction or service outcome measure. Those studies that have used a customer satisfaction or service outcome measure typically had a manager, employee (internal customer), or team member, complete the measure. Few studies (Jong et al., 2001; Cohen & Ledford, 1994; Shea & Guzzo, 1987b) have included an objective measure based on the external customer's comments or behavior.

The other trend addressed in this study was the shift from a "single-owner manager model" to a family-team management model in family businesses (Fischetti, 1999; Aronoff, 1998). Although there was no empirical research that focused specifically on family work teams, researchers, family therapists, and family-business consultants have found that family dynamics play an important role in the health of the family business (Gilding, 2000; Swogger, 1991; Friedman, 1991; Lansberg & Astrachan, 1994; Lee-Chua, 1997; Dunn, 1999). For example, Lee-Chua (1997) studied five family businesses and found a relationship between the health of the family and the health of the family business. Lansberg and Astrachan (1994) found that the family's commitment to the business and the relationship the owner had with the successor mediated the effects family adaptability and family cohesion had on succession planning and successor training. Sorenson (2000) conducted a study regarding different leadership styles in family businesses. He found that certain leadership styles had a greater positive affect on family business outcome measures, such as financial performance and employee satisfaction and commitment. The study also identified a common best practice conducted by the more successful leadership styles. This best practice was teamwork and found a significant relationship to the successful leadership styles. No matter what the family composition of the team is, if the family members cannot work together well, it

will not succeed (Fischetti, 1999). Fischetti (1999) points out that there is very little information that provides insight into the characteristics of successful family work teams. Lansberg (1999) suggests that one factor that might contribute to the success of family work teams is their ability to reach "unique compromises and adaptations that enable them to disagree without destroying the partnership" (p. 6).

To reiterate, no empirical research that focused specifically on family work teams existed. What we do know about families who work together in business is that family dynamics play an important role in the health of that business. We also know that there is evidence that self-managed work teams positively affect an organization's financial performance, productivity, and customer and employee satisfaction. Given the lack of empirical research regarding family work teams, and the growing trends of self-managed work teams in service organizations and family teams managing family businesses, there is a great opportunity to better understand what factors contribute to the success of families who work together in teams. This study attempts to fill a gap in the self-managed work team and family business literature by providing empirical research regarding family members who work together in a service organization. The teams in this study have direct contact with external customers and are expected to provide high levels of customer service and quality, sell financial services and products, and attain new customers. Each of the teams are comprised of family members who are responsible to both help manage the team and interact directly with their external customers.

### *Theoretical Framework*

The rationale behind applying family systems theory to organizations and work teams lies in the notion that families, teams, and organizations *are* systems. Therefore, it is appropriate to apply a systemic paradigm to understand those entities.

Goldenberg and Goldenberg (1991) define a system as "...a set of interacting units or component parts that together make up a whole arrangement or organization" (p. 331) and a subsystem as "...an organized, coexisting component within an overall system, having its own autonomous functions as well as a specified role in the operation of the large system" (p. 330). Both self-managed work teams and families have been described as systems. For example, a self-managed work team consists of employees who perform interdependent jobs, share common goals, have differentiated roles, are identified and identifiable as a social unit in an organization, and are given significant authority to carry out their work (Cohen & Bailey, 1997; Guzzo & Dickson, 1996; Alderfer, 1977). Hackman (1990) described a team as a social system that creates its own reality and then behaves in accord with the environment it helps create. A family has been described by Goldenberg and Goldenberg (1991) as a:

...natural social system, with properties all its own, one that has evolved a set of rules, is replete with assigned and ascribed roles for its members, has an organized power structure, has developed intricate overt and covert forms of communication, and has elaborated ways of negotiating and problem solving that permit various tasks to be performed effectively. (p. 3)

Jackson (1968) used the concept of homeostasis to describe a family. He said that a family was a closed information system in which each family member influenced and

was influenced by the communication system they helped create. Further illustrating the similarity between family and organizational systems, Boverie (1991) said the following:

Repercussions of negative, stressful interactions at the administrative (or parental) level will be felt at the lower levels of the hierarchy. A battle between two department managers can lead to acting out or tension in the employees in their respective departments. Similarly, when parents argue or family stress is increased, the disturbance is often manifested in the children. (p. 64)

Self-managed work teams are the byproduct of socio-technical systems theory.

Socio-technical systems theory emphasizes the interrelationship of the social and technical systems within an organization (Pasmore et al., 1982; Trist & Bamforth, 1951). Unlike classical organizational theory (Taylor, 1911; Fayol, 1949; Gerth & Mills, 1958), which largely ignored the personal needs of employees and human relations perspectives (Miles, 1965; McGregor, 1960), and gave little attention to the technical aspects of the work, the goal of socio-technical systems theory is both high task productivity and employee satisfaction. The self-managed work team is a way for achieving the best match between the technical and social systems in an organization. To illustrate the interrelationship of these two systems in work teams, Fisher, Rayner, and Belgard (1995) have said the following:

There are two basic types of needs, or issues, that arise on a team: task and relationship. Task issues relate to the actual work that the team must accomplish. Relationship issues relate to how well the people on the team get along and work together. A team that is too heavily focused on task may find itself overlooking important relationship issues. Consequently, tension may rise and tempers may

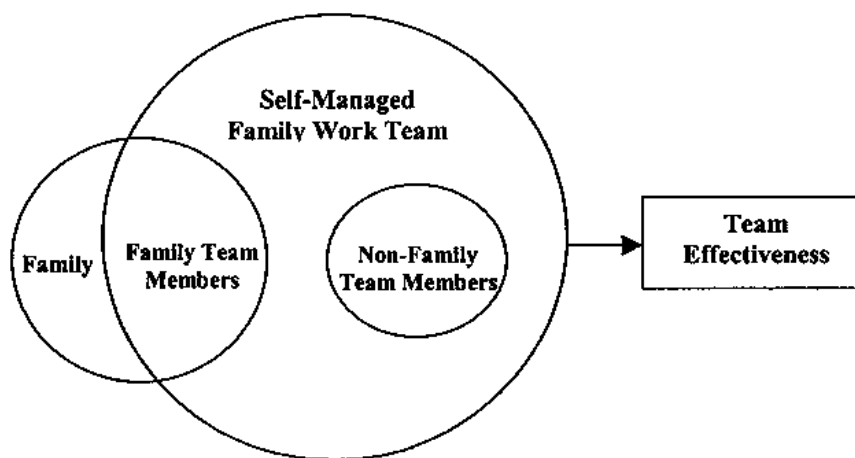
flare. Teams that over-emphasize relationships may find that important tasks become ignored or that quality loses priority. Therefore, the team may lose credibility as expectations are not met, motivation of team members may decline, and individuals may begin to point fingers. (p. 209)

The work team effectiveness literature provided evidence to support socio-technical systems theory. In addition, research involving family businesses provided evidence to suggest that family dynamics play an important role in the health of the family business. Since self-managed work teams and families *are* systems, this study uses the Beavers family systems model (Beavers & Hampson, 1990) to assess the level of family functioning within the family subsystem on the team, in order to determine its affects on the overall effectiveness of the self-managed family work team system.

Illustrating the systems framework for this study is in the following diagram:

Figure 1:

*Systems Framework*



The Beavers family systems model emphasizes family competence. Family competence is defined as the family's ability to perform "the necessary tasks of



organizing and managing itself" (Hampson & Beavers, 1993, p. 74). Family competence measures the family's ability or lack of ability, to communicate, coordinate, negotiate, establish clear roles and goals, problem solve, adapt to new situations, manage conflict, accept responsibility, be autonomous, and have confidence in itself (Beavers & Hampson, 1990; 2000; Hampson & Beavers, 1993; 1996a). The family is given a competence rating, based on the Self-Report Family Inventory (SFI) Health/Competence Scale (Beavers & Hampson, 1990). This rating is based on continuum that ranges from "severely dysfunctional" to "optimal."

Families that function at an optimal level "...excel in their capacity to accept directions, organize themselves, develop input from each other, negotiate differences, and reach closure coherently and effectively" (Hampson & Beavers, 1993, p. 83). In addition, "...competent families are more readily able to resolve conflict and communicate openly and directly" (Hampson & Beavers, 1993, p. 74). On the other hand, families that rate severely dysfunctional:

... are the most limited in negotiating conflicts, in adapting to developmental demands and situational crises. The family members have the most trouble in resolving ambivalence and defining goals...Such families have poorly defined power structure; unclear, ineffective, and unsatisfying communication; extreme problems in interpersonal boundaries; few negotiation skills; and a pervasively depressed or cynical tone. (Hampson & Beavers, 1993, pp. 88-89)

Hampson and Beavers (1993) state that "...it is highly unlikely that one family will show extremely competent interaction in one domain and dysfunctional levels in others" (p.75).

Research provided evidence to suggest that families who were rated high in family

competence had greater goal attainment in family therapy (Beavers & Hampson, 2000), and families who saw themselves highly competent at the outset of therapy required fewer sessions to benefit from therapy than lower competent families (Hampson & Beavers, 1996b).

This study uses McGrath's (1964) input-process-output model to assess the affects of family competence on the self-managed family work team's effectiveness. This model is commonly used when evaluating team effectiveness (Gladstein, 1984; Tannenbaum, Beard, & Salas, 1992; Hackman, 1987; Guzzo & Shea, 1992; Campion et al., 1993). For this study the input, or predictor variable, is family competence. Neither family competence, nor any other family related variables are factored into self-managed work team effectiveness research. Measuring the affect family competence has on team effectiveness helps answer the question, 'Is there a relationship between how well the family members function together and the effectiveness of the self-managed family work team in a service organization?'

Since family competence measures the family's ability, (or lack thereof), to communicate, coordinate, negotiate, establish clear roles and goals, problem solve, adapt to new situations, manage conflict, accept responsibility, be autonomous, and believe in itself (Beavers & Hampson, 1990; 2000; Hampson & Beavers, 1993; 1996), it is likely that families that demonstrate high levels of family competence will positively impact team process variables, which in turn will positively affect the team's effectiveness. The reason for this expected relationship was that work team effectiveness research had suggested that the family competence characteristics described above had been shown to

positively contribute to self-managed work team effectiveness (Campion et al., 1993; 1996; Jehn, 1995; Kirkman & Rosen, 1999; Shea & Guzzo, 1987b).

In order to help answer the question, 'If there is a relationship, what family and team factors are related to self-managed work team effectiveness in a service organization?' the following process variables are chosen for this study: intragroup conflict, communication, and group potency. Intragroup conflict has to do with a team's ability to manage relationship conflict within the team, manage how tasks and goals within the team are established, determine how the team will accomplish its tasks, and decide who on the team will be responsible for completing the tasks. Intragroup conflict has been shown to affect work team effectiveness (Jehn 1995; Jehn & Chatman, 2000).

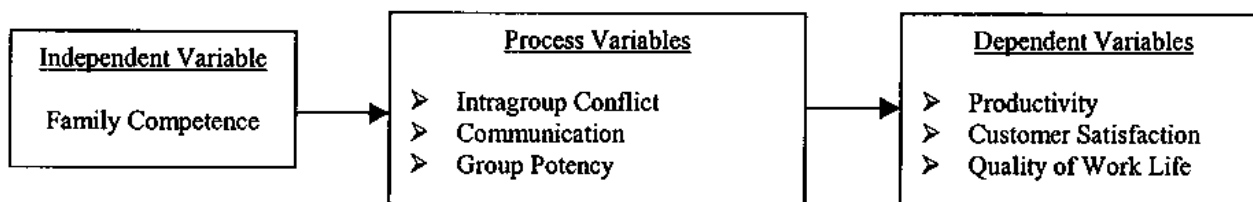
Communication refers to the team's ability to communicate effectively in order to share information. Communication has been shown to affect work team effectiveness (Campion et al., 1993; 1996). Group potency has to do with the team's collective belief that it can effectively accomplish its work. Group potency had also been shown to affect work team effectiveness (Shea & Guzzo, 1987b; Kirkman & Rosen, 1999).

These process variables are chosen because they have been shown to affect team effectiveness and because they align with the characteristics of family competence. It has been suggested that families who rate high in family competence are able to more effectively communicate, cooperate, negotiate, problem-solve, manage conflict, and are more confident in its ability to reach its goals (Beavers & Hampson, 1990; 2000, Hampson & Beavers, 1993). Therefore, it is likely that families that demonstrate higher levels of family competence will have lower levels of intragroup conflict and higher levels of communication and group potency.

The output or outcome variables for this study include team productivity, customer satisfaction, and the quality of work life of team members. These outcome variables were chosen because they have been recommended to use when assessing team effectiveness (Hackman, 1990), and because they have been used in other team effectiveness studies (Cohen & Ledford, 1994; Shea & Guzzo, 1987b; Campion et al., 1996; Jong et al., 2001; Kirkman & Rosen, 1999). In particular, customer satisfaction was chosen because the self-managed family work teams in this study work in a service organization and they are responsible for interacting directly with their external customers. This study's research design is illustrated in the following diagram:

Figure 2:

*Research Design*



*Hypotheses*

*Hypothesis # 1:* Family competence will be positively related to intragroup conflict and negatively related to communication, and group potency. Lower scores on family competence are indicative of better functioning.

*Hypothesis # 2:* Communication and group potency will be negatively related to the production quintile and intragroup conflict will be positively related to the production quintile. Lower scores on the production quintile indicate a favorable outcome.

*Hypothesis # 3:* Communication and group potency will be negatively related to the customer satisfaction quintile (lower scores indicate higher satisfaction) and intragroup conflict and will be positively related to the customer satisfaction quintile.

*Hypothesis # 4:* Communication and group potency will have a positive relationship with quality of work life and intragroup conflict will have a negative relationship with quality of work life.

*Hypothesis # 5:* Family competence (a lower score indicates better functioning) will have a positive relationship with production and customer satisfaction quintiles (a lower score is better) and a negative relationship with quality of work life.

*Hypothesis # 6:* The relationship between family competence and the production quintile will be mediated by each of the process variables (communication, group potency, and intragroup conflict).

*Hypothesis # 7:* The relationship between family competence and the customer satisfaction quintile will be mediated by each of the process variables (communication, group potency, and intragroup conflict).

*Hypothesis # 8:* The relationship between family competence and quality of work life will be mediated by each of the process variables (communication, group potency, and intragroup conflict).

#### *Statement of the Problem and Need for this Study*

Clearly, there is a growing trend in the number of self-managed work teams in service organizations (Jong et al., 2001; Spreitzer et al., 1999) and in the number of family teams managing family businesses (Fischetti, 1999; Aronoff, 1998). There is also evidence to support the effectiveness of self-managed work teams (Macy & Izumi, 1993;

Campion et al., 1996; Cohen & Ledford, 1994; Gladstein, 1984; Hackman, 1987; Pearce & Ravlin, 1987; Shea & Guzzo, 1987a; Kirkman & Rosen, 1999; Cohen & Ledford, 1994), and family dynamics play an important role in the health of the family business (Swogger, 1991; Friedman, 1991; Lansberg & Astrachan, 1994; Lee-Chua, 1997; Dunn, 1999). However, there is still much to be learned about self-managed work teams in service organizations and family work teams that manage family businesses.

First, although the literature that developed, which attempted to apply family systems theory to organizations in general and family businesses specifically, there is little empirical research evidence to support this endeavor. Walsh (1994) stated:

Although concepts from family systems theory and family therapy have improved our understanding of family businesses, a literature has not developed on either the theoretical extension of core concepts to families with businesses, or the testing of these concepts with original research on this subset of families. (p. 175)

Neck et al. (1997) said "the application of family therapy knowledge to work groups...has been sparse" (p. 246).

Second, although there is evidence to suggest that family dynamics play an important role in the health of the family business, there is no empirical research that has been conducted regarding family work teams. Since there is a growing trend of family businesses being managed by family teams, and family businesses play a crucial role in our nation's economy (Shanker & Astrachan, 1996; Survey of Small and Mid-Size Business, 1996), it is essential that empirical research be conducted to identify the factors that contribute to the effectiveness of family-management teams.

Lastly, a scant amount of empirical research existed involving self-managed work teams in service organizations in general (Spreitzer et al., 1999; Cohen et al., 1996; Griffin et al., 1994; Batt, 1999), and financial services organizations specifically (Manz & Sims, 1987; Campion et al., 1993; 1996). With few exceptions (Jong et al., 2001; Cohen & Ledford, 1994; Kirkman & Rosen, 1999) much of the self-managed work team research has not included a customer satisfaction or service outcome measure. Those studies that have used a customer satisfaction or service outcome measure typically had a manager, employee (internal customer), or team member, complete the measure. Few studies (Jong et al., 2001; Cohen & Ledford, 1994; Shea & Guzzo, 1987b) included an objective measure based on the external customer's comments or behavior.

Given the importance of customer satisfaction and loyalty (Goodstein & Butz, 1998; Heskett et al., 1994) to the self-managed work team and ultimately the service organization, it is imperative that self-managed work teams in service organizations can effectively provide high levels of customer service and quality. In order to help ensure that the teams meet this objective, more empirical research is needed to identify the characteristics that contribute to team effectiveness in service organizations.

This study is significant for the following reasons: 1) The findings of this study provide empirical support for the application of a family systems model to family work teams, 2) given the similarities between the self-managed family work teams in this study and family teams that manage family businesses, the findings provided further insight into what factors contribute to the success of family work teams in general, and family teams that manage family businesses specifically, and 3) by studying self-managed family work teams in a financial services organization, the findings provided further

understanding regarding what factors contribute to team effectiveness in service organizations in general and financial service organizations specifically. In addition, this study is one of the few self-managed work team studies that uses an objective customer service measure determined by the external customer's feedback and behavior.

### *Definition of Terms*

#### Self-managed family work team

Self-managed family work teams consist of employees who perform interdependent jobs, share common goals, are identified and identifiable as a social unit in an organization, and are given significant authority to carry out their work (Cohen & Bailey, 1997; Guzzo & Dickson, 1996; Alderfer, 1977). In addition, there exists a family subsystem on the team where at least one of the family members is a financial advisor. In other words, every team consists of at least two family members and the balance is comprised of non-family members.

#### Family competence

Family competence describes the family's ability to perform "the necessary tasks of organizing and managing itself" (Hampson & Beavers, 1993, p. 74). Family competence measures the family's ability, or lack of ability, to communicate, coordinate, negotiate, establish clear roles and goals, problem solve, adapt to new situations, manage conflict, accept responsibility, be autonomous, and believe in itself (Beavers & Hampson, 1990; 2000; Hampson & Beavers, 1993; 1996). This is assessed using the SFI Health/Competence Scale (Beavers & Hampson, 1990).

#### Group potency



Group potency refers to the team's collective belief that it can be effective across multiple tasks encountered in complex environments (Guzzo, Yost, Campbell, & Shea 1993). This is assessed using the Group Potency Scale (Guzzo et al., 1993).

#### Communication

The communication variable in this study refers to how well the team shares information with one another to get their work done (Campion et al., 1996). This is assessed using the Communication Scale (Campion et al., 1993).

#### Intragroup conflict

The intragroup conflict variable is a compilation of the following three types of conflict:

- Relationship conflict: involves interpersonal incompatibilities among team members, which are not related to work (Jehn, 1995). Relationship conflicts can be about social events, gossip, clothing preference, hobbies, and political views, or personality differences and annoyance between team members (Jehn, 2000). This was assessed using the Intragroup Conflict Scale (Jehn, 1995; Shah & Jehn, 1993).
- Task conflict: involves disagreements about the work that is being performed, including viewpoints, ideas, and opinions (Jehn, 1995). This is assessed using the Intragroup Conflict Scale (Jehn, 1995; Shah & Jehn, 1993).
- Process conflict: involves how a given task should be accomplished, who is responsible for performing the various tasks, and how they should be delegated (Shah & Jehn, 1993). For instance, team members in conflict about who is responsible for writing a report, and who will make a presentation, are examples of process conflict.

This is assessed using the Intragroup Conflict Scale (Jehn, 1995; Shah & Jehn, 1993).

#### Productivity

All of the financial advisors in this financial service organization are ranked by quintiles based on the amount of commissions/fees they generate and their length of service. This information is generated by the financial service organization.

#### Customer satisfaction

All of the financial advisors in this financial services organization are ranked by quintiles based on customer satisfaction surveys completed by their respective customers, their customer's behavior (increasing or reducing assets managed by their financial advisor), and length of service of the financial advisor. This information is generated by the financial service organization.

#### Quality of work life

Quality of work life is comprised of the following three constructs:

- Team commitment: the team members' level of commitment to the team. This is assessed using the Team Commitment Scale (Kirkman & Rosen, 1999).
- Job satisfaction: the level of satisfaction each team member has in his/her job. This is assessed using the Job Satisfaction Scale (Cammann, Fichman, Jenkins, & Klesh 1983).
- Group satisfaction: the level of satisfaction each team member has with the team. . This is assessed using the Group Satisfaction Scale (Hackman, 1986).

#### *Delimitations*

This study has a number of limitations that may affect the ability to generalize the results to other teams or organizations. First, this study only involves self-managed family work teams. It does not include any other type of team (project teams, management teams, sports teams), nor does it include self-managed work teams that do

not have a family subsystem within the team. Second, these self-managed work teams exist within one financial service organization. The results might have been different if it involved other financial service organizations or other types of organizational settings. Third, although the sample has representation from various states across the United States, the selection of these teams was not a result of random sampling. Instead, existing self-managed family work teams are targeted for the study. Fourth, since the self-managed family work teams in this study reside only in the United States, one cannot assume that teams that reside in other countries or across countries would reflect the same results. Fifth, the independent variable, process variables, and one of three dependent variables (quality of work life) are based on self-report measures. Self-report measures are not always the most reliable way to measure because of the possibility of individuals interpreting questions differently or trying to give a more socially desirable response. Sixth, this research study provides a snapshot of the family and team at one moment in time. As the Beavers systems model, work team research, and the family life cycle literature suggest, the family and team can progress or regress over time, therefore the results could in fact change depending on the time of the snapshot taken. Seventh, this study assesses the relationship between the family and the entire team system. However, it does not assess the relationship between the different types of family systems represented on the teams (e.g., father-son vs. husband-wife) and the entire team system. Eighth, due to the correlation design of this study, casual conclusions are not be able to be drawn. Ninth, this study does not control for other variables that have been found relevant in prior team effectiveness research, for example, task-interdependence (Shea & Guzzo, 1987b) or commitment to service quality (Jong et al., 2001). Last, this study uses

the Beavers systems model of family functioning to understand the effects of the family subsystem on the self-managed work team as a whole. Although the Beavers system model incorporates aspects of Bowen (differentiation of self) and Minuchin (structural concepts) it does not represent all family systems models. Different findings might result if other family systems models are used.

The results of this study would most naturally be applicable to self-managed family work teams that reside in a financial service organization. Caution should be used when trying to generalize these results to other types of teams or organizations.

## CHAPTER II

### Review of Related Literature

#### *Introduction*

The purpose of this study was to assess the interrelationship of family systems and business systems when family members work together in business. To help accomplish this, the Beavers systems model was used to evaluate the relationship between family competence and team effectiveness in self-managed *family* work teams in a service organization. Team effectiveness was defined as productivity, customer satisfaction, and the quality of work life of team members. These teams were comprised of family member's ("insiders") and non-family members ("outsiders") who were responsible for providing service and quality to their existing external customers, selling financial products and services, and attaining new customers.

Although there have been attempts to apply family systems theory to non-clinical settings, presently there exists little empirical support for this endeavor. In addition, there was no empirical research that had studied family work teams specifically and there was a scant amount of empirical research that had assessed the effectiveness of self-managed work teams in service organizations whose responsibility was to provide products and services directly to internal or external customers. What researchers had found was that self-managed work teams had a positive impact on an organization's overall financial performance, employee satisfaction, productivity, and customer satisfaction (Macy & Izumi, 1993; Campion et al., 1996; Cohen & Ledford, 1994; Gladstein, 1984; Hackman, 1987; Pearce & Ravlin, 1987; Shea & Guzzo, 1987a; Kirkman & Rosen, 1999).

Concomitantly, researchers, family therapists, and family business consultants had

provided evidence to suggest that family dynamics play an important role in the health of a family business (Gilding, 2000; Swogger, 1991; Friedman, 1991; Lansberg & Astrachan, 1994; Lee-Chua, 1997; Dunn, 1999). This study attempted to fill a gap in the literature by answering the following questions: 1) Is there a relationship between how well the family members function together and the effectiveness of the self-managed family work team in a service organization, and, 2) If there is a relationship, what family and team factors are related to self-managed work team effectiveness in a service organization? The purpose of this chapter is to provide a review of the literature that is relevant to the hypotheses proposed in this study. Since no empirical research had existed regarding *family* work team effectiveness in service organizations, the researcher provided the relevant empirical and theoretical knowledge from three fields of study: family systems, family businesses, and self-managed work teams.

This chapter is divided into several parts and a brief overview follows. The first section provides a theoretical overview of the Beavers systems model (Beavers & Hampson, 1990). In addition, there is a review of the literature that used the Beavers system construct of family competence in its research. The second section reviews the literature that addressed the relationship between family dynamics and the health of family businesses. More specifically, there was a review of the family dynamics variables found related to the success or failure of families that work together in business. The third section focuses on the findings of self-managed work team effectiveness research in service organizations, with an emphasis on the studies that involved self-managed work teams that interacted directly with internal or external customers. Studies that include general work teams are also addressed in this section if they reside in a

service organization that is responsible for interacting directly with internal or external customers. General work team studies are included in this section only if the teams studied resembled self-managed work teams, namely that they were intact teams and had some level of autonomy or discretion to carry out their work. Finally, this chapter concludes with a summary of the literature review and an explanation on how the findings from these three separate literatures were integrated to provide the foundation for this study.

#### *Beavers Systems Model of Family Competence*

The Beavers systems model is based on 30 years of research and clinical work, across a wide range of individual and family functioning and in a variety of settings (Beavers & Hampson, 1990). The Beavers system model was used as the theoretical framework in the seminal work of Lewis, Beavers, Gossett, and Philips (1976). The Lewis et al. (1976) Timberlawn study focused on healthy families (families without an "identified psychiatric patient") so that they could identify the family characteristics associated with successful family functioning (e.g., raising competent children). The "healthy" or "competent" families in this study were given a series of tasks to complete together. Based on how the families interacted to complete the tasks the researchers identified a continuum of family functioning. This seminal research was the first published study using the Beavers interactional, systems perspective. The research suggested that family competence demonstrated in small tasks (e.g., negotiation or conflict resolution) is indicative of family competence in larger tasks (e.g., managing a family) (Beavers, 1977; Lewis et al., 1976).

The philosophical underpinnings of the Beavers systems model is based on general systems theory that suggests that structure and flexibility are important characteristics of family systems. This is based on the concept of entropy, which refers to the organization and available energy in the system. Closed systems lack structure and have no energy coming from the outside world. Negentropy refers to an open system that receives energy from the outside world, which it uses to maintain its structure and flexibility. The concept of negentropy can be understood along a continuum ranging from chaos (one end of the continuum), through rigidity, to flexibility (the other end of the continuum). This is the principle on which the major levels of family functioning are based in the Beavers systems model:

In systems terms, this may be called a negentropic continuum, since the more negentropic (flexible and adaptive) a family, the more the family can negotiate, function and deal effectively with stressful situations. High competence requires both structure and the ability to change structures. (Beavers & Hampson, 2000, p. 128)

The Beavers systems model describes family competence along a five level progressive competence continuum that ranges from severely dysfunctional, to borderline, to midrange, to adequate, to optimal (see Table 1).



Table 1

*The Beavers Systems Model describing Family Competence Along a Five Level Progressive Continuum*

<i>Level 1: Optimal</i>
<ul style="list-style-type: none"> <li>▪ Highly flexible and adaptable rules</li> <li>▪ Decision-making authority between parents [adults] is equal</li> <li>▪ Members are extremely comfortable airing positive and negative views/feelings</li> <li>▪ Excellent conflict resolution abilities among members – a “we can work it out” attitude pervades</li> <li>▪ Members can be autonomous yet still part of the group</li> </ul>
<i>Level 2: Adequate</i>
<ul style="list-style-type: none"> <li>▪ Rules still govern family, but they are adaptable (flexible)</li> <li>▪ Both parents [adults] have at least partial decision-making authority</li> <li>▪ Members are comfortable sharing both positive and negative feelings</li> <li>▪ Members are able to resolve most conflicts</li> </ul>
<i>Level 3: Midrange</i>
<ul style="list-style-type: none"> <li>▪ Control is no longer external – comes from each member of the group</li> <li>▪ Each member has internalized specific rules for what it means to be “good”</li> <li>▪ Rules govern the family; they are more important than anyone in it</li> <li>▪ Rules “rule” because system is operating on assumption that guidelines to behavior must be in place or no one would do the right thing of their own accord</li> </ul>
<i>Level 4: Borderline</i>
<ul style="list-style-type: none"> <li>▪ Anarchy replaced by dictatorship</li> <li>▪ Polarized system of either/or – you are good or all bad</li> <li>▪ Inflexible rules designed to control actions, thoughts, feelings of group members</li> <li>▪ Members constrain their thought, feelings – do not challenge the rules</li> <li>▪ Members live under mutual surveillance, struggling to think and feel what is permissible</li> <li>▪ Tyrant runs the system by means of intimidation and control</li> </ul>

<i>Level 5: Severely Dysfunctional</i>
▪ Emotional System is confusion and turmoil
▪ Nobody has authority; real leadership is lacking
▪ Mission/purpose is unclear
▪ Conflicts are unresolvable
▪ Members repeat dysfunctional patterns of behavior
▪ No norms/rules

(Source: Adapted from Neck, Connerley, and Manz, 1997)

According to the Beavers systems model, the family does not have to first go through one stage to get to another. Nor does every family follow the same path - some progress, others can regress.

This Beavers systems model is based less on family homeostasis (the attempt to maintain the status quo is seen as a characteristic of less healthy families) and more on the concept of morphogenesis (spontaneous, flexible structure, open to grow and change, and responsive to new stimulation). For example, healthy or optimal functioning is defined as "...not just a passive adaptability to circumstances, but rather a set that reaches toward change, intrasystem determinism and innovation" (Lewis, et al., 1976, pp. 13-14).

The core construct of the Beavers systems model is family competence. Family competence refers to the family's ability to successfully organize and manage itself so that it can ultimately develop and maintain the health of all of its members. Family competence measures the family's ability, or lack of ability, to communicate, coordinate, negotiate, establish clear roles and goals, problem solve, adapt to new situations, manage conflict, accept responsibility, be autonomous, and believe in itself (Beavers & Hampson,

1990; 2000; Hampson & Beavers, 1993; 1996). Hampson and Beavers (1993) state that "...it is highly unlikely that one family will show extremely competent interaction in one domain and dysfunctional levels in others" (p.75).

Families that function at an optimal level "...excel in their capacity to accept directions, organize themselves, develop input from each other, negotiate differences, and reach closure coherently and effectively" (Hampson & Beavers, 1993, p. 83). In addition, "...competent families are more readily able to resolve conflict and communicate openly and directly" (Hampson & Beavers, 1993, p. 74). On the other hand, families that rate as severely dysfunctional:

... are the most limited in negotiating conflicts, in adapting to developmental demands and situational crises. The family members have the most trouble in resolving ambivalence and defining goals...Such families have poorly defined power structure; unclear, ineffective, and unsatisfying communication; extreme problems in interpersonal boundaries; few negotiation skills; and a pervasively depressed or cynical tone. (Hampson & Beavers, 1993, pp. 88-89)

The value of the Beavers systems model is that it allows the therapist to assess the family's level of functioning so that the proper treatment plans and/or intervention strategies can be determined. This process of assessment and intervention is similar to the process consultant's use when entering a work system as evidenced in the following quote:

Akin to the experienced organizational consultant, who recognizes that he has to assess the structure and function of the company he is entering in order to decide

how to proceed effectively, the family therapist must make decisions regarding initial style and strategy. (Beavers & Hampson, 1990, p. 69)

Therefore, this model provides great value to the family therapist or consultant who wants to apply the Beavers systems model in non-clinical settings. This is especially true when the family therapist or consultant is working with families who work together in business. The next section of this chapter reviews the literature that used the Beavers system construct of family competence in its research.

### *Research Findings*

The majority of empirical research involving the Beavers and Hampson's (1990) construct of family competence has been conducted in clinical settings. This section will review the relevant published studies that were based in clinical *and* non-clinical settings.

The Timberlawn study (Lewis et al., 1976) was the first published study that used the Beavers systems model as its theoretical framework. The primary purpose of this research was to identify the characteristics of optimally functioning or "healthy" nuclear families so that these qualities could then be taught to parents, teachers, and mental health professionals. Healthy families were defined as families that did not have an "identified psychiatric patient" as one of its members. Two of the primary reasons noted by the researchers for this study were the vacuous amount of research available that had focused on "healthy" or "functional" families versus "dysfunctional" families (e.g., families with schizophrenic offspring), and the scant amount of research that used a systems perspective and focused on the interactions of family members, versus using a individualistic paradigm to understand psychological health. "We found that little is known systematically about the processes of healthy family systems, and that there was a

real and primary need for interactional studies that investigate the system operations of healthy families directly" (p. 11).

The genesis of this study began with the researchers, who worked at the Timberland Psychiatric Hospital, assessing via "instruments" and interviews, the success or failure of the therapeutic process on the psychiatric adolescents who were discharged from the hospital. The researchers wanted to identify the characteristics (individual and family) that may have contributed to their therapeutic success or failure. Eventually the researchers decided that they needed a research instrument that would enable them to collect data that could be quantified:

[I]ntensive interviewing of the patient and his family was adequate for clinical purposes. For research purposes, however, the transcripts of these interviews, while rich with clinical meaning, did not lend themselves to adequate comparison of families; that is, they were not quantifiable. (p. 16)

They decided to use a videotaped interview in which the family of the discharged adolescent had to complete assigned tasks. This began the pilot phase of the study. It was called the Healthy Family Project. The pilot study included 23 families; 12 of which had an adolescent in-patient child, the other 11 did not have an "identified patient." "Raters" were responsible for viewing the videotaped interviews and rating the family based on how they interacted to complete their tasks. It was at this point in the study that Dr. Robert Beavers joined the study as one of the raters and introduced his rating scale that was designed to assess family interaction patterns and structure. The scale was called the Beavers-Timberlawn Evaluation Scales. This scale was comprised of the following 13 scales: structure, coalition, closeness, mythology, negotiation, clarity,

responsibility, invasiveness, permeability, expressiveness, mood, conflict, and empathy. (This was the original version of what is now referred to as Beavers Interactional Scales that was designed to assess family competence via an "outsider" (observer). This scale was also the basis for the self-report version ("insider") of the family competence scale that was used in this researcher's study). The researchers found that there was a high degree of correlation between raters regarding the family's level of competence as well as between raters and "the individual family members' estimates of their family competence" (p. 199).

The next phase of this study was to identify a larger group of families. A local church, via the pastor, which had helped them identify the families for the pilot study had now offered the research project to his entire congregation:

The criteria for participation included: 1) biological intactness of the family; 2) oldest child in mid-adolescence; 3) no family members in psychological difficulty for the past year as manifested by a self-acknowledged psychiatric syndrome, having received any psychological treatment, or being in legal difficulty. (p. 19)

Thirty-three families met these criteria. The additional 33 families in this phase of the study were presented with a series of tasks to accomplish and were videotaped (10 minutes of video taped family interaction) and then evaluated by the researchers (e.g., the "clinical eye"; rating scale) based on their process of interaction. In addition, twelve of these families went through a more intensive assessment; interviews, home observations, and psychological testing (e.g., MMPI).

Based on the results of the 44 "healthy" (non-patient) families that participated in this study, the researchers appeared to find evidence that in effect began to identify the

characteristics of healthy or optimal family functioning. It was found that no one "single thread" was identified to describe family competence. When summarizing the findings of this research project, Beavers stated:

...the data suggests that families that produce adaptive, well functioning offspring have a structure of shared power, a great appreciation and encouragement of individuation, and an ability to accept separation and loss realistically. In addition, they have a family mythology consistent with the reality as seen by outside observers, a strong sense of the passage of time and the inevitability of change, and a warm expressive feeling tone. (p. 80)

This seminal research, with its limitations (e.g., homogeneity of subjects: white, middle- or upper-middle-class, belonged to the same church, all volunteered and were "urged" by their pastor to participate), both provided evidence to suggest that family competence can be measured and used to distinguish between "healthy" and "unhealthy" families as well laid the foundation for future family competence research, which I will now review.

Hampson et al. (1999) conducted a study involving 139 married couples for the primary purpose of identifying the characteristics of couples who were successful in couple's therapy. Success was defined as the couples' ability to set and reach their goals; this was ultimately determined by the therapist's evaluation of treatment (a questionnaire completed by the therapist at the termination of a couple's treatment process). Family competence was one of the predictor variables in this study. The number of children and treatment sessions were other predictor variables used in this study. The Beavers' observational and self-report measures were used to assess family competence.

Before the start of the treatment process, the couples were asked to complete a demographic questionnaire and Beavers and Hampson's (1990) self-report family competence scale. The treatment process began with the therapist asking the couple to discuss together for ten minutes what they would like to see changed in their family. The therapist then left the room and the couple was videotaped. (This is the protocol recommended by Beavers and Hampson (1990) to assess the family's level of family competence when using their family competence observational scale.) This process was completed two more times during the treatment process. The ten-minute discussion was changed to "what would you still like to see changed in your family" (p. 416). The total number of treatment sessions varied from one to 84, with a mean of 15.3 and a median of 5.

A multiple regression analysis was used to analyze the data. The researchers found that the couples who attended three or more sessions had greater "gains" ("moderate" or "significant gains" versus "very little" or "no gain") than the couples who attended fewer sessions. In addition, the number of children was a significant predictor of success. Couples with three children or less were more "successful." The self-report competence ratings of the wives and husbands were also significant predictors of success, while the observational ratings of self-competence were not significant predictors. "Hence, it appeared that the couples' selfperceptions were more important to outcome than were the observational ratings of outside observers" (p. 417). When the researchers combined the self-report and observer's family competence ratings, the combination significantly predicted the therapist's evaluation of the couples' success ( $F = 5.05$ ;  $df = 1$ ,  $p < .05$ ). "Overall, more competent couples (as measured by self-ratings and



observational ratings) with few or no children who came to more sessions and viewed themselves as more competent fared better in couples therapy” (p. 417).

Hampson and Beavers (1996b) conducted a study with 434 families for the primary purpose of assessing the relationship between family competence and success in family therapy. Success was defined as the families’ ability to set and reach their goals; this was ultimately determined by the therapist’s evaluation of treatment (a questionnaire completed by the therapist at the termination of a family’s treatment process). The Beavers’ observational and self-report measures were used to assess family competence:

The methodological difficulties that threaten most studies of clinical outcome done in clinical settings, including lack of random assignments of patients and therapists, consistency of data collection, and a wide variety of family characteristics and presenting problems, are also found in our study. (p. 348)

Before the start of the treatment process, the families were asked to complete a demographic questionnaire and Beavers and Hampson’s (1990) self-report family competence scale. The treatment process began with the therapist asking the family to discuss together for ten minutes what they would like to see changed in their family. The therapist then left the room and the family was videotaped. This process was completed two more times during the treatment process. The ten-minute discussion was changed to “what would you still like to see changed in you family” (p. 354).

Overall, the researchers found that families who had higher levels of family competence fared better in family therapy than those who had lower ratings of family competence. There was a significant relationship found between the number of sessions and success. The families who participated in at least five treatment sessions had greater

success (n = 253, range = 6-53 sessions). Families who saw themselves highly competent at the outset of therapy required fewer sessions to benefit from therapy and had more success than less competent families, even when the number of sessions were controlled. This study found evidence to suggest that the family's self-report level of family competence is a greater predictor than the ratings of those outside the family. Hampson and Beavers (1996) state, "...there is a direct relationship between competence and a favorable outcome" (p. 359). Lastly, "there is reassurance that the structure of the family is not related to outcome. Blended, single-parent, multigenerational, and all other family types, of various ethnic groups, provide as much opportunity for good results as the traditional Anglo family" (p. 359).

Hampson and Beavers (1996a) conducted a study to assess the relationship between 175-clinic families' level of family competence, the characteristics of the therapist's relationship to the family, and family therapy success. The Beavers' observational and self-report scales were used to assess family competence. The therapist completed the Perceived Relationship Scale that measured the degree of openness (disclosing strategy), degree of partnership (joining the family), and power differential (directing vs. developing more egalitarian relationships with family members) s/he had with the family. The outcome measure ("success") was completed by the therapist and it assessed "the degree to which the family and therapist were able to set goals, meet goals, develop a working relationship, and create relatively durable changes" (p. 354).

Before the start of the treatment process, the families were asked to complete a demographic questionnaire and Beavers and Hampson's (1990) self-report family

competence scale. The treatment process began with the therapist asking the family to discuss together for ten minutes what they would like to see changed in their family. The therapist then left the room and the family was videotaped. This process was completed two more times during the treatment process. The ten-minute discussion was changed to "what would you still like to see changed in you family" (p. 355). After the initial treatment session, the therapist completed a therapist demographic sheet and an "impressions sheet" about the family. After the third treatment session, the therapist completed the Perceived Relationship Scale.

This study found no significant differences on the basis of family type (e.g., nuclear, single parents) or ethnicity. Families who had higher levels of family competence at the outset of therapy had more success (e.g. goal attainment) than those did that had lower competence ratings. Lastly, "the most competent families did better with high levels of openness and partnership, and with lower levels of power differential. The least competent families (severely dysfunctional) had better outcomes with high level of therapist power differential, less openness, and lower levels of partnership" (p. 365).

There have been a number of studies conducted by researchers other than the authors of the Beavers systems model (and associated family competence scales), that have provided further evidence to support the value and usefulness for the construct of family competence. For example, Knudson-Martin (2000) examined the relationship between the presence of individual psychological symptoms and family competence (Beavers & Hampson, 1990). More specifically, she wanted to assess how this relationship might vary according to gender. The Symptom Checklist-90-R (SCL-90)

was used to assess the following psychological symptoms: somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism. Ninety-seven families participated in this study, fifteen of which were currently in family therapy.

The first phase of the analysis was to examine the correlations between the symptoms of the SCL-90 and the five measures from the Beavers' self-report scale of family competence: Health, conflict, cohesion, leadership, and emotional expressiveness. What the researcher found was that the total score of the SCL-90 correlated .46 with the family competence scale. More specifically, the five measures on the self-report scale were significantly related at the .001 level for each of the symptoms on the SCL-90 except phobic anxiety, which was found to have no relationship. "People reporting more positive family interactions reported fewer psychological symptoms" (p. 323). The second phase of the analysis included an examination of the correlations between the symptoms of the SCL-90 and the five measures from the Beavers self-report scale of family competence separately for the adult males and females. Overall, the relationships were significant for both genders. More specifically, interpersonal sensitivity, depression, anxiety, and hostility were significantly related to the family competence scores for both genders, though the correlations were not as high for women. Paranoid ideation and psychoticism were significantly related to family competence at the .001 level for men, but not for women. Somatic and obsessive-compulsive symptoms were significantly related to family competence at the .001 level for women, but not for men. "These genders differences in magnitude of correlations were significant (.05 level) for somatization, paranoid ideation, and psychoticism" (p. 323).

The researcher reminded the reader that although the two gender samples were analyzed separately in the second phase of the analysis, the men and women were still describing the same relationships. Lastly, the researcher highlighted the fact that the results of this study found that female *and* male psychological symptoms were related to their perceptions of family competence. "In fact, the magnitude of the correlation was higher for men on seven of the 10 subscales. This suggests that men are probably as dependent on relationships for their psychological well being as women, probably more so" (p. 326).

Johnson (2001) used the self-report family competence scale to assess the various dimensions of family functioning in alcoholic and nonalcoholic families. Eight hundred and thirteen college students participated in this study. The students completed the self-report family inventory, which is comprised of the following five dimensions: health competence, conflict, cohesion, leadership, and expressiveness. In addition, they were asked to complete a demographic questionnaire and a questionnaire that assessed their experiences in their families of origin related to child abuse, spousal violence, parental marital status, parental alcoholism status, and grandparent alcoholism status.

A MANOVA analysis found significant relationships at the .001 level between alcoholic and nonalcoholic families across the health/competence, cohesion, conflict and emotional expressiveness family competence dimensions:

More specifically, alcoholic families seem to have higher levels of overt unresolved conflict, fighting, blaming, and arguing; lower levels of togetherness and family closeness; and lower levels of physical and verbal expressions of

positive feelings, warmth, and caring between family members than nonalcoholic families. (p. 131)

Lastly, the researcher found evidence to suggest that there were higher levels of divorce, alcoholic grandparents, and verbal, physical, and sexual abuse in alcoholic families than in nonalcoholic families.

Shek (1999) conducted a study that included 378 Chinese parents and their adolescent children (mean age = 13); these families lived in Hong Kong. The purpose of the study was to assess the relationship between individual well-being, dyadic functioning, and family functioning. Individual well-being was measured via the Satisfaction Life Scale, Midlife Crisis Scale, Purpose of Life Questionnaire, Self-Esteem Scale, Hopelessness Scale, and General Health Questionnaire. Dyadic functioning was measured via the Dyadic Adjustment Scale, Kansas Marital Satisfaction Scale, Parent-Child Relational Quality Scale, Demands from Children Scale, Father-Adolescent Conflict Scale, Mother-Adolescent Conflict Scale, and Conflict Behavior Questionnaire. Beavers and Hampson's (1990) self-report family inventory was used to assess family functioning. The family members took the appropriate scales (time 1) given their role/position in the family (e.g., all husbands and wives completed the various dyadic scales) and then one year later they completed the scales for a second time (time 2). A multiple regression analysis was run to assess individual and dyadic predictors of family competence over time.

The results found significant relationships between a father's reported midlife crisis ( $\beta = .11, p < .05$ ), marital adjustment ( $\beta = -.38, p < .0001$ ), and parent-adolescent conflict ( $\beta = .23, p < .0001$ ) and the father's perception of family

functioning at "time 2." Significant relationships were found between a mother's reported midlife crisis ( $\beta = .17, p < .01$ ), marital adjustment ( $\beta = -.29, p < .0001$ ), and parent-adolescent conflict ( $\beta = .20, p < .0001$ ) and the mother's perception of family functioning at "time 2." Lastly, the children's report of life satisfaction ( $\beta = -.13, p < .05$ ), life purpose ( $\beta = -.13, p < .05$ ), hopelessness ( $\beta = .17, p < .01$ ), and father-adolescent ( $\beta = .33, p < .0001$ ) were significantly related to the children's perception of family functioning.

Overall, there was evidence to suggest that both individual well being and dyadic functioning were significant predictors of family functions (family competence) over time. More specifically, "...although both individual and dyadic functioning were found to be significant predictors of family functioning in all samples, measures of dyadic functioning were found to be stronger predictors" (p. 56). The researcher suggested that this evidence supported the notion that family therapy was essentially "dyadic relationship therapy." Finally, the father's *and* mother's perception of family functioning at "time 2" were significantly related to the same predictors. "In particular, the present findings show that marital quality is of paramount importance to fathers and mothers" (p. 56).

One of the few empirical studies using the Beavers systems model that was not conducted in a clinical setting was the study by Goldwater and Nutt (1999). Goldwater and Nutt (1999) found that there was a relationship between a teacher and student's level of family competence and the student's academic performance. To assess this relationship, teachers and their respective seventh-grade students were asked to complete only the expressiveness, conflict and cohesion dimensions of the self-report family

inventory. The rationale for this was the researchers postulation that one's ability to express feelings, resolve conflicts, and develop some degree of intimacy with others was a good measure of the skills needed in the teacher-student relationship. Academic performance was defined in part by "receive better grades" on the final exam; they were compared to grades from the six-week report cards. The teachers were asked to respond to the self-report inventory while thinking about their family functioning when they were eleven to thirteen years old; the students were asked to think about their family's current functioning.

The researchers found evidence to suggest that there was a relationship between the students and teachers level of cohesion, (when teachers and students had higher levels of cohesion, the student had higher grades on the final exam) conflict, (high-conflict teachers assigned higher grades to high-conflict students, and students from low-conflict homes did significantly better on the final exam irrespective of the teacher's conflict scores) and expressiveness scores (low scores for teachers and students was not related to grades, but high scores yielded slightly higher grades). They conclude that the findings of this study may provide further insight into the literature on self-fulfilling prophecies and teacher expectancy research. "According to the results, the family background of teachers and compatibility with the family backgrounds of students could be the missing link" (p. 659).

Another study that was not conducted in a clinical setting was Lee-Chua's (1997) pioneering work in the field of Filipino family businesses. The researcher used the Beavers systems model to help assess whether a relationship existed between the health of the family members who worked in the family business and the health of the business



itself. "[M]y study is hinged on the premise that family and business relationships are intertwined...Furthermore, it proposes that therapy on the family as a system may benefit the business as well" (p. 4). Beavers and Hampson's (1990) interaction scales and self-report family inventory were used to measure the health of the family members who worked together in business, and Dyer's (1986) 12-point checklist (awareness of problems, planning for future needs, succession plan, trust, managing conflict, leadership development) was used to measure the health of the business. Extended family members (e.g., nephews) did not complete the self-report family competence scale because it was designed to measure only "nuclear" family relationships. In addition, the researcher included in-depth, semi-structured interviews with the family members who worked in the family businesses, genograms, and questionnaires as part of the assessment. There were only five family businesses included in this study and they were all considered "successful" (has existed for at least 10 years and still exists, has attained a certain growth, and has been recognized as one of the top in its field). The family businesses consisted of printer, shoe, food, and clothing companies. They were chosen because the researcher was a friend with the family or she was a friend with someone who was friends with the family. The following definition was used to determine a family business: at least 50 percent of the ownership and management fell within one family (whether by blood or marriage).

Lee-Chua (1997) attempted to answer the following two questions: 1) What is the level of each family's health and competence, and, 2) what relation, if any, does this have in business functioning? (p. 5). The researcher did not provide the statistics or the particulars of her research design. She merely provided the findings along with her

explanations. She found that "if family health is optimal, so is business health" (p. 234). There was one case in which the family was found to have a low level of family competence and yet still had a successful family business. She concluded "successful families lead to successful businesses, but not necessarily the other way around" (p. 235). The researcher also found that the Beavers interactional scales correlated with the self-report family inventory ratings. "This implies that even the most dysfunctional families are still realistic about their situation" (p. 235). Lastly, she concluded that "the families studied show that patterns formed in the family environment while the children are growing up (however unconscious) usually have parallels in the business" (p. 236).

Lastly, Neck et al. (1997) was another study that used the Beavers systems model in a non-clinical setting. The researchers suggested that although families and work teams are different, (e.g., membership into a family is not voluntary and is for life) they were similar in many ways (e.g., members perform multiple roles, are comprised of two or more individuals that are interdependent of each other, and they are capable of affecting the others in their system). Therefore, the researchers conducted an exploratory study in which they borrowed from the family therapy (Beavers & Hampson, 1990) and work team literature (Tuckman, 1965). They hypothesized that the Beavers and Hampson (1990) self-report family inventory could be used to assess various aspects of team development. The rationale for this was that the Beavers systems model assessed variables (e.g., general functionality, conflict, cohesion, leadership, and emotional expressiveness ) that were similar to characteristics found in the group development stages. For example, work teams "...evolve from an initial start-up phase to a mature, highly effective phase...in the group process literature, research suggests that the

following stages typify the developmental progression of groups: forming (orientation), storming (conflict), norming (cohesion), performing (performance), and adjourning (dissolution)" (p. 249). "We feel that these similarities indeed serve to support our contention that using the family therapy discipline to study group development can further enhance our understanding of SMT [self managed team] developmental processes" (p. 249).

Neck et al. (1997) used the self-report family inventory to assess the various aspects of the teams' development and the relationship to team performance. They changed the self-report family inventory by replacing the word "family" or "family members" with "team" or "team members." This study included 29 self-managed work teams from the accounting department of a large insurance company. The average size of each team was six members. Objective (task accomplishment) and subjective (5-point Likert scale complete by a coach assigned to each team) measures were used to assess team performance.

Neck et al. (1997) used a hierarchical regression analysis and found a significant relationship between cohesion ( $p < .001$ ), absence of conflict ( $p < .01$ ) and task accomplishment (objective measure). Based on the results of the regression analysis, cohesion and absence of conflict accounted for 30% of the variance in the DV (task accomplishment). In addition, cohesion ( $p < .001$ ) was found to be significantly related to the subjective measure (coaches rating of performance).

Overall, Neck et al. (1997) found that team member's perceptions of team development were a good predictor of subjective measures of performance (coach's

ratings). They suggested that their findings parallel the findings of family therapy research as illustrated by the following quote:

To some degree, the team development/task accomplishment finding parallels family therapy research that indicated a significant correlation between a family's problem-solving skills and its corresponding development-that is, the better the family is able to solve problems, the more developed the family is along the BSM [Beavers systems model] continuum. (p. 254)

In summary, the Beavers systems model, and more specifically the construct of family competence, has been used in various settings (e.g., therapy, school, and business) for different purposes. For example, to identify "healthy" family characteristics, researchers assess the teacher-student relationship as it pertains to the student's learning to evaluate the relationship between family competence and the health of the family business. The next section in this chapter will review the research that has found evidence to suggest a relationship between family functioning and the health of a family business. (Note: The next section will not reiterate the Lee-Chua (1997) study, although it is directly relevant, because it was already addressed in this section.)

### *Family Businesses*

It is very common to come across the following expression when reading the family business literature: "*Shirt-sleeves to shirt-sleeves in three generations.*" It refers to the idea that the first generation builds the business, the second generation maintains or "milks" it, and the business dissolves or is sold off by the third generation. Most of the research involving family businesses has to do with business succession (Handler, 1994). This is probably because approximately 70 - 80% of companies are not able to survive

the transition from the first generation to the next, and for those that do, only about 10 - 15% successfully transfer the business to the next generation (Ward, 1987; Beckhard & Dyer, 1983a; 1983b). Another relevant statistic is that the average lifespan of an entrepreneurial firm is twenty-four years. This is the average length of time the founder is associated with his/her firm (Kets de Vries, 1993).

The lack of succession planning is the reason most often given to explain the lack of success when the family attempts to transfer the business from one generation to the next (Dyer, 1986; Handler, 1994; Ward, 1987). This section will address the "family dynamic" factors that appear to contribute directly or indirectly to the success or failure of families that work together in business. These factors have ranged from the family members' levels of differentiation of self, to sibling rivalries, to conflict management styles and to leadership styles. Compared to the amount of empirical research available, most of the literature is anecdotal in nature or is based on survey data.

### *Research Findings*

"Does your family come first or does your business come first?", is typically asked to business-owning families. Hoover and Hoover (1999) argue that this type of question sets up an unnecessary dichotomy. They say that trying to separate family matters from business issues is like "unscrambling eggs." Instead they suggest that family businesses should be a "relationship-first" family business. They believe a new creation is formed when a family and business are in an interdependent long-term relationship. In order to succeed, a new paradigm for the family business must be formed. One that understands that the family and business are more than either would be

by itself, understands that decisions are often a compromise between family and business (Hoover & Hoover, 1999).

Hoover and Hoover (1999) postulate that family businesses will succeed or fail depending on the health of the family relationships. The following quote illustrates this point:

The greatest threat to the long-term survival and success of any family business has less to do with what's going on outside with customers, competitors, and technology, than it does with what's going on inside with relationships among key players, especially among family members. (p.2)

In order for a family business to succeed they believe it is crucial that family members demonstrate high levels of "relationship intelligence." "Relationship intelligence is the capacity of a particular group of people to successfully reach the goals of their group in a harmonious and productive manner" (p. 33). Relationship intelligence is comprised of two dimensions: relationship skill and relationship paradigm. Relationship skill refers to how well a particular group can negotiate, communicate, problem-solve, manage conflict, plan, accept responsibility and have confidence in oneself while fully participating in other relationships (autonomy/intimacy). Relationship paradigm consists of the expectations, attitudes, and prejudices that are used to guide a particular group's relationships and they are based on trust or mistrust, optimism or pessimism, respect or disrespect, openness or secrecy, and inclusion or rejection. The relationship paradigm, whether positive or negative, will ultimately determine what can or cannot happen in a particular group's interaction (Hoover & Hoover, 1999). For example, if a group's relationship paradigm demonstrated high levels of mistrust, secrecy,

and pessimism, it is likely that they would not collaborate nor have a spirit of "teamwork" among them. This in turn can negatively effect the performance of the group. Since relationship intelligence is learned from on prior life experiences, a skill can be taught or an unproductive mental model about relationships can be re-learned if a family commits themselves to the process (Hoover & Hoover, 1999).

Another concept that has been used to address an individual's ability to be effective with other people is "emotional intelligence." Derman (1999) performed a correlational study between the mean emotional intelligence levels of family members who manage a family business and the success or failure of the family business. The family business profits and returns on investment determined whether the business was a success. Emotional intelligence was defined as an individual's ability to be emotionally aware, have self-confidence and self control, be able to handle relationships successfully, be empathic, and persuasive. Derman found that there was a strong relationship between emotional intelligence and business success. The study did not find a significant relationship between low emotional intelligence levels of an individual and business success. "In other words, it is the mean emotional intelligence of the entire management team that influences the success or failure of a business" (p. 2). This finding suggests that the ability of the entire family to function well together has the potential to positively or negatively affect the business system.

Kets de Vries (1993), who is a trained psychoanalyst, attempted to identify the reasons for the problems experienced in family firms, especially as they relate to business succession. He did this by interviewing 300 executives from family firms and found that there is "good news" and "bad news" when family members work together in business.

He suggests the reason for the "good news" and "bad news" is "...that family businesses have a built-in Achilles' heel. Two systems interact - the family and the business - and these two systems are not necessarily compatible" (p. 312).

Some of the advantages or "good news" he identified were having a sense of control over one's destiny, a greater feeling of independence, the potential financial benefits, early training of family members, family pride, and the fulfilling of narcissistic pleasures (e.g., seeing the family name on a building). He found that many of the problems or "bad news" faced by families who work together in business is of a "psychological nature." He suggests that family members sometimes make decisions solely based on emotional issues (e.g., unresolved family and individual issues) and not based on sound business judgement. The author provided the following examples of the challenges the family system has to confront: 1) nepotism, 2) the "spoiled kid" syndrome, (which is a result of the parent feeling guilty for not being available to the children because of his/her devotion to the business), 3) sibling rivalry which may result because of the little available love and attention offered by the parent to the children, and 4) the dominant, "bigger than life" father, which may trigger the Oedipus complex.

One of the solutions he offers to families to help successfully manage business succession is to have the family members share management and/or rotate management responsibilities. He suggests that if the family can work collaboratively and leverage the complementary skills of family members it can yield enormous benefits.

The work of Dyer (1986) and Sorenson (2000) provide evidence to suggest that when family members work collaboratively, they can be more successful. Dyer (1986) found that there were four types of cultures found in family businesses: participative,



laissez-faire, paternalistic and professional. He found that the participative culture promoted collaboration among family members (mutually supportive and work well together), and this culture was more likely to lead to an effective transfer of the business to the next generation. Sorenson (2000) conducted a study that assessed the relationship between different leadership styles and family business success. The following leadership styles assessed in this study were based on the work of Dyer (1986):

- 1) *Participative* - this type of leadership involves employees in making decisions and guiding the organization, builds cohesion and teamwork, increases the level of trust, status and power are minimized, and the development of employees is important
- 2) *Autocratic* - this type of leadership creates a culture in which relationships are hierarchical, family leaders retain all key information and decision-making authority, managers closely supervise employees, and employees are given little discretion to carry out their work
- 3) *Laissez-faire* - this type of leadership defines the mission and goals for employees and expects the employees to be proactive in pursuing them, employees are given discretion, high levels of trust exist, and authority is delegated to lower level decision makers
- 4) *Expert* - competitive environment, individual motivation and achievement are important, the leader emerges because s/he is seen as having the most expertise, judgement, skills, wisdom and knowledge
- 5) *Referent* - competitive environment, individual motivation and achievement are important, employees have a desire to please the leader, the leader

emerges because s/he is perceived as fair, friendly, considerate, empathic, respectful and trusting.

It was found that participative, referent, and laissez-faire leadership styles had significant positive relationships with family business success as defined by financial performance and, employee satisfaction and commitment. The participative leadership style was the strongest predictor of family business success. The study also identified a common best practice conducted by the more successful leadership styles. This best practice was teamwork. Teamwork was significantly correlated with the successful leadership styles.

A book written by Aronoff, Astrachan, Mendoza, and Ward (1997) addressed the concept of family teamwork. They offered insights and best practices to help ensure that sibling teams in a family business become "an effective, cohesive, fully functioning partnership" (p. 1). In order for the sibling team to be successful they suggest that it must involve the contributions of the parents, in-laws, and the siblings. They recommend that the parents should treat the siblings as a team. In so doing, they should give the siblings tasks to work on together without interfering with the sibling team's process. The husbands and wives of the siblings should educate themselves about the business and get to know the family members directly instead of through the lens of their spouses. And the siblings should commit themselves to working as a team and learn how to effectively communicate, manage conflict, and share in decision making. In addition, the siblings should prevent their parents from being divisive to the group, make sure all spouses feel part of the sibling partnership, speak with one voice to non-family employees, nurture their personal relationships, have fun, share interests outside the business, and focus on

goals larger than themselves. Lastly, the family as a whole should be adaptable and flexible (Aronoff et al., 1997).

A number of authors have used family systems theory to explain the relationship between the family and business systems. Whiteside et al. (1993) refer to the family systems concepts of Bowen (differentiation, triangles, emotional cutoff), Minuchin (family structure), and Herz (emotional maturity) and purport that these family system characteristics do not go away when families work together in business. In fact, they suggest that families in business should make it a priority to understand their family history because of the powerful effects it has on the family's present functioning, especially if the family is experiencing difficulties:

Many of the multigenerational patterns that powerfully influence family members' behavior are largely unconscious. When such patterns are outside the realm of family members' awareness, their power is vastly increased. When people are unaware of influences of the past, they cannot recognize choices or opportunities for change. They are more likely to be trapped in old patterns. (p. 10)

They suggest that the best thing a family can do is become conscious of their family histories and thus their present family patterns. This will give them greater power over their behaviors and enable to them to correct dysfunctional family patterns. They referred to the Beavers systems model as an example of healthy family functioning characteristics. For example, they highlight that healthy families are cooperative and adaptable, effectively communicate and negotiate, are open to new ideas and are concerned with functioning well and accomplishing shared goals.

Dunn (1999) used Bowen's theory as a framework to help understand how a family system addresses and manages its anxiety when going through the process of business succession; transferring the business from one generation to the next. In order for there to be a successful transition, the researcher said the family must plan for changes in ownership, change in leadership, and the effects on the business. The ability of the family system to plan for and make these changes effectively is based on the family's ability to change and adapt. More specifically, the level of differentiation of self among family members was postulated to play a significant role in the succession of the business, because differentiated family members are better able to express their thoughts, work through challenges and crises, and manage anxiety (Dunn, 1999). She suggests that families should expect to experience anxiety during this time of transition, but what is important is how the family system manages this anxiety. The purpose of this study was "to determine what relationship factors contribute to or detract from a family business system's ability to make progress with key succession tasks" (Dunn, 1999, p .43).

This study involved three longitudinal case studies (family businesses), each of which was comprised of a son succeeding the business from his father. Data was collected over a five-year period (during the succession phase) via in-depth interviews, consultant's reports, marketing materials, and company accounts. This data was analyzed "...for key themes and insights into the relationship dimension affecting progress made in required tasks" (p. 46). Based on the researchers in-depth qualitative analysis, she did find evidence to suggest that the family that was able to reduce rather than sustain their anxiety was more successful going through the succession phase of their respective businesses.

Swogger (1991) used Bowen's family systems approach, with an emphasis on his differentiation of self-construct, to assess the relationships among family members who work together in business. The author recommended that in order to help ensure the success of the succession process (transfer of wealth, control, and leadership) in family businesses it is important to assess the relationships among sons, daughters and their spouses. In particular, he suggested assessing whether there were sibling rivalries, if the siblings were overly dependent on the parents, and whether the successors showed evidence of autonomy and individuation. He recommended that a consultant working with the family should assess where the family is along the differentiation continuum and then intervene accordingly. For example:

To the extent that processes of emotional individuation and differentiation have occurred in the family - resulting in members who are clear about their personal needs and goals, less prone to enacting parental expectations or roles in family dramas, and more capable of working together realistically - work in family business consultation can focus on the successor generation. (p. 409)

Lansberg and Astrachan (1994) used the Circumplex Model of Family Relationships (Olson, Russell, & Sprenkle, 1988) to assess the effects of family adaptability and family cohesion on succession planning and successor (person designated to be the next leader of the business) training in family businesses. The researchers hypothesized that the family's commitment to the business (the degree to which the proprietary family is committed to having the next generation eventually lead the company) and the relationship between the owner-manager and the successor (trust, mutual respect and support, effective communication) would mediate the effects of the

family system (cohesion and adaptability) on the business system (succession planning and successor training).

The sample consisted of 130 participants representing 109 family businesses; in total, eighty-four successors and forty-six owner-managers participated in this study. The participants were asked to complete the 36-item FACES questionnaire developed by Olson et al. (1988) to assess the family's level of cohesion and adaptability. Another questionnaire was used to assess family business succession behaviors. A multiple regression analysis was run to analyze the data. The researchers found evidence to suggest that the family's commitment to the business and the relationship the owner-manager relationship with the successor mediated the effects family adaptability and family cohesion had on succession planning and successor training:

[T]his study underscores that family relationships do play an important role in determining the extent of succession planning and successor training in a family business. This study highlights the importance of looking at the specific and complex relations between family and business variables. (p. 56)

It is inevitable that people in relationships will experience conflict, but conflict appears to be more complex when it involves families who work together in business. Ward (1987) suggests that how well a family functions together has a direct impact on the long-term health of the family business. One of the barriers to the long-term health of the business occurs when the goals of the business and the goals of the family are different. For example, the goal of the family might be to avoid conflict in the name of familial harmony. Yet, a healthy amount of conflict among the family members is what the family business needs to grow. When conflict is avoided, Ward (1987) said:

New ideas and appropriate challenges to the status quo are repressed. Family businesses thus develop a noncompetitive spirit. They lose the healthy tension needed for innovation and change and begin to experience the unhealthy kind of tension that stems from limited individual expression. (p. 50)

The author suggests that families are sometimes not equipped to successfully transfer the business and instead make mistakes that contribute to family conflicts. "This conflict then becomes the focus of trouble within the family business that can result in the dissolution of the company" (p. xvi).

Friedman (1991) addressed the issue of sibling rivalries and its effects on the family business. He suggested that sibling rivalry "can be benign or it can be malignant, as it was for Cain and Abel, and thus destroy the integrity of a family" (p. 4), and ultimately the family business. Friedman suggested that conflict or rivalries between siblings could be a constructive force that enhanced their development. However, when it comes to choosing a successor from among the siblings, if the siblings interpret their parents as picking a "favorite child," it could trigger pernicious rivalries among siblings that could delay and complicate the succession transition.

Sorenson (1999) studied how different conflict management strategies affect family businesses. Unlike a non-family business that is concerned primarily with business outcomes, a family business is concerned about the business and the family. Because family businesses are concerned with both, this tends to add a layer of complexity to managing conflict not found in a non-family business.

If family businesses are to achieve desired outcomes for both business and family, they must learn to manage conflict in ways that will maintain family relationships,

accommodate many issues, and respond to all the interests in the business and the family. (p. 134)

This study assessed the relationship between the following conflict management strategies and business (financial performance) and family outcomes (family independence and satisfaction, rewards, quality of work life, cohesion, supportiveness, loyalty, respect in the community):

1. *Competition* - this strategy is not likely to address both the family and business issues related to the conflict; it will only focus on the concerns of the competitor; competitors typically misunderstand one another and this has negative effects
2. *Collaboration* - this strategy attempts to satisfy all employees involved in the conflict; unlike accommodation, this strategy will not resolve the conflict in an attempt to assuage others, instead it is an active attempt to find a "win-win" solution
3. *Compromise* - each employee involved in the conflict gives up something to find an acceptable solution; since employees had to give up something, no one is satisfied
4. *Accommodation* - this strategy has a high concern for others and a low concern for self; there is an attempt to resolve the conflict by accommodating to each others needs; a conciliatory tone is promoted
5. *Avoidance* - employees deny that conflicts exist or simply avoid addressing them.



The results found that collaboration, accommodation, and compromise produced better results for family and business outcomes. Competitive and avoidance strategies resulted in negative business and family outcomes. The collaboration conflict management strategy was the strongest predictor of family and business outcomes. "Collaboration is an integrative, relationship-enhancing strategy that promotes cooperation and commitment. Collaboration is also a business enhancement strategy. It gives individuals a voice, and it promotes synergy, teamwork and learning" (p. 141).

A number of studies have looked at specific types of relationships within a family business: e.g., husband-wife or parent-child. Kadis and McClendon (1991) suggest that when couples work together in business, the business is usually a result of the relationship. "In the couple-owned business, the relationship often gives birth to the business and, as such, is the creator, founder, producer, and the maintainer of the business" (p. 413). In order for the couple-owned business to be successful both the couple (family) and business system must be healthy. They recommend the following to ensure the success of the business and the couple: 1) make sure the business is not having a negative effect on the couple and visa versa, and, 2) each individual should have strong self-esteem while maintaining the marital bond.

Barnett and Barnett (1988) referred to couples who start a business together as copreneurs. They suggest that in order for copreneurs to be successful they must determine and accept each other's work styles, compete with the outside and not each other, have effective communication, share common goals, promote teamwork, and trust one another. Nelton (1986) surveyed copreneurs who had successfully managed their

business and personal relationship. They found the following characteristics contributed to their success:

- 1) "Marriage and children come first,
- 2) The spouses demonstrated an enormous respect for each other,
- 3) There is a high degree of close communication,
- 4) The partners complement each other's talents,
- 5) The partners are supportive of each other,
- 6) They have strong family ties,
- 7) Spouses compete with the outside world, not with each other,
- 8) They like to laugh, and
- 9) They put their egos in check. (pp. 25-28)

Marshack (1994) conducted an empirical study involving copreneurs. She stated that copreneurs represent the "dynamic interaction of the systems of love and work" (p. 49). To better understand the boundaries between family and work she contrasted copreneurs against dual-career couples. This study did not assess the relationship between the copreneurs and dual-career couples and their business success; nonetheless, this study provided important and needed empirical evidence regarding couples that work together in business. "Although there is a growing interest in the study of family firms, researchers have yet to take a look at the marital relationship within the family firm" (p. 53).

The researcher had the copreneurs and dual-career couples complete questionnaires that measured sex-role orientation, household responsibilities, self-concepts at home and work, marital equity, work responsibilities, and business

partnership equity. What she found was that copreneurs were much more traditional in their sex-role orientations than dual-career couples. The copreneur wives handled much more of the household responsibilities while dual-career couples shared the household tasks. Copreneur wives were more likely to handle the traditional "women's" work (secretarial and bookkeeping functions) while husbands handled the traditional "men's" work. "Regardless of the division of labor, both copreneurs and dual-career couples are in agreement that they are satisfied as marital partners, and business partners, which indicates that the distribution of work is considered equitable, if not equal" (p. 59). Lastly, the researcher found that copreneurs relied on gender differences to construct boundaries between husband and wife and dual-career couples relied upon changes in self-concept to construct boundaries between work and home.

Based on the findings of this study the researcher suggested that one of the potential reasons why most family firms are not successful transferring the business from one generation to the next is because of the stereotypical sex-role orientations of copreneurs. She offered the following explanation for this: "wives (and daughters) unprepared to take over the business because they are not trained in the areas exclusively reserved for the men" (p. 60).

Few studies have addressed the role of the CEO's spouse in a family business. Rosenblatt, de Mik, Anderson, and Johnson (1985) found in their research that although women spouses traditionally have "invisible roles" in the business they are still called upon to meet both family and business needs. Based on structured interviews with and observations of CEO spouses, Poza and Messer (2001) found that they played important roles in the family business especially during the succession stage of the business. They

identified the different type of roles the CEO spouse played (e.g., "The Chief Trust Officer" or "The Senior Advisor and Keeper of the Family Values") and found that however formal or informal the spouses role in the family business is "they often adopt a role that seeks to preserve and strengthen family unity and the feasibility of family business continuity" (p. 34).

Dumas (1996) suggests that the family-business literature has not adequately emphasized the affective, emotional realm of succession. The following quote illustrates this point:

...because of the closely interconnected nature of the family and the firm, succession is not simply a matter of utilizing the correct skills, knowledge or plan. Succession involves some very powerful emotional issues, such as loss or change of identity, feelings of jealousy and rivalry, the loss of or the struggle to find a sense of purpose in life, complex family relationships, and the search for self-respect. (p. 435)

She also points out that daughters are not usually seen as a potential successor. She argues that the nature of the father-daughter relationship necessitates the need to discuss the affective domain of their relationship. Her argument is based on the theory that a woman's sense of self is largely defined by the relationships she has with the important people in her life. Her father plays an important role (e.g., mentor) in her successor development role therefore the quality of their relationship can ultimately have a negative or positive impact on the family business. Unlike the conventional wisdom that suggests that sons need to demonstrate independence from their fathers, she suggests that interdependence would be a more appropriate way to describe the relationship between

father and daughter (she cites Bowen's work to support this). Lastly, she suggests taking the following steps to help manage the succession process between fathers and daughters:

- 1) Consider daughters as viable resources, 2) assess and discuss the daughter's potential, 3) understand female developmental issues, 4) uncover assumptions about the process, and 5) provide crucial training (pp. 439-441).

Davis and Tagiuri (1996) conducted a study to assess the quality of the relationship between fathers and sons in business. In particular, the researchers hypothesized that the quality of the father-son relationship would depend on their respective life stages. Quality referred to how well they worked together and was measured along the following dimensions: 1) the ease of their work interaction, 2) the enjoyment they derive from their work relationship, 3) how much they get done working together, and 4) how much they learn from working with each other (p. 424).

The researchers did find evidence to suggest that the father and son's respective life stages affected the quality of their relationship. Two intersecting periods of time were found to be the most problematic for the father-son relationship: 1) when the son was in his late teens/earlier twenties and the father was in his late forties, and, 2) when the son was in his late thirties and the father was in his sixties. The first period of time is seen as a time when the son is in the process of trying to separate from his family and create his own identity. This may cause conflicts with his parents. The father is experiencing a mid-life transition that may cause him to question his own identity and start thinking about his own mortality and purpose in life. The second period of time is characterized as a time when a son in his late thirties is striving to attain recognition, control, advancement, and security. He wants to be "his own man." At the same time,

his father who is in his sixties is facing the issues of loss around retirement and his struggling to let go of the business. Both of these intersecting periods are seen as unstable for the father and son and thereby negatively impact the quality of their relationship.

Based on their findings they suggest that a son should not start working with his father until he has had a few years of professional life experience, post college (mid to late twenties). This will enable the son to develop his own identity and confidence and will allow the father to address his internal conflicts without it being exacerbated by the son's presence. For the son who is in his late thirties, they recommend that the father give them control over a piece of the business so that the son's need to be "his own man" is met and the father learns to let go.

In conclusion, there have been numerous variables (e.g., leadership style, gender, dyadic relationships, conflict management, differentiation-of-self, relationship intelligence, life-cycle stages, communication, family cohesion and adaptability, and family competence) that have been addressed in the family business literature which have been postulated to have a relationship to the health or success of the family business, especially on the succession phase of the family business. Earlier in this chapter the researcher reviewed the research findings of the Beavers systems model, with a focus on family competence. There was one study that actually applied the Beavers system model to a family business (Lee-Chua, 1997). These two disciplines (family systems and family businesses) provide the framework and support for this research project. More specifically, the researcher has tried to show thus far, that there is an inextricable, interrelationship between the family and business systems, and that the Beavers concept

of family competence can be an effective measure to assess this relationship. What still remains is the application of this theoretical framework to self managed work teams in service organizations. By way of review, there exists no empirical research that has applied a family systems variable to self-managed work team effectiveness research. The next section in this chapter will review the research findings from the self-managed work team effectiveness literature.

### *Self-Managed Work Teams in Service Organizations*

This section will review the studies that included self-managed work teams, or work teams in general, that resided in a service organization and that were responsible for interacting directly with internal or external customers. General work team studies are included in this section only if the teams studied resembled self-managed work teams, namely that they were intact teams and had some level of autonomy or discretion to carry out their work. By way of review, a self-managed work teams consists of employees who perform interdependent jobs, share common goals, are identified and identifiable as a social unit in an organization, and are given significant authority to carry out their work (Cohen & Bailey, 1997; Guzzo & Dickson, 1996; Alderfer, 1977).

### *Research Findings*

Saavedra (1990) studied two beer sales and delivery teams. One team consisted of nine members and the other team of seven. These two teams were responsible for marketing and distributing beer products to their respective geographic sales regions. The customers of these teams were retail outlets, bars, and nightclubs. The individual team members' pay was based on the commissions generated by the team. Management gave the team the authority to determine how they would get their work done, but

provided the teams with their sales goals and basic performance requirements. The outcome variables used to determine the teams' effectiveness were sales, team health, and individual satisfaction.

The researcher found that it was important that the team members and the team at large had the autonomy to meet the idiosyncratic requests of their customers. The team's ability to cooperate, coordinate, be supportive of one another, negotiate, problem-solve, and the participative style of the team leader, were found to contribute to the team's effectiveness. In addition, a winning attitude was shown to be an important attribute to their effectiveness.

Both teams were shown to be equally effective even though their group dynamics, leadership styles, team strategies, and respective sales regions differed. The researcher concluded that there was no one way for a team to be effective. What was most important was the team's ability to be flexible and adaptive so that it could employ strategies to meet the requests of its customers and beat their competitors (Saavedra, 1990).

Cohen and Denison (1990) studied two flight attendant teams. Both teams consisted of three members: one team had three permanent members, the other team had two permanent members and one "rotating" member. Their customers were airline passengers. They were self-managing teams whose responsibilities were to provide cabin service, ticketing and passenger safety. In addition, they were responsible for checking bags, directing passengers to their flights, revenue accounting, and reservations. The teams were empowered to make their own decisions regarding how the work would get done within certain guidelines. Both teams socialized outside of work together. All team



members were around the same age, had similar levels of experience within the organization, and were able to select their team members.

Communication, planning, and coordination were found to be important factors that contributed to team effectiveness. The team with three permanent team members was found to be more effective, even though the two teams had many similar qualities. The researchers suggested that the more effective team was enthusiastic about their work and had a more positive attitude about their effectiveness: "Our group's performance always exceeds the expectations of our passengers..." (p. 386). Upon closer examination, the researchers found that although the work for both teams was similar, each team had a significantly different perception of the work that influenced their attitude and motivation. The researchers determined that their differences of perceptions were based on earlier work experiences from when they first started with the organization.

The more effective team's earlier work experiences fulfilled their hopes and expectations. The other team's earlier experiences did not and gave them reason to believe that good performance was not recognized nor rewarded. This contributed to a negative spiral. "A spiral in which members' perceptions reinforced the negative features of objective reality, thereby further strengthening those perceptions" (p. 392). The key event that contributed to this self-fulfilling negative spiral began when the original "permanent" third member of the team was fired. The remaining two members did not think this was fair and from this experience concluded that neither teamwork nor commitment was important to the organization. Therefore, the two remaining team members were hesitant about getting more involved with and committed to the

organization. They determined that advancement was dependent on whom one knew, instead of performance.

What the researchers concluded from this study was that the way a team perceives its ability to be effective can determine its ability to be effective as evidenced in the following quote:

The most important lesson we can learn...has to do with the way early organizational experiences can generate self-fulfilling and self-reinforcing cycles of team success and failure. A team that believes it will be successful in an organization behaves in ways that make this so. (p.396)

Gladstein's (1984) study included 100 self-managed sales teams from the telecommunications industry. This researcher was asked to perform this study for the purpose of increasing team performance and satisfaction, and to meet the increased needs of its market place. The primary task of these teams was to sell communications equipment. They would receive commissions based on the amount of revenue the group brought in. The size of the teams ranged from two to six members. A team leader was assigned in each team even though they were at the same hierarchical level as the others in the team. Data was collected using a questionnaire, actual sales revenue, naturalistic observation, workflow analyses, and interviews. This correlation study relied primarily on self-report measures. Effectiveness was defined by team performance (revenue and self-rated performance), satisfaction of group-member needs, and the ability of the group to exist over time.

There was a positive relationship found between team member self-ratings of open communication, supportiveness, rewards, training, and active leadership with self-

ratings of team performance and satisfaction. The researcher found that team members attributed sales to their own interactions and experience, when it was actually other factors that determined influenced sales revenue (e.g., market growth). The researcher explained these findings by saying that team members' implied theories of effectiveness or high-performance might in fact have directed their behaviors and caused them to self-rate their effectiveness on criteria differently than their employer's criteria of effectiveness. Therefore, it is very important that management clearly define high-performance and communicate it to employees (Gladstein, 1984). Another explanation offered by the researcher was the lag time between the group process variables (e.g., communication) and their effect on sales revenue. "That is, the positive impact of open communication, discussion of strategy, leadership, and training might not be present as early as the second quarter but show up later in the year" (p. 513). Lastly, the researcher pointed out that a team might focus too much on internal processes and not enough time on developing the strategies and skills to transfer their work to outsiders such as customers.

Jong et al. (2001) studied the relationship between self-managed work team commitment to customer service and customer service and productivity outcomes. This study consisted of 26 service teams with an average size of eight per team. These teams worked for a major manufacturer of office equipment in the Netherlands. This organization "...strive[d] to maintain long-standing relationships with its customers on the basis of service excellence."

They found that the teams that had a higher level of commitment to service quality in fact had perceived themselves as delivering higher levels of quality service and

received significantly higher scores on responsiveness and empathy than lower-level teams. But the teams that perceived themselves as delivering higher levels of quality service did not significantly deliver higher service productivity (response time and product performance) than lower-level teams. The study also found a significant positive relationship between team member empowerment, formalization, interdepartmental communication, team norms, team goal setting and role conflict, and team commitment to service quality. Role ambiguity and bureaucratic obstacles did not have a significant relationship to the team's commitment to service quality.

The researchers purported that the reason for the lack of a significant positive relationship between team commitment to service quality and productivity measures may have to do with the conflicting demands of the customers (quality) and management (productivity) as evidenced by the following quote: "Moreover, this relationship may also be mediated by the idiosyncratic product history and/or product range that each team has to service" (p. 18). Lastly, the study found evidence (team norms) to suggest that the team's ability to work together and solve problems together positively affected service excellence and enhanced performance.

Cohen and Ledford (1994) used a quasi-experimental research design to study 50 self-managed teams and 50 traditionally managed teams from a telecommunications organization. The teams performed the following functions: customer service (to small business and residential customers), technical support (to internal and external customers), administrative support (to engineers and other technical personnel), and managerial functions (to engineers and other technical personnel). The teams had a median size of ten and no team had less than three. The study predicted that self-

managed work teams would be more effective in terms of performance (productivity and quality), behavior outcomes (absenteeism), and quality of work life of team members (job and group satisfaction). The researchers did not address the characteristics that were used to predict the outcome measures. "A later paper will focus on the characteristics that predict self-managing team effectiveness, including employee involvement contextual supports, group job design features, and other characteristics" (p. 27).

Overall, the self-managed work teams were shown to be significantly more effective than traditionally managed teams that performed the same work ( $F = 5.27, p < .001$ ). But there were no significant differences regarding objective quality of service (customer complaints) and organization survey data for the customer service office subset in the study. In addition, the employee, supervisor, and manager performance ratings from these offices were not significantly different between the self-managed teams and the traditionally managed teams. Upon further investigation, the researchers suggested the reason for this was that "...the work had not been re-designed to take advantage of greater self-management [lack of interdependence between team members, low levels of autonomy, active participation by outside supervisor]" (p. 13).

Cohen et al. (1996) studied 50 self-managed work teams and 50 traditionally managed teams in a large telephone organization. The teams performed the following functions: customer service (to small business and residential customers), technical support (to internal and external customer), administrative support (to engineers and other technical personnel), and managerial functions (to engineers and other technical personnel). Most of the teams in this study were customer service teams. The teams had a median size of ten and no team had less than three. Team effectiveness was determined

by the team member's self-ratings regarding the teams' performance on quality, productivity, and costs. Also, managers rated the teams' performance. Team effectiveness was defined as well by the team members' quality of work life. Quality of work life was defined as team members' job, growth, social and group satisfaction, and organizational commitment and trust. Absenteeism was the only objective performance data used to evaluate the teams' effectiveness. Cohen et al. (1996) assessed the relationship between group task design, encouraging supervisory behaviors, and group characteristics, and employee involvement context and the team effectiveness measures. Group task design refers to the variety, interdependence, significance, and autonomous nature of the work. It also includes receiving feedback from management about their work. Encouraging supervisory behaviors are behaviors espoused by Manz and Sims (1987) for self-managing work teams. The idea is that each team member is encouraged to practice the following behaviors: self-observation, self-goal setting, self-reinforcement, self-criticism, self-expectation, and rehearsal (practice). Group characteristics consist of group composition (size, expertise, and stability), group beliefs (norms, potency), and group processes (coordination, innovation). Employee involvement has to do with the power to make decisions, having access to relevant information, reward for performance, and having access to the resources needed to complete the work.

Overall, the study found more significant relationships between group task design, group characteristics, and employee involvement and the outcome measures, for self-managed work teams than for traditionally managed teams. Encouraging supervisory behaviors had no significant relationship with any dependent variables for the traditional work teams and only one significant negative (manager performance ratings) relationship

with the self-managed work teams. Employee involvement had the strongest relationship to both quality of work life and manager ratings of performance for self-managing work teams.

Spreitzer et al. (1999) studied self-managed work teams residing in an insurance and telecommunications organization. An objective of this study was to answer the following question: 'What are the key success factors for self-managed work teams in a service context?' Similar to the study conducted by Cohen et al. (1996), group task design, encouraging supervisory behaviors, group characteristics, and an employee involvement context was expected to have a positive relationship to team effectiveness. Outcome data was based on the team's rating of themselves and objective measures of team productivity (employee hours per unit of work) and customer service (internal ratings of field agents). No measure of customer satisfaction was available for the telecommunications organization. In addition, quality of work life was used as an outcome measure. The fourteen self-managed work teams in the insurance organization were responsible for providing all services related to insurance products from individual life, disability, and long-term care, to field agents and members and the underwriting and issuing of new business and claims administration. Given the small number of teams, the analysis was limited to correlations. The 50 teams from the telecommunications organization performed the following functions: provide technical service to customers (repairing telephone services), recommend voice, data, video and wireless communication services to residential and business customers, provide clerical support to engineers and other technical personnel, and manage engineers and other technical personnel.

Overall, group task design was found to have a positive significant relationship with quality of work life. In particular, autonomy (one of the characteristics of group task design) was an important predictor of quality of work life. Group characteristics had a significant negative relationship with absenteeism and a positive relationship with the team's performance as rated by the team. "The best teams had clear norms, were able to coordinate their efforts, and developed innovative methods aimed at improving their work methods" (p. 350). Overall team leadership (Manz & Sims, 1987) was not found to be a predictor of success. The employee involvement context was found to be a very strong predictor of success. More specifically, the amount of interpersonal-skills training predicted team productivity, and technical-skills training was important for customer service and quality of work life:

Interpersonal skills training helped team members to better communicate and coordinate their activities, and thus increase their productivity... With better technical skills, team members answered field agents' questions more quickly and accurately. Having better technical skills also helped employees to feel more satisfied with their work and work relationships. (p. 351)

Spreitzer et al. (1999) summarized their findings by highlighting the consistency of findings across the two different service companies:

We found some consistent patterns of results across the two samples. For example, having an organizational context that supported employee involvement was a powerful success factor. The design of the team's work (where team members shared responsibility, had the autonomy to make decisions, and completed a whole, identifiable task) was also an important success factor... The



consistency in the findings across the two studies suggests that these findings are robust and generalizable across different service contexts. (p. 352)

Yet, for a study based in two service organizations it was limited in what it could say about customer satisfaction. Only one organization had customer service as an effectiveness measure. This organization did find that employee involvement was a strong predictor of customer satisfaction. However, the customers were employees of the organization (in-house field agents) and not the customers to whom the organization offered products and services. In addition, the study did not find a relationship between employee quality of work life and customer service. "Field agents cared about whether the team members were competent in providing correct answers quickly" (p. 353). The researchers suggest that some customers may want a close relationship with employees while others care more about the efficiency and effectiveness of the employees, while still others may want both at different points in time. "In short, a focus on the trade-offs and contingencies of self-managed work teams for effective customer service is a fertile area for future exploration" (p. 353).

Wageman (1997) studied 43 self-managed work teams in the Xerox customer service division. The responsibilities of these teams, comprised of customer service engineers (CSEs), were to fix equipment, design maintenance procedures, analyze and monitor the machine's performance, manage the costs of the work, and solve problems created by customers needs. In addition, they were empowered to select their team members, provide peer feedback, and help design support systems. These teams were the primary point of contact between the organization and the customers.

Overall, the researcher found the self-managed work teams to be effective. Effectiveness was defined by consistency in meeting the needs of their customers, continued performance improvement over time, and a membership that was engaged in and satisfied with their work. The teams that proved to be more effective demonstrated higher levels of the following self-managing characteristics: innovation, coordination, acceptance of personal responsibility for their work, management of their own performance, and effective communication and problem-solving skills. These team members were also more committed to their respective teams.

Manz et al. (1993) reported on the implementation and post-phase that launched self-managed work teams in IDS Financial Services, a subsidiary of American Express Organization. The major reason for this endeavor was their belief that teams would be the answer to the following two questions: 'How can business processing errors be prevented' and 'How can the organization be more adaptable to changing volumes, products, and the financial environment?' The transition took place in IDS's mutual fund operations division. IDS offers a wide range of financial services and products including financial planning, insurance and annuities, mutual funds, certificates, limited partnerships, consumer banking, lending, and brokerage services. IDS is comprised of 6,500 financial planners (field agents who interact directly with the customer) whose responsibilities are to work with individual customers to identify financial goals and objectives and then design for them a customized comprehensive financial plan. There are 3,500 employees in the organization's home office that provides support to the financial planners. In this study, the financial planners deal with the mutual fund operations division employees on a daily basis. Their contact is by mail and/or

telephone, and usually involves a transaction for their customers (e.g., an investment of the customer's money into an IDS mutual fund). "An important aim of the organization is to retain the planners as satisfied customers. Accuracy and absence of errors are critical for maintaining both efficiency and customer goodwill" (p. 87). The team size averaged 20 -25 members with a supervisor who played the role of facilitator (instill confidence, help set goals, help the team to manage itself) for the team.

A pilot team was implemented first. After one month of existence, preliminary results found the team had more confidence that it would be effective, felt more ownership over its work, had a greater commitment to providing excellent quality, and enjoyed the increased flexibility in their jobs. In addition, the team members began to develop more personal relationships with the financial planners in the field, their error rate began to decline, and they did a better job tracking their performance.

Approximately three years after the division completely converted to self-managed work teams the researchers found the self-managed work teams were able to service their customers with shorter cycles, higher quality, and more flexibility.

George and Bettenhausen (1990) did not study self-managed work teams specifically, but work teams in general. These work teams were based in a national retail service organization. Thirty-two of the thirty-seven retail stores from this organization participated in the study. Each retail office averaged eleven sales associates and one manager. These retail office employees were considered the work teams for this study. The purpose of this study was to assess the effects of group-level prosocial behaviors on customer service and ultimately sales. Prosocial behaviors are behaviors that are intended to benefit the person or group they are directed at. George and Bettenhausen

(1990) hypothesized that group cohesiveness, the leader's positive mood (enthusiastic, excited, positive, confident, high-energy), and the emphasis of teaching pro-social behaviors as part of the initial socialization of new workers into the group would positively affect pro-social, customer-service behavior. High levels of pro-social, customer-service behavior would provide high quality customer service that in turn would be positively related to sales performance. The rationale provided to explain the significant and positive relationship between prosocial customer-sales behavior and sales performance is evidenced in the following quotation:

At the initial point of contact, prosocial behavior may result in higher sales because sales personnel provide customers with information and knowledgeable advice and help them locate items that will suit their needs. Customers who are the recipients of prosocial behaviors are more likely to enjoy their shopping experience and to develop a positive opinion of the store...This can result in more repeat visits to the store, generating subsequent sales and good 'word-of-mouth' advertising...Eventually, the store may develop a positive image in the community as one of the better places to shop. (p. 702)

They also hypothesized that group cohesiveness and the leader's positive mood would have a negative relationship to the voluntary turnover rate of the employees. Self-report measures were used to assess group cohesiveness, the leader's mood, socialization emphasis, and prosocial behavior. Sales performance was based on the 2-month period following the receipt of the assessment measures used in this study. The total store sales were divided by the total number of sales associates working in the store and was used as an indicator of sales performance. The employee turnover rate data was gathered via a 6-

month follow up call asking the manager to report those employees who voluntary left the organization.

Group cohesiveness, prosocial socialization of new hires, and the leader's positive mood were found to have a significant and positive relationship with prosocial behavior. The leader's positive mood had a significant and negative relationship with employee turnover. Prosocial behavior had a significant and positive relationship to sales performance.

Shea and Guzzo (1987b) did not study self-managed work teams specifically, but work teams in general. These teams were based in a national retail corporation with more than 800 outlets. Corporate management was looking to increase sales so they decided to design incentives to increase teamwork. They did this by going from paying their employees an hourly wage to paying them an hourly wage and a team bonus. There were no penalties for sales losses. The groups were made up of salespeople and the average size of a sales team was nine. The teams' sales figures were posted weekly, providing them with continuous feedback regarding their performance. Shea and Guzzo (1987b) posited that task interdependence (the degree of task-driven interaction among team members), outcome-interdependence (task accomplishment yields consequences that are important to and shared by some or all of the team), and potency (collective belief that the team can be effective) would be predictors of the team's effectiveness. During a seven-month period of time, salespeople, supervisors, first-level managers, and upper-managers filled out a questionnaire designed to assess task interdependence, potency and outcome interdependence. An internal measure of customer service was also included to complement the external measure of sales gains or losses.

They found that outcome-interdependence and potency had a significant and positive relationship with customer service (the team rated themselves on this measure). The supervisors' perceptions aligned with the team's perception of themselves regarding customer service ratings. A gain in sales was not found to have a significant relationship to any of the predictor variables. They offered the following explanation for this outcome:

At the group level changes in customer-service behaviors and not in sales figures may be a more appropriate measure of group performance. Customer-service behaviors are substantially more controllable by group members than is the amount of money customers spend - group members can provide good service and not make a sale. (p. 29)

Hyatt and Ruddy (1997) did not study self-managed work teams specifically, but work teams in general. They said the type of teams in their study were "unique" to organizations and very little published research exists regarding their characteristics and effectiveness. They said that what made these teams unique was "that their work environment is very reactive, offering little chance to predict the activities of any particular day" (p. 554). They referred to them as maintenance or support teams. They suggest that as organizations focus on improving customer service, the importance of maintenance or support teams will greatly increase.

The teams in this study were responsible for maintaining personal computers, faxes, copiers and printers. They were also responsible for servicing the needs of their customers, performing routine maintenance calls, repairing machines, and responding to customer complaints.

The study began with roundtable sessions with 50 managers and 150 team members representing 30 teams. The interviewers held these sessions to answer the following questions: 1) What makes a group effective, 2) what are the enablers and barriers of effective performance, and, 3) what are your work group's goals and how are they set? Based on these roundtable sessions thirteen categories emerged concerning work group effectiveness. They are: work group morale, work group support, commitment to common goals, process ownership, organizations, empowerment, effective communication, work group confidence, organizational awareness, cooperation, norms and roles, trust, and proactive behavior. These thirteen constructs were then developed into a 103-item scale called the Group Development Profile (GDP) and used to assess the effectiveness of the teams in this study. Objective performance data, customer satisfaction, and manager evaluations of the teams determined team effectiveness.

One hundred teams participated in the study. The average size of the teams was seven. All objective criterion measures were calculated by averaging the team's performance over a six-month period of time. The six outcome criterion measures were: 1) Response time regarding the expected amount of time expected to service a particular machine versus how much time it actually took, 2) response time is similar to the response time measure just mentioned but it also included the number of calls responded to in a given period of time, 3) percentage of broken calls refers to the unfinished maintenance calls that were not scheduled, 4) on-going maintenance hours refers to the total time spent working on a machine compared to the planned service hours for the machine, 5) customer satisfaction is a measure of external customer satisfaction with the

services and support the organization provides, and, 6) managers rating of team effectiveness.

Eleven of the GDP sub-scales were positively related to response time (the amount of time expected to service a particular machine versus how much time it actually took). The two sub-scales that did not have a relationship were work group morale and organization. Four of the subscales (work group support, work group confidence, cooperation, and norms and roles) had a positive relationship with response time (also included the number of calls responded to in a given period of time). Only the process ownership subscale was related to the percentage of broken calls measure. No subscales were related to the on-going maintenance hours measure. Five of the subscales were related to the customer satisfaction measure (effective communication, organizational awareness, cooperation, norms and roles, and trust). All of the subscales except the empowerment subscale were correlated with the manager's perceptions of the teams' effectiveness.

Because the inter-correlation of the 13 subscales was high, suggesting potential multi-collinearity problems, an exploratory analysis was conducted. As a result only six constructs consisting of 51 items remained. They were process orientation, work group support, goal orientation, work group confidence, customer orientation, and interpersonal work group processes. The new scales were significantly related only to the two-response time metrics and the manager's ratings.

Batt (1999) studied 67 work groups. This research compared the effectiveness of these three approaches to organizing work in customer service call centers in a telecommunications organization: mass production, total quality management, and self-



managed. The mass production approach attempts to maximize individual efficiency by limiting discretion, establishing detailed functional responsibilities, and limiting service options. The total quality management approach seeks to maximize sales and quality by enhancing each employee's discretion and participation in quality circles (problem-solving or quality improvement meetings with their supervisors; although the meeting is consultative in nature, the workers have limited decision-making rights). The supervisor structure does not change. The self-managed work team approach attempts to maximize sales and quality through group self-regulation (reducing or eliminating external supervision, are empowered to make decisions regarding how they will get the work done, and have direct communication with others outside their team.) The customer service representatives (CSRs) are responsible for handling service inquiries and sales requests from residential customers through incoming telephone calls. The CSRs also use computers to process requests and manage customer information.

Sales productivity (average monthly sales over a six-month period of time) and service quality were used as the performance measures. Service quality was a self-report measure completed by the employees. Group self-regulation (goal-setting, task allocation, problem solving) and external coordination (authority to interact with subject matter experts (SMEs) outside of their department or group) and technology (use of the company's automated computer system) were used as independent measures.

The research found that the self-managed work teams had a statistically significant positive relationship to self-reported service quality and increase in sales per employee. When the use of technology was factored in, the increase in sales was even greater. The other two approaches did not have a significant effect on performance. The

self-managed work teams had these significant results despite the fact that the nature of their work did not require interdependence and there was no team-based reward system in place. Although all three independent measures had a significant positive relationship with the self-managed work team, self-regulation had the strongest correlation. Only self-regulation had a positive significant affect on service quality and sales. As pointed out by other researchers, they did not find a direct effect of service quality on sales.

Kirkman and Rosen (1999) included 111 work teams from four organizations (two Fortune 50 organizations and two smaller companies) in their study to evaluate the mediating roles of team empowerment between organizational and job characteristics (external team leader behaviors, production/service responsibilities, team-based human resource policies, and social structure) and team effectiveness. The definition of empowerment included potency (the team's collective belief that it can be effective), meaningfulness (team believes their work is valuable and worthwhile), autonomy (the degree by which the team has independence and discretion over their work), and impact (see or hear about the results of their work). Team productivity, proactivity (continuous improvement, innovative solutions, initiative), and customer service were performance outcomes and job satisfaction, organizational commitment, and team commitment were attitudinal outcomes. The companies consisted of two textile manufacturers, a high-technology manufacturer, and an insurance organization.

External team leaders completed the antecedents and performance self-report measures and the team members completed the empowerment and attitudinal self-report measures. The team members had to reach consensus when completing the empowerment measure for their respective teams. Team empowerment was found to

have significant and positive relationships with productivity, proactivity, customer service, job satisfaction, organizational commitment, and team commitment. Team empowerment significantly mediated the relationship between production/service responsibilities, team-based human resource policies, social structure and the performance outcomes. Team empowerment significantly mediated the relationship between external team leader behavior, production/service responsibilities, team-based human resource policies, social structure and the performance outcomes. More empowered teams were more productive, proactive and had higher levels of customer service, job satisfaction, and organizational and team commitment than less empowered teams.

Campion et al. (1993) studied 80 clerical work groups in a financial service organization. The work groups ranged from six to thirty in size and had one manager. "They were formal groups in that employees were permanently assigned; viewed themselves and were seen by others as groups; and interacted and shared resources to accomplish mutual tasks, responsibilities and goals" (p. 829). The responsibility of the groups was to process paperwork (sorting, coding, quality checking, answering customer inquiries) for other units in the organization that sold products. Job design (self-management/autonomy, participation, task variety, task significance, task identity), interdependence (task and goal interdependence, feedback and rewards linked to group performance), composition (membership heterogeneity, size, employee preference toward group work), context (training, managerial support, communication and cooperation between groups), and process (group potency, social support, workload sharing, communication and cooperation within the work group) characteristics were used to

predict effectiveness. Effectiveness was defined by the following three measures: 1) productivity (objective measure assessing the work finished or not finished on a weekly basis over a six-month period of time), 2) employee satisfaction (the organization's employee opinion survey that assessed such areas as supervision, job, career development, quality of service, rewards, employee relations, communications, co-workers), and, 3) the manager's judgements of effectiveness (regarding quality of work, customer service, satisfaction of the members, and productivity).

Overall, the research found that job design and process were slightly more predictive than interdependence, composition and context characteristics. More specifically, job design characteristics were significantly and positively related to all three of the outcome measures of effectiveness. Self-management and participation were most predictive. The process characteristics were mainly related to productivity and manager assessments. In particular, potency was significantly and positively related to all three effectiveness-outcome measures. Potency was the strongest predictor of all characteristics. Communication was also a relatively strong predictor of effectiveness. Interdependence characteristics showed several relationships and, in particular, interdependent feedback and rewards were related to employee satisfaction. Composition characteristics primarily had relationships with manager assessments. Lastly, the context characteristics were related primarily to employee satisfaction and manager judgments.

Campion et al. (1996) conducted a study involving 60 work teams in a financial service organization. The teams were comprised of "professional workers." The teams were purposely selected from different business areas in the organization: information systems (programmers and systems analysts), insurance (underwriting and claim

specialists), and administrative (human resources and financial specialists). Although these teams were considered intact work groups, some members were temporary and may have worked on a "secondary" team. Manager assessments, senior and peer manager assessments, employee assessments, and archival records of employee satisfaction and performance appraisals were used as the effectiveness measures. Unlike the Campion et al. (1993) study, productivity was not used as an outcome measure because of "the complexity and diversity of the jobs" (p. 434). Similar to the Campion et al. (1993) study, job design, interdependence, composition, context, and process characteristics were used to predict effectiveness.

Process characteristics had the strongest predictive relationships, followed by job design, context, interdependence, and composition characteristics. With the exception of manager assessments, all of the process characteristics were positively related to effectiveness measures. Job design was positively related to all outcome measures except performance appraisals. Self-management and participation were again shown to be strong predictors. The context characteristics showed some relationships to the outcome measures. For example, communication and cooperation between groups showed more significant relationships than training. Interdependent feedback and rewards had the most significant relationships to the outcome measures, followed by task and goal interdependence. The composition characteristics had the fewest relationships. The following quote summarizes the findings of this study:

In short, high performing teams in this context performed a variety of tasks that members perceived to be significant. They were allowed a high degree of self-management, were interdependent in terms of tasks, goals, and feedback, and

functioned as a single team. They tended to have members with complimentary skills who were also flexible in the tasks they performed...They had confidence in their team's abilities, and members supported one another, communicated, cooperated, and fairly shared their workload. (p. 443)

#### *Summary and Overview of This Study*

What is evident from the literature review is that there are a myriad of "family dynamic" factors that contribute to successful family businesses. These factors range from the emotional and relationship intelligence of family members, to the health/competence of the family system, to the leadership and conflict-management styles utilized, to the life stages of family members.

Although many family dynamic factors were identified, only two related themes emerged. The first theme had to do with how well the family functioned together. The evidence suggests that if the family did not function well together before going into business, they were not likely to function well together in business. In fact, unresolved family issues may be exasperated in business (e.g., sibling rivalries). A number of the authors highlighted how the integrating of the family and business systems seemed to add a layer of complexity to the family and business. Whether it was Hoover and Hoover's (1999) reference to relationship intelligence, Aronoff et al's. (1997) work on sibling teams, Sorenson's (1999) study of conflict-management styles, or Whiteside et al.'s (1993) reference to the Beavers systems model, the literature strongly suggests that the family's ability to communicate, negotiate, problem-solve, trust and support one another, manage conflict, take responsibility for one's behavior, and be autonomous, are very important to family business success.

The second theme that I would like to highlight, and maybe the most important in terms of long-term survival or health of the family and business, was the family's ability to be flexible and adaptable to new situations (Aronoff et al., 1997; Whiteside et al., 1993; Lansberg & Astrachan, 1994). As mentioned earlier in this chapter, general system theory purports that negentropic (an open system that receives energy from the outside world, which it uses to maintain its structure and flexibility) systems have a greater chance of being effective. This is especially important for families in business because they not only have to adapt to the ever changing work milieu, but they also need to adapt to the life stages of its family members.

Similar to the findings found in the family business literature, the self-managed work team literature found a plethora of factors that contribute to team effectiveness. What was evident from this review was that there was no one way for a work team to be effective. The factors found to contribute to team effectiveness were similar to the first theme that emerged in the family business literature. The literature strongly suggests that the team's ability to communicate, cooperate, coordinate, negotiate, problem-solve, manage conflict, plan, and take responsibility for one's behavior are very important to team effectiveness.

One theme that emerged throughout the work team literature was the team's ability to self-manage, or function autonomously. Autonomy is the very characteristic that differentiates self-managed work teams from other types of work teams. And in fact, autonomy was found to be a significant predictor of team effectiveness. Another theme that emerged in this review was the team members' belief in the team's ability to be effective (group potency). Researchers (Cohen & Denison, 1990; Saavedra, 1990; Shea

& Guzzo, 1987b; Campion et al., 1993;1996; Cohen et al., 1996; Kirkman and Rosen, 1999) found a strong relationship between group potency and team effectiveness. Lastly, the work team's ability to be adaptable and flexible was found an important factor that contributed to team effectiveness. This is especially important for self-managed work teams who interact directly with customers in a service organization because customers introduce an unpredictable variable into the effectiveness equation (Griffin et al., 1994).

This literature review has provided evidence to suggest that there is a great deal of overlap between successful family businesses and effective self-managed work teams. As pointed out in the family business literature, the family system has an inextricable interrelationship with the business system. Therefore, the health of the family system plays an important role in the health of the business system. Self-managed work teams and family teams who manage family businesses are similar in that they are comprised of members who share common goals, are identified and identifiable as a social unit in an organization, and are autonomous in that they either have (family team) or are given (self-managed work team) significant authority to carry out their work. It is expected that the health/competence of a family system will play an important role in the health of self-managed work team system.

The Beavers system model of family competence will provide the framework for evaluating the effects of the family system on the self-managed family work team system. To reiterate, family competence measures the family's ability, or lack of ability, to communicate, coordinate, negotiate, establish clear roles and goals, problem solve, adapt to new situations, manage conflict, accept responsibility, be autonomous, and believe in itself (Beavers & Hampson, 1990; 2000; Hampson & Beavers, 1993; 1996). These



characteristics are the exact characteristics found to contribute to successful family businesses and effective self-managed work teams. Therefore, it is expected that the self-managed family work teams whose family members have higher ratings of family competence will be more effective than the teams whose family members have lower ratings of family competence.

In conclusion, this study is designed to answer the following questions: 1) Is there a relationship between how well the family members function together and the effectiveness of the self-managed family work team in a service organization, and, 2) if there is a relationship, what family and team factors are related to self-managed work team effectiveness in a service organization? In order to answer these questions, the researcher first had to review the literature from three separate disciplines (family systems, family businesses, and self-managed work teams), because no empirical studies existed that factored in a family systems variable into self-managed work team effectiveness research. This chapter provided the theoretical framework and empirical support for this research endeavor. The rest of this research paper will focus on the design, process, statistical analyses, and findings of this research project.

## CHAPTER III

### Methodology

#### *Participants*

The participants in this sample represent self-managed family work teams that reside in a global financial service organization. The teams in this study are located *only* in the United States and are in the division of the company that deal primarily with the retail public. Each retail office consists of a management team, operations support, financial advisors (a greater percentage were not in teams), and their support (e.g., customer associates). Self-managed family work teams consist of employees who perform interdependent jobs, share common goals, are identified and identifiable as a social unit in the organization, and are given significant authority to carry out their work. In addition, there exists a family subsystem on the team where at least one of the family members is a financial advisor. In other words, every team consists of at least two family members and the balance is comprised of non-family members.

The self-managed family work teams in this study are expected to provide high levels of customer service and quality, sell financial services and products, and attain new customers. Each of the teams are comprised of family members who are responsible for both helping manage the team and interacting directly with their external customers. The primary positions held on the self-managed work teams are financial advisor, financial advisor in training, investment advisor, and customer associate. The first three are considered professional positions and the latter provided administrative support to the team at large. The financial advisor is considered the "top" position on the team. The financial advisor, financial advisor in training, and investment advisor are primarily

responsible for providing the financial products and services directly to the customer and attaining new customers.

### *Sampling Strategy*

In order to identify the self-managed family work teams that exist in this financial service organization, an email message was sent to each manager throughout the United States who managed a retail office for this financial service organization. These managers were asked to report which self-managed work teams in their office fit the following definition: "There must be at least one person on the self-managed work team who was related to a financial advisor via blood or marriage." Approximately two-thirds of the 150 offices responded and approximately 325 self-managed family work teams were identified.

Since the instrument that was used to assess the independent variable (family health/competence) in this study was not developed to measure extended family relationships, not all of the self-managed family work teams identified were included in this study. Only self-managed family work teams that consisted of parent-child, siblings and/or husband-wife relationships were included in this sample. This reduced the total number to approximately 180 self-managed family work teams.

### *Procedure*

An email message was sent to all of the self-managed family work teams identified in this financial service organization that asked them to voluntarily participate in a study regarding family work team effectiveness. The email message stressed that all information gathered from the individuals on each self-managed family work team would be kept confidential and anonymous. Only the researcher knew which team members

belonged to which team for the sole purpose of tracking and reporting. They were also told that all data reported would be in aggregate form and would never have their individual, team, or organization's name attached to the results, thereby again ensuring their anonymity. They were given the option to contact the researcher if they wanted further detail about the study before agreeing to voluntarily participate.

Once a team chose to participate, the researcher asked them to provide the total number of members on the team and how many of the team members were family members, so that the appropriate number of data packets were mailed to the team. The data packets were then mailed to the team. All data packets included an introduction letter and demographic fact sheet. The introduction letter also served as the consent form. In addition, all data packets included the following scales to complete: Intragroup Conflict Scale, Group Potency Scale, Communication Scale, and the Quality of Work Life Scales. Only the family members on the team received a data packet that also included the Family Competence Scale (see Appendix A). All data packets included a self-addressed postage paid envelope so that each team member could mail back their completed data packets separately.

#### *Record Keeping*

A coding system was used solely for tracking and reporting purposes. All returned data packets were kept locked in the office of the researcher. The researcher was responsible for scoring the completed scales and entering the information into the computer. In addition, the researcher was responsible for acquiring the production and customer satisfaction quintile rankings from the financial services organization's database even though the self-managed family work teams had access to this information. This

ensured that the researcher obtained the production and customer satisfaction quintile information for the same period of time for all the self-managed family work teams.

### *Instruments*

#### *Demographic Fact Sheet*

The researcher (See Appendix) designed this form. It asked participants to provide information about themselves: age, gender, position on the team, family role, (if they are a family member), length of service in the organization, and length of service on the team.

#### *Self-Report Family Inventory (Beavers & Hampson, 1990)*

The Self-Report Family Inventory (SFI) is a 36-item self-report scale completed by family members eleven years of age or older, measuring five dimensions based on the Beavers Systems model of family functioning (Beavers & Hampson, 1990). These dimensions include family health/competence, conflict, cohesion, leadership, and expressiveness. Participants responded to each item on a five point Likert scale. In this study, the researcher will use only the 19-item health/competence subscale of the SFI, which has proven to be a useful global measure of family health and functioning (Beavers & Hampson, 1990; Hampson & Beavers, 1996). Beavers and Hampson (1990) reported Cronbach's alpha for the family health/competence subscale of .88 and test-retest reliability over both three and ninety day periods of .85. Volker and Ozechowski (2000) performed a 'goodness-of-fit' within a confirmatory factor analysis that demonstrated the construct validity of the SFI health/competence scale. They concluded that the SFI family health/competence scale represented a single-family functioning construct. The SFI health/competence scale has shown the ability to discriminate clinical from

nonclinical families ( $r = .62$ ) and has shown no significant differences in overall ratings between males and females (Beavers & Hampson, 1990). Hampson, Beavers, and Hulgus (1990) found no significant differences among nonclinical Anglo, African-American, and Mexican-American families on global competence. The SFI family health/competence scale also corresponds well with other measures. A canonical correlation of .62 has been demonstrated when comparing the SFI family health/competence scores and the observer-rated Beavers Interactional Competence Scale. In addition, the SFI family health/competence scale correlates  $+ .77$  with the General Functioning factor of the Family Assessment Device (FAD). (Miller et al., 1985).

A decision was made to exclude item # 24 ("One of the adults in this family has a favorite child.") from the family health/competence scale because it was not appropriate for the participants in this study. Volker and Ozechowski (2000) support this omission because of its low reliability within their sample. The Cronbach's alpha reliability coefficient on the remaining items was .91 for husbands and .93 for wives.

Only the family members on the team were asked to complete this scale. The total score on the SFI health/competence subscale was computed by taking the average of the responses. Five of the nineteen items needed to be reverse scored using the following formula:  $6 - \text{SFI raw score}$ . Family competence ratings were reported at the team level. Taking the average of the individual team members' average scores generated the team score.

*Intragroup Conflict Scale (Jehn, 1995; Shah & Jehn, 1993)*

The twelve items in this scale measured the presence of conflict within a "work unit" and are rated on a 5-point Likert scale anchored by 1 = "None" and 5 = "A lot." The

words "work unit" were changed to "team" to better fit the focal unit in this study. This scale consisted of three subscales. Each subscale measures a different type of conflict: relationship, task, and process conflict. The coefficient alphas for relationship and task conflict are +.90 and +.88, respectively (Jehn, 2001; Jehn & Chatman, 2000; Jehn, 1995). The coefficient alpha for process conflict ranged from .78 to .93 (Shah & Jehn, 1993; Jehn, 2001).

All of the team members were asked to complete the scale. A total score on the Intragroup conflict scale was computed by taking the average of the responses. Intragroup conflict scores were reported at the team level. Taking the average of the individual team members' average scores generated the team score.

*Communication Scale (Campion et al., 1993)*

The Communication Scale measured how well the team shared information with its members in order to accomplish its tasks. All team members completed the three-item Communication Scale. The items were rated on a 7-point Likert scale anchored by 7 = "Strongly Agree" and 1 = "Strongly Disagree." This scale, developed by Campion et al. (1993), was part of a thirteen item scale that measured team effectiveness process variables (coefficient alpha = .89, interrater reliability = .65, and interrater agreement = .96). The Coefficient alpha for the communication scale was .89 (Campion et al., 1996). The interrater reliability based on James, Demaree, and Wolf (1984) was .79 (Campion et al., 1996).

All of the team members were asked to complete this scale. A total score on the communication scale was computed by taking the average of the responses.

communication scores were reported at the team level. Taking the average of the individual team members' average scores generated the team score.

*Group Potency Scale (Guzzo et al., 1993)*

Group potency is synonymous with group efficacy. Guzzo et al. (1993) introduced the concept of group potency and defined it as the group's collective belief that it can be effective. Although Bandura (1982; 1986) focused on self-efficacy, he suggested that the strength of groups lies in people's sense that they can solve their problems and improve their lives through concerted effort (Bandura, 1986). Shea and Guzzo (1987a) included group potency in their model of group effectiveness and asserted that group potency influences performance and in return is influenced by it.

The eight items are rated on a 5-point Likert scale anchored by 1 = "To No Extent" and 5 = "To a Great Extent." The coefficient alpha for the group efficacy scale was .88 and intra-group agreement of  $r = .95$  (Guzzo et al., 1993). Gibson, Randel, and Earley (2000) found that the group potency scale is unidimensional, reliable (.83), and was a strong predictor of general group process effectiveness.

All of the team members were asked to complete the scale. A total score on the group potency scale was computed by taking the average of the responses. Group potency scores were reported at the team level. Taking the average of the individual team members' average scores generated the team score.

*Quality of Work Life Index (Hackman, 1986; Kirkman & Rosen, 1999; Cammann et al., 1983)*

When analyzing work team effectiveness, it is recommended that one of the effectiveness measures assess the effects of the team and the work on the team members



(Hackman, 1990). For this study, the quality of work life index consisted of the following scales: job satisfaction, group satisfaction, and team commitment. These scales have been used in other team effectiveness studies as quality of work life dependent variables (Cohen et al., 1996; Spreitzer et al., 1999; Kirkman & Rosen, 1999). The job satisfaction scale consisted of two items and demonstrated coefficient alphas of .84 to .91 (Cammann et al., 1983; Cohen et al., 1997). The group satisfaction scale consisted of three items and demonstrated coefficient alphas of .86 to .91 (Hackman, 1986; Cohen & Bailey, 1997). The team commitment scale consisted of three items and demonstrated a coefficient alpha of .80 at the individual level analysis and .87 at the team level analysis (Kirkman & Rosen, 1999). The eight items are rated on a 7-point Likert scale anchored by 1 = "Strongly Disagree" and 7 = "Strongly Agree." Where necessary, the word "group" or "work group" was changed to "team" to better fit the focal unit in this study.

All of the team members were asked to complete these scales. A total score on the quality of work life scale was computed by taking the average of the responses from the three scales. Quality of work life scores were reported at the team level. Taking the average of the individual team members' average scores generated the team score.

#### *Production Quintile Rankings*

All of the financial advisors in this financial service organization were ranked by quintiles based on the amount of commissions/fees they generated and their length of service. The quintile ranking was calculated monthly. This study used the quintile ranking from the month prior to the month the study was conducted. The production quintile was not generated at the team level. For this study, if there was more than one financial advisor on the team, the researcher totaled the quintile ranking for each financial

advisor and divided by the total number of financial advisors thereby generating a team level production quintile ranking.

#### *Customer Satisfaction Quintile Rankings*

All of the financial advisors in this financial services organization were ranked by quintiles based on customer satisfaction surveys completed by their respective customers, their customer's behavior (increased contributions or transferal of assets from their financial advisor), and length of service. The quintile ranking was calculated quarterly. This study used the quintile ranking from the quarter prior to the month the study was conducted. The customer satisfaction quintile was not generated at the team level. For this study, if there was more than one financial advisor on the team, the researcher added up the quintile ranking for each financial advisor and divided by the total number of financial advisors thereby generated a team level customer satisfaction quintile ranking.

#### *Hypotheses*

In order to answer the following questions: 1) Is there a relationship between how well the family members function together (family competence) and the effectiveness of the self-managed family work team in a service organization, and 2) if there is a relationship, what family and team factors are related to self-managed work team effectiveness in a service organization? The researcher established the following hypotheses:

*Hypothesis # 1:* Family competence will be positively related to intragroup conflict and negatively related to communication, and group potency. Lower scores on family competence are indicative of better functioning.

*Hypothesis # 2:* Communication and group potency will be negatively related to the production quintile and intragroup conflict will be positively related to the production quintile. Lower scores on the production quintile indicate a favorable outcome.

*Hypothesis # 3:* Communication and group potency will be negatively related to the customer satisfaction quintile (lower scores indicate higher satisfaction) and intragroup conflict and will be positively related to the customer satisfaction quintile.

*Hypothesis # 4:* Communication and group potency will have a positive relationship with quality of work life and intragroup conflict will have a negative relationship with quality of work life.

*Hypothesis # 5:* Family competence (a lower score indicates better functioning) will have a positive relationship with production and customer satisfaction quintiles (a lower score is better) and a negative relationship with quality of work life.

*Hypothesis # 6:* The relationship between family competence and the production quintile will be mediated by each of the process variables (communication, group potency, and intragroup conflict).

*Hypothesis # 7:* The relationship between family competence and the customer satisfaction quintile will be mediated by each of the process variables (communication, group potency, and intragroup conflict).

*Hypothesis # 8:* The relationship between family competence and quality of work life will be mediated by each of the process variables (communication, group potency, and intragroup conflict).

### *Data Analysis*

This study used a correlational/hierarchical regression design. The first phase of the analysis was to run a correlational analysis to determine if there were relationships between the independent variable (family competence) and the dependent variables (productivity, customer satisfaction, and quality of work life). In addition, a correlational analysis was run to determine if the independent variable predicted the process variables (intragroup conflict, communication, and group potency) and determine if the process variables predicted the dependent variables.

The second phase was to run a hierarchical multiple regression to test for the mediators. The first step was to enter the set of process variables. The next step was to enter the independent variable. The last step was to enter the cross product of the independent variables by the process variables. Since the third step was interpreted as the interaction of family competence and the set of process variables, it was used to rule out the process variables as moderators and then appropriately test for a mediator. If each of the correlational analyses described above were significant, and the family competence effect (after removing the shared variance attributed to the process variables) was non-significant, the researcher would conclude that the relationship between family competence and an outcome was mediated by the process variables.

For the last phase, F Tests were used to assess the impact of all the predictor variables on each criterion variable. Individual Beta tests (t tests) were used to determine if family competence was a significant predictor of each dependent variable while controlling for all process variables.

The assumptions of this regression analyses were normality and linearity since it is well known to statisticians that F and t Tests are robust to violation of the normality assumption as sample size increases. This N by P ratio should give accurate results even if the data is distinctly not normal. Linearity suggests that the independent variables have a linear relationship with the dependent variables. This was assessed using the overall F test for model fit.

#### *Power/Sample Size*

For regression designs, Stevens (1996) suggested a minimum 20 to 1 ratio of sample size to the number of variables ( $n/p$ ) for adequate power. There were four predictor variables in this study; therefore the minimum sample size recommended is 80.

Power, the probability of rejecting the null hypothesis when it should be rejected, should be greater than .80 for this study. A formal power estimate for regression designs was completed. Assuming an effect size of .15 (moderate for regression analyses), five predictor variables, Alpha of .05, and a sample size of 100, gives a power estimate of .87 for this study.

## CHAPTER IV

### Results

#### *Introduction*

This chapter will provide an overview of the data, the results of the statistical analysis, hypotheses testing, and a summary of the chapter.

#### *Overview of the Data*

180 teams were identified in the financial services company that fit the self-managed family work team definition for this study (at least one team member had to be related to a financial advisor via blood or marriage). All 180 teams were invited, via email, to voluntarily participate in this study. Of the 180 teams, 140 teams responded to the email invitation in the affirmative; this reflected a 78% return rate, which is considered very high for survey research. The remaining 40 either did not respond or declined to participate. Data packets were sent to the 140 teams. Only the teams that had *all* members complete their respective questionnaires (scales) were counted in this study. The total number of teams that met this criterion was 103. The results of this study are based on these 103 teams which were comprised of a total of 466 individual participants.

For the three-item scales (communication, team commitment, and group satisfaction), any team member that did not have at least two of the three items completed was not counted in the team's average score for this scale. This happened on one occasion and involved the communication scale. The job satisfaction scale, which was one of the three scales that made up the quality of work life dependent variable, was a two-item scale. In order to ensure data quality, unless both items were completed the

scale was discarded and the individual's quality of work life score was not averaged into the team score. This happened on three occasions. Lastly, there were eight teams that did not have a customer satisfaction quintile (DV). Therefore, only 95 of the 103 teams were included in the regression analysis for this dependent variable.

The 103 teams that were included in this analysis represented 25 different states and 81 different offices (see Table 2 for frequency distribution).

Table 2

*Distribution of Teams in the US*

	# of Teams	# of Offices
Georgia	3	3
California	15	11
Illinois	4	4
Michigan	9	7
Pennsylvania	8	7
North Carolina	7	5
Hawaii	3	2
New Hampshire	1	1
Florida	8	6
Texas	9	5
Virginia	4	3
Maryland	2	2
New York	5	4
New Jersey	2	2
Connecticut	6	5
Alabama	2	2
Utah	3	2
Ohio	4	2
Colorado	1	1
Arkansas	1	1
Minnesota	2	2
Louisiana	1	1
Massachusetts	1	1
Maine	1	1
Indiana	1	1
	<b>103</b>	<b>81</b>

The size of teams ranged from three members to 12 members. Approximately 30% of the teams consisted of three members and another 32% consisted of 4 members (see Table 3 for frequency distribution).

Table 3

*Size of Teams*

team size	frequency	percent
3	31	30.1
4	33	32.04
5	16	15.53
6	14	13.59
7	4	3.88
8	1	0.97
9	2	1.94
11	1	0.97
12	1	0.97

All team members were asked to complete a demographic sheet that included the following sections: length of service on the team; position on the team (e.g., financial advisor); age; gender; length of service at the company, and; family role (e.g., father). The researcher decided not to include the “length of service on the team” in the analysis for the following reasons: 1) numerous missing responses, 2) written responses that reflected the participants confusion about when to start considering length of service with the team (e.g., “two years with John and Mary, six months with Tom”), and 3) examples of responses that reflected team members on the same team responded very differently (e.g., one team member said his/her length of service with the team was 15 years and everyone else on the team had significantly less time listed).



The possible positions on any team were Financial Advisor (FA), Financial Advisor in training (FAIT), Investment Advisor (IA), and Customer Associate (CA). Approximately 46% of the teams were comprised of FAs and CAs, 32% were comprised of FAs, IAs, and CAs, 18% were comprised of FAs, FAITs, and CAs, and 7% had all positions represented. Among the 103 teams, the two most frequent combinations were two FAs and one CA (17 teams) and two FAs and two CAs (13 teams). This accounted for 29% of the teams (see Table 4 for frequency distribution).

Table 4

*Roles on Team*

Financial Advisor	Financial Advisor in Training	Investment Associate	Customer Associate	Frequency	Percent
1	0	1	1	9	8.74
1	0	1	2	5	4.85
1	0	2	1	1	0.97
1	0	2	2	1	0.97
1	0	3	2	1	0.97
1	1	0	1	5	4.85
1	1	0	2	1	0.97
1	1	0	3	2	1.94
1	1	2	1	1	0.97
1	1	2	2	1	0.97
2	0	0	1	17	16.5
2	0	0	2	13	12.62
2	0	0	3	1	0.97
2	0	0	4	1	0.97
2	0	1	1	6	5.83
2	0	1	2	3	2.91
2	0	1	3	2	1.94
2	0	2	3	1	0.97
2	1	0	1	5	4.85
2	1	0	2	1	0.97
2	1	1	1	2	1.94
2	1	2	1	1	0.97
2	1	2	2	1	0.97
3	0	0	1	2	1.94
3	0	0	2	3	2.91
3	0	0	3	5	4.85
3	0	1	1	1	0.97
3	0	1	3	1	0.97
3	1	0	1	1	0.97
3	1	0	2	2	1.94
4	0	0	2	1	0.97
4	0	0	5	1	0.97
4	0	1	2	1	0.97
4	1	0	3	1	0.97
4	2	1	2	1	0.97
6	0	0	5	1	0.97
6	0	0	6	1	0.97

The average age of the participants was 41 years old ( $SD = 12$ ) and the median age was 38. Fifty one percent of the individuals were male, 49% were female. All but two teams were a combination of men and women. The average length of service at the company was 10 years ( $SD = 9.6$ ) while the median was seven. To get a "team" length of service, an average was taken of all team members' length of service. The average team length of service was 10 years ( $SD = 4.2$ ) while the median was 10 years.

The possible *family* roles on each team were father, mother, husband, wife, son, brother, daughter, and sister. Approximately 48% of the teams consisted of solely parent-child relationships, 24% were solely spousal relationships and 16% were solely sibling relationships (see Table 5 for frequency distribution).

Table 5

*Family Structures*

Parent	child	spouse	sibling	frequency	percent
0	0	0	1	16	15.53
0	0	1	0	25	24.27
0	0	1	1	1	0.97
1	1	0	0	49	47.57
1	1	0	1	9	8.74
1	1	1	0	2	1.94
1	1	1	1	1	0.97

The most frequent combinations were father-son (37 teams), husband-wife (25 teams) and two brothers (13 teams). This accounted for 73% of all teams (see Table 6 for frequency distribution).

Table 6

*Family Structures/Roles*

father	mother	husband	wife	son	daughter	brother	sister	frequency	percent
0	0	0	0	0	0	0	2	1	0.97
0	0	0	0	0	0	1	1	2	1.94
0	0	0	0	0	0	2	0	13	12.62
0	0	1	1	0	0	0	0	25	24.27
0	0	1	1	0	0	1	1	1	0.97
0	1	0	0	0	1	0	0	2	1.94
0	1	0	0	1	0	0	0	1	0.97
0	1	0	0	1	1	1	1	1	0.97
1	0	0	0	0	1	0	0	8	7.77
1	0	0	0	1	0	0	0	37	35.92
1	0	0	0	1	1	1	1	4	3.88
1	0	0	0	2	0	2	0	3	2.91
1	0	0	0	2	1	2	1	1	0.97
1	0	1	1	0	1	0	0	1	0.97
1	1	1	1	0	1	0	0	1	0.97
1	1	1	1	2	1	2	1	1	0.97
3	0	0	0	3	0	0	0	1	0.97

Table 7 represents the descriptive statistics for each of the measures used in this study. It is important to note that "1" was a better score to receive for the Family Competence, Intragroup Conflict, Customer Satisfaction, and Production measures. For the Group Potency, Communication, and Quality of Work Life measures, "7" was the better score to receive.

Table 7

*Descriptive Statistics for all Measures*

	Score Range	n	M	SD
Family Competence	1- 5	103	1.82	.50
Intragroup Conflict	1- 5	103	1.93	.50
Group Potency	1- 7	103	6.36	.44
Communication	1- 7	103	6.30	.55
Quality of Work Life	1 - 7	103	6.33	.55
Customer Sat.	1- 5	95	3.07	1.30
Productivity	1- 5	103	2.37	1.10

For models in which significant regression fits were obtained, assumption of normality and homoscedasticity were checked using assessments of the standardized residuals. Examination of the plots of the standardized residuals versus each of the three process variables revealed insufficient evidence to conclude that the assumption of homoscedasticity was violated. In addition, the Kolmogorov-Smirnov statistic for the standardized residuals was 0.077 (not significant at the 95% confidence level), and thus proved insufficient to conclude that the assumption of normality was violated.

Similarly, the model of quality of work life versus the process variables, independent variable, and potency X family competence interaction fit the assumption of normality and homoscedasticity and were checked using assessments of the standardized residuals. Examination of the plots of the standardized residuals versus each of the main effects revealed insufficient evidence to conclude that the assumption of homoscedasticity was violated. The Kolmogorov-Smirnov statistic for the standardized residuals was 0.116 (significant at the 95% confidence level) due to the relatively high

level of kurtosis (3.8). However, the fact that the total sample size was greater than 30 combined with the approximately symmetrical (skewness was  $-.35$ ) distribution, indicated that there was no overwhelming evidence to conclude that the assumption of normality was violated.

Multi-collinearity among the main effects was checked using the variance inflation factor (VIF). The highest VIF among the three process variables and the independent variable was 2.31, well below the recommended limits of 5 (Snee, 1973) and 10 (Marquandt, 1980). The assumption of linearity was checked by inspecting the data points on the scattergrams (Bordens & Abbott, 1991). The data points did follow a straight line with very few deviations, therefore the assumption of linearity was met.

Stevens (1996) and Tabachnick and Fidell (1989) suggested that the sample size required for a multiple regression analysis be at least 20 times the number of predictor variables. "If either standard multiple or hierarchical regression is used, one would have to have 20 times more cases than IVs. That is, if you plan to include five IVs, it would be lovely to measure 100 cases" (Tabachnick & Fidell, 1989, p. 128). Based on these recommendations this research design would require at least a sample size of 80 because there are four predictor variables (one IV and three process variables). The actual sample size was 103 for two of the regression analyses and 95 for the remaining regression analysis. Therefore, the sample size met and exceeded the requirements suggested.

### *Hypotheses Testing*

The primary objective of this study was to determine if there was a significant relationship between how the family members who work together on a self-managed work team function together (family competence), and the overall work team's

effectiveness as defined by productivity, customer satisfaction, and quality of work life of team members. More specifically-if there was a significant relationship- was it mediated by how well the team at large communicated, the confidence the team had in itself to effectively do its work (group potency), and the amount of intragroup conflict.

To begin the analysis, Pearson correlations were run to determine if there were significant relationships between the IV and each of the DVs (production and customer satisfaction quintiles, and quality of work life), between the IV and each of the process variables (intragroup conflict, communication, and group potency), and between the process variables and each of the DVs (see Table 8).

Table 8

*Pearson Correlation Coefficients*

	Family Competence	Intragroup Conflict	Group Potency	Communication	Quality of Work Life	Customer Satisfaction	Productivity
Family Competence							
Intragroup Conflict	0.38**						
Group Potency	-0.21*	-0.46**					
Communication	-0.32**	-0.58**	0.69**				
Quality of Work Life	-0.37**	-0.70**	0.64**	0.77**			
Customer Satisfaction	0.02	-0.06	-0.04	-0.11	-0.07		
Productivity	-0.15	-0.18	-0.08	0.16	0.17	0.09	

\*  $p < .05$ . \*\*  $p < .001$ .

This analysis tested the following hypotheses:

*Hypothesis # 1:* Family competence will be positively related to intragroup conflict and negatively related to communication, and group potency. Lower scores on family competence are indicative of better functioning.

*Hypothesis # 2:* Communication and group potency will be negatively related to the production quintile and intragroup conflict will be positively related to the production quintile. Lower scores on the production quintile indicate a favorable outcome.

*Hypothesis # 3:* Communication and group potency will be negatively related to the customer satisfaction quintile (lower scores indicate higher satisfaction) and intragroup conflict and will be positively related to the customer satisfaction quintile.

*Hypothesis # 4:* Communication and group potency will have a positive relationship with quality of work life and intragroup conflict will have a negative relationship with quality of work life.

*Hypothesis # 5:* Family competence (a lower score indicates better functioning) will have a positive relationship with production and customer satisfaction quintiles (a lower score is better) and a negative relationship with quality of work life.

The only significant correlations (at the 95% confidence level) found were between family competence and each of the process variables and quality of work life, and between each of the process variables and quality of work life.

In summary, the Pearson correlation analyses found support for *Hypothesis 1*. Teams with higher levels of family competence also had higher levels of communication and group potency and lower levels of intragroup conflict. There was no support found for *Hypotheses 2 and 3*, but there was support found for *Hypothesis 4*. Teams with higher levels of communication and group potency and lower levels of intragroup conflict

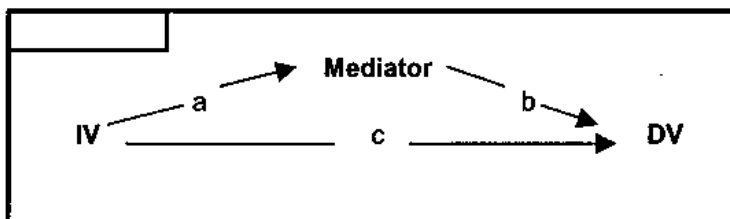


also had higher levels of quality of work life among its team members. *Hypothesis 5* was only partially supported. Teams with higher levels of levels of family competence also had higher levels of quality of work life among its team members. There was not support for the relationships between family competence and production and customer satisfaction quintiles.

The remaining part of the analysis was to determine if the process variables mediated the relationship between the IV and the DVs. Baron and Kenny (1986, p. 1176) offered the following path model to illustrate the nature of a mediating variable (see Figure 3).

Figure 3

*Mediating Variable*



They suggested that in order to determine if a particular variable functions as a mediator, the following conditions must be met: 1) there must be a significant relationship between the independent variable and the presumed mediating variable (Path a), 2) the presumed mediating variable must have a significant relationship with the dependent variable (Path b), and 3) when Paths a and b are controlled, there is not a significant relationship between the IV and the DV (Path c) that might have otherwise existed.

A hierarchical multiple regression was used to apply Baron and Kenny's (1986) mediation model in this study. Since there were three DVs in this study, the following process was conducted three times: 1) the set of process variables entered, 2) then the IV

entered, and 3) then the cross product of the independent variable by the process variables entered. The last step was used to determine if the process variables mediated or moderated the relationship between the IV and DV. According to Baron and Kenny, a variable acts as a moderator and not as a mediator when the cross product (interaction) between the IV and the process variables is found to be significant.

The following analyses will test the remaining hypotheses:

*Hypothesis # 6:* The relationship between family competence and the production quintile will be mediated by each of the process variables (communication, group potency, and intragroup conflict).

*Hypothesis # 7:* The relationship between family competence and the customer satisfaction quintile will be mediated by each of the process variables (communication, group potency, and intragroup conflict).

*Hypothesis # 8:* The relationship between family competence and quality of work life will be mediated by each of the process variables (communication, group potency, and intragroup conflict).

Although the Pearson correlation did not find a significant relationship between family competence and production and customer satisfaction quintiles, which would suggest that it did not meet one of the conditions of Baron and Kenny's (1986) mediation model, hierarchical regressions were still run for family competence and production and customer satisfaction quintiles. The reason for this was because there were three process variables in this study and the Pearson correlation does not take this into account. In other words, the Pearson correlation only assessed the relationship between two variables

(e.g., communication and production quintile) and it does not control for the “noise” that may result from the other variables in this study.

The first hierarchical regression was run to test if the process variables mediated the relationship between family competence and production quintile. The first step was to enter the process variables. Table 9 reflects that after entering the process variables, significant relationships were found between communication ( $p = .0298$ ), group potency ( $p = .0056$ ) and production quintile. There was not a significant relationship found between intragroup conflict and production quintile.

Table 9

*Production Quintile (DV) Regression Analysis: Test for Mediators*

Analysis of Variance							
Source	DF	SS	MS	F Value	Pr > F	R-Square	Adj R-Square
Model	3	13.44666	4.482222	4.01	0.0097*	0.1083	0.0813
Parameter Estimates							
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t		
Intercept	1	5.01646	2.13624	2.35	0.0208		
Communication	1	0.63792	0.28943	2.2	0.0298*		
Group Potency	1	-0.93756	0.33102	-2.83	0.0056*		
Intragroup Conflict	1	-0.36413	0.25872	-1.41	0.1624		

\*  $p < .05$ . \*\*  $p < .001$ .

Since a significant relationship was not found between intragroup conflict and production quintile, the researcher ran a second regression analysis excluding intragroup conflict. A significant relationship was again found between communication and production quintile

( $p = .0030$ ) and between group potency and production quintile ( $p = .0085$ ) (See Table 10).

Table 10

*Production Quintile (DV) Regression Analysis: Test for Mediators excluding the Conflict Scale*

Analysis of Variance							
Source	DF	SS	MS	F Value	Pr > F	R-Square	Adj R-Square
Model	2	11.232	5.616	4.97	0.0087*	0.0905	0.0723
Parameter Estimates							
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t		
Intercept	1	2.93889	1.55174	1.89	0.0611		
Communication	1	0.80634	0.26483	3.04	0.003*		
Group Potency	1	-0.88862	0.3308	-2.69	0.0085*		

\*  $p < .05$ . \*\*  $p < .001$ .

The next step was to enter the IV. Table 11 reflects that communication ( $p = .0394$ ) and group potency ( $p = .0063$ ) were again found to have a significant relationship to production quintile. There were no significant relationships found between intragroup conflict and family competence, and production quintile.

Table 11

*Production Quintile (DV) Regression Analysis: Family Competence & Process Variables*

Analysis of Variance							
Source	DF	SS	MS	F Value	Pr > F	R-Square	Adj R-Square
Model	4	13.96598	3.49149	3.11	0.0188*	0.1125	0.0763
Parameter Estimates							
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t		
Intercept	1	5.31923	2.1879	2.43	0.0169		
Communication	1	0.61144	0.29283	2.09	0.0394*		
Group Potency	1	-0.92813	0.33221	-2.79	0.0063*		
Intragroup Conflict	1	-0.31849	0.26798	-1.19	0.2375		
Family Competence	1	-0.1566	0.2304	-0.68	0.4983		
* p<.05. **p<.001.							

The last step was to enter the cross product between family competence and each of the process variables. No significant relationships were found between the cross products and production quintile (see Table 12).

Table 12

*Production Quintile (DV) Regression Analysis: Cross Products*

Analysis of Variance							
Source	DF	SS	MS	F Value	Pr > F	R-Square	Adj R-Square
Model	7	16.72955	2.38994	2.11	0.0493*	0.1348	0.071
Parameter Estimates							
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t		
Intercept	1	-0.69404	10.15006	-0.07	0.9456		
Communication	1	2.40008	1.28894	1.86	0.0657		
Group Potency	1	-1.83845	1.5768	-1.17	0.2466		
Intragroup Conflict	1	0.02103	1.22744	0.02	0.9864		
Family Competence	1	3.02543	5.54926	0.55	0.5869		
Communication x Family Competence	1	-0.94028	0.656	-1.43	0.155		
Group Potency x Family Competence	1	0.47025	0.83825	0.56	0.5761		
Intragroup Conflict x Family Competence	1	-0.17592	0.64895	-0.27	0.7869		

\* p<.05. \*\*p<.001.

The second hierarchical regression was run to test if the process variables mediated the relationship between family competence and customer satisfaction quintile. The first step was to enter the process variables. No significant relationships were found between the process variables and customer satisfaction quintile (see Table 13).

Table 13

*Customer Satisfaction Quintile (DV) Regression Analysis: Test for Mediators*

Analysis of Variance							
Source	DF	SS	MS	F Value	Pr > F	R-Square	Adj R-Square
Model	3	5.647	1.88233	1.12	0.3463	0.0355	0.0037
Parameter Estimates							
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t		
Intercept	1	6.84292	2.70421	2.53	0.0131		
Communication	1	-0.58866	0.37169	-1.58	0.1167		
Group Potency	1	0.12666	0.41658	0.3	0.7618		
Intragroup Conflict	1	-0.44877	0.3227	-1.39	0.1677		

\* p<.05. \*\*p<.001.

The next step was to enter the IV. No significant relationships were found between the process variables and family competence, and the customer satisfaction quintile (see Table 14).

Table 14

*Customer Satisfaction Quintile (DV) Regression Analysis: Family Competence & Process Variables*

Analysis of Variance							
Source	DF	SS	MS	F Value	Pr > F	R-Square	Adj R-Square
Model	4	5.70866	1.42717	0.84	0.5045	0.0359	-0.0069
Parameter Estimates							
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t		
Intercept	1	6.74127	2.77062	2.43	0.0169		
Communication	1	-0.58146	0.37559	-1.55	0.1251		
Group Potency	1	0.12409	0.41902	0.3	0.7678		
Intragroup Conflict	1	-0.46449	0.33477	-1.39	0.1687		
Family Competence	1	0.05636	0.29618	0.19	0.8495		

\* p<.05. \*\*p<.001.

The last step was to enter the cross product between family competence and each of the process variables. No significant relationships were found between the cross products and customer satisfaction quintile (see Table 15).



Table 15

*Customer Satisfaction Quintile (DV) Regression Analysis: Cross Products*

Analysis of Variance							
Source	DF	SS	MS	F Value	Pr > F	R-Square	Adj R-Square
Model	7	9.03853	1.29122	0.75	0.631	0.0569	-0.019
Parameter Estimates							
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t		
Intercept	1	21.11873	13.24182	1.59	0.1144		
Communication	1	-0.5886	1.91704	-0.31	0.7596		
Group Potency	1	-1.48052	2.10767	-0.7	0.4843		
Intragroup Conflict	1	-2.51526	1.5769	-1.6	0.1143		
Family Competence	1	-8.01759	7.23642	-1.11	0.2709		
Communication x Family Competence	1	-0.00109	1.01871	0	0.9992		
Group Potency x Family Competence	1	0.91393	1.12325	0.81	0.4181		
Intragroup Conflict x Family Competence	1	1.11055	0.83208	1.33	0.1855		

\*  $p < .05$ . \*\*  $p < .001$ .

The last hierarchical regression was to test if the process variables mediated the relationship between family competence and quality of work life. The first step was to enter the process variables. Table 16 reflects that communication ( $p = <.0001$ ), group potency ( $p = .0263$ ), and intragroup conflict ( $p = <.0001$ ) were all significantly related to quality of work life.

Table 16

*Quality of Life (DV) Regression Analysis: Test for Mediators*

Analysis of Variance							
Source	DF	SS	MS	F Value	Pr > F	R-Square	Adj R-Square
Model	3	21.44648	7.14883	78.01	<.0001**	0.7027	0.6937
Parameter Estimates							
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t		
Intercept	1	2.92002	0.61159	4.77	<.0001		
Communication	1	0.44684	0.08286	5.39	<.0001**		
Group Potency	1	0.21372	0.09477	2.26	0.0263*		
Intragroup Conflict	1	-0.39068	0.07407	-5.27	<.0001**		

\* p<.05. \*\*p<.001.

The next step was to enter the IV. Table 17 reflects that communication ( $p = <.0001$ ), group potency ( $p = .0234$ ), and intragroup conflict ( $p = <.0001$ ) were again all significantly related to the quality of work life. Family competence was not significantly related to quality of work life.

Table 17

*Quality of Work Life (DV) Regression Analysis: Family Competence & Process**Variables*

Analysis of Variance							
Source	DF	SS	MS	F Value	Pr > F	R-Square	Adj R-Square
Model	4	21.56139	5.39035	58.97	<.0001**	0.7065	0.6945
Parameter Estimates							
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t		
Intercept	1	3.06244	0.62387	4.91	<.0001		
Communication	1	0.43438	0.0835	5.2	<.0001**		
Group Potency	1	0.21815	0.09473	2.3	0.0234*		
Intragroup Conflict	1	-0.36322	0.07641	-4.83	<.0001**		
Family Competence	1	-0.07366	0.0657	-1.12	0.2649		

\*  $p \leq .05$ . \*\*  $p < .001$ .

The last step was to enter the cross product between family competence and each of the process variables. Table 18 reflects that *only* the cross product between family competence and group potency had a significant relationship with quality of work life ( $p = .0162$ ).

Table 18

*Quality of Work Life (DV) Regression Analysis: Cross Products*

Analysis of Variance							
Source	DF	SS	MS	F Value	Pr > F	R-Square	Adj R-Square
Model	7	22.86673	3.26688	40.56	<.0001**	0.7493	0.7308
Parameter Estimates							
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t		
Intercept	1	7.60756	2.70923	2.81	0.0061		
Communication	1	0.7041	0.34404	2.05	0.0435*		
Group Potency	1	-0.81085	0.42088	-1.93	0.057*		
Intragroup Conflict	1	-0.22838	0.32763	-0.7	0.4875		
Family Competence	1	-2.6061	1.4812	-1.76	0.0817		
Communication x Family Competence	1	-0.13223	0.1751	-0.76	0.452		
Group Potency x Family Competence	1	0.54793	0.22374	2.45	0.0162*		
Intragroup Conflict x Family Competence	1	-0.0488	0.17322	-0.28	0.7788		

\* p<.05. \*\*p<.001.

Entering the cross products into the regression analysis helped determine if the process variables mediated or moderated the relationship between the independent variable and the dependent variables. In fact, what was found was that communication and intragroup conflict mediated the relationship between family competence and quality of work life (see Table 17) and group potency *moderated* the relationship between family competence and quality of work life (see Table 18). Figure 4 further illustrates the

moderating relationship between family competence and quality of work life via group potency.

Figure 4

*Interaction between Family Competence and Group Potency*

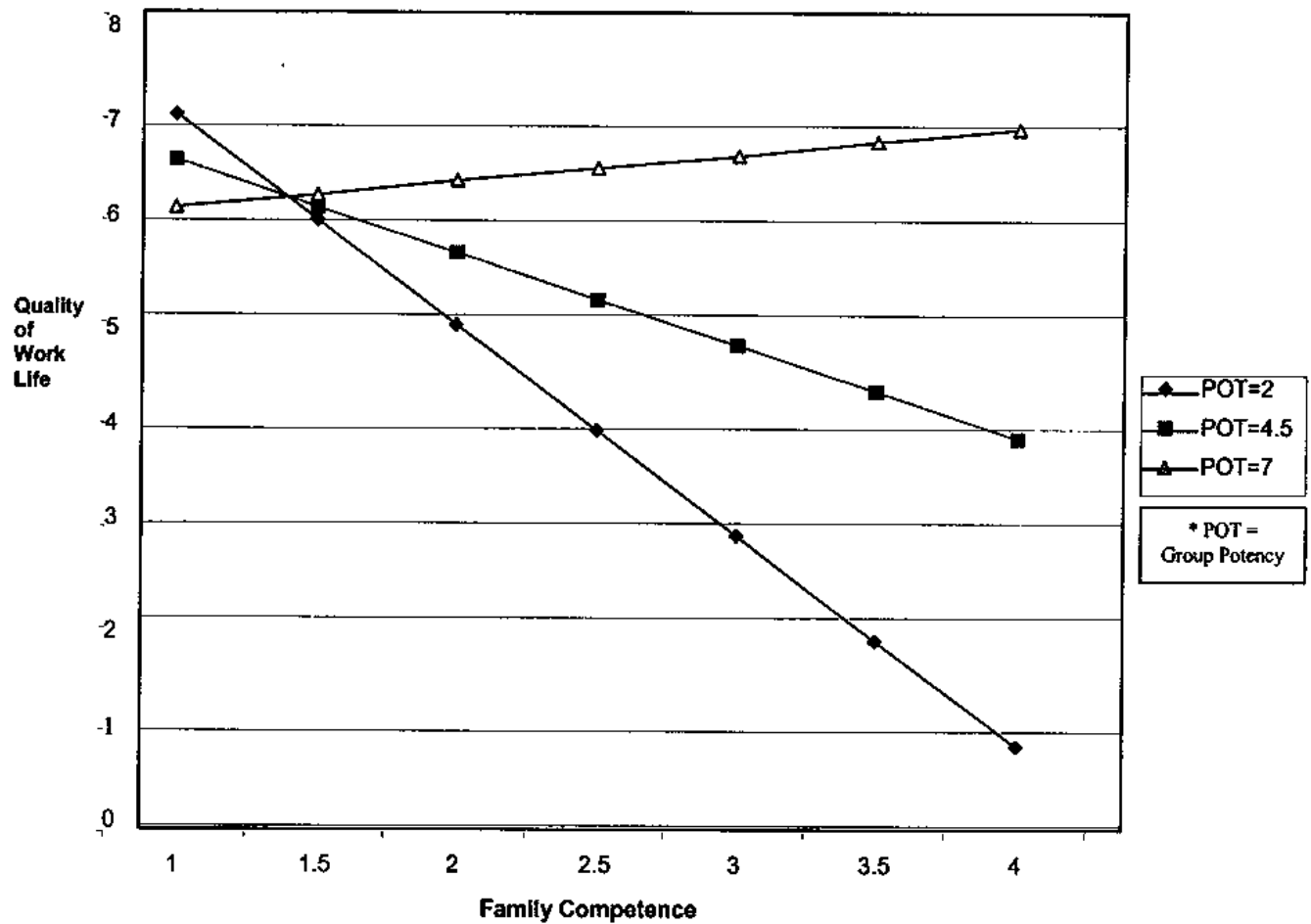


Figure 4 reflects that when the team's belief in itself to effectively complete its work (group potency) was low, it was necessary that the level of family competence be high in order for there to be a high level of quality of work life among team members. It also suggests that when the family competence level was low, then the group potency

level needed to be high in order for there to be a high level of quality of work life among team members.

In summary, the hierarchical regression analyses did not find support for *Hypotheses 6 and 7*. The process variables (communication, group potency, and intragroup conflict) did not mediate or moderate the relationship between family competence and production and customer satisfaction quintiles. There was found a significant relationship between communication and group potency, with production quintile (see Table 9). It is important to note that the significant relationship between communication and production quintile was positive. By way of reminder, the lower the production quintile ranking, the more productive the team, the higher the communication score, the more effective the team communication as defined by Campion et al., (1993; 1996) communication scale. In other words, teams with *lower* levels of communication and higher levels of group potency were more productive.

Partial support was found for *Hypothesis 8*. The process variables communication and intragroup conflict did mediate the relationship between family competence and quality of work life. The process variable group potency was found to *moderate* the relationship between family competence and quality of work life, not mediate it.

#### *Summary*

This chapter provided a summary of the varied analyses that were conducted on the data from 103 self-managed family work teams (466 individual participants) at a financial services company. A descriptive analysis of the data found the following:

- 25 different states and 81 different offices were represented.
- The size of teams ranged from three to 12 members.

- Approximately 30% of the teams consisted of three members and another 32% consisted of four members.
- Approximately 45% of the teams were comprised of financial advisors and customer associates and another 31% were comprised of financial advisors, investment advisors, and customer associates.
- The two most frequent combinations were two financial advisors and one customer associate (17 teams) and two financial advisors and two customer associates (13 teams).
- The mean age of the participants was 41 years old ( $SD = 12$ ).
- Fifty one percent of the participants were males, 49% were females.
- All but two teams were a combination of men and women.
- The average length of service at the company was 10 years ( $SD = 9.6$ ).
- The average team length of service was 10 years ( $SD = 4.2$ ).
- Approximately 48% of the teams consisted of parent-child relationships, 25% spousal relationships and 16% sibling relationships.
- The most frequent family combinations were father-son (37 teams) and husband-wife (25 teams).

A series of analyses were run to answer the following question: Is there a significant relationship between how well the family members that work together on a self-managed work team function together (family competence), and the overall work team's effectiveness as defined by productivity, customer satisfaction, and the quality of work life of team members? More specifically, if there was a significant relationship, was it

mediated by how well the team at large communicated, the confidence the team had in itself to effectively do its work (group potency), and the amount of intragroup conflict.

The data suggested that when a team had a high level of family competence it also had high levels of communication and group potency, and low levels of intragroup conflict. This same team had higher levels of quality of work life among team members than the teams who had lower levels of family competence, communication and group potency, and higher levels of intragroup conflict. Second, the data suggested that the relationship between family competence and quality of work life was mediated by communication and intragroup conflict, and moderated by group potency. Third, teams with *lower* levels of communication and higher levels of group potency were more productive than teams with higher levels of communication and lower levels of group potency. Fourth, family competence was not found to be significantly related to how productive the team was. Finally, family competence, group potency, communication, and intragroup conflict were not found to be significantly related to customer satisfaction.



## CHAPTER V

### Summary, Conclusions, and Recommendations

#### *Problem Restatement*

The primary purpose of this study was to fill a gap in the family systems literature by attempting to provide the much-needed empirical support for the application of family systems in non-clinical settings. Walsh (1994) said "although concepts from family systems theory and family therapy have improved our understanding of family businesses, a literature has not developed on either the theoretical extension of core concepts to families with businesses, or the testing of these concepts with original research on this subset of families" (p. 175). Neck et al. (1997) said, "the application of family therapy knowledge to work groups...has been sparse" (p. 246).

This study was unique in that it applied the Beavers family systems model (family competence) to self-managed work teams that reside in a financial service organization. The self-managed work teams in this study were comprised of family ("insiders") and non-family ("outsiders") members. This study was the *first* attempt to evaluate the relationship between the family and business systems in self-managed *family* work teams.

This study was also significant because of the scant amount of empirical research available involving self-managed work teams in service organizations in general (Spreitzer et al., 1999; Cohen et al., 1996; Griffin et al., 1994; Batt, 1999), and financial services organizations specifically (Manz et al., 1993; Campion et al., 1993; 1996). With few exceptions (Jong et al., 2001; Cohen & Ledford, 1994; Kirkman & Rosen, 1999; Manz et al., 1993) much of the self-managed work team research has not included a customer satisfaction or service outcome measure. Those studies that have used a

customer satisfaction or service outcome measure typically had a manager, employee (internal customer), or team member complete the measure. Few team effectiveness studies (Jong et al., 2001; Cohen & Ledford, 1994; Shea & Guzzo, 1987b) have included an objective measure based on the *external* customer's feedback or behavior.

Given the importance of customer satisfaction and loyalty (Goodstein & Butz, 1998; Heskett et al., 1994) to the self-managed work team and ultimately the service organization, it is imperative that self-managed work teams in service organizations can effectively provide high levels of customer service and quality. In order to help ensure that the teams meet this objective, more empirical research was needed to identify the characteristics that contribute to team effectiveness in service organizations.

This study attempted to answer the following questions: 1) Is there a relationship between how well the family members function together (family competence) and the effectiveness of the self-managed family work team in a service organization, and, 2) If there is a relationship, what family and team factors are related to self-managed work team effectiveness in a service organization?

This study hypothesized that when family members on the self-managed work team demonstrated high levels of family competence, there would be greater communication within the team as a whole, there would be less intragroup conflict, and the team would have more confidence in itself (group potency) to effectively perform their work; as compared to teams with lower levels of family competence. For teams where these characteristics were evidenced, they would also have higher levels of productivity and quality of work life, and more satisfied customers than teams that did not. There was evidence to support some of these hypotheses.

The rest of this chapter includes the following sections: the sample, a discussion of the results, the practical implications of the study, limitations of the study, and recommendations for future research.

### *Sample*

The sample consisted of 103 self-managed *family* work teams (466 individual participants) at a financial services company. The teams in this study had direct contact with external customers and were expected to provide high levels of customer service and quality, sell financial services and products, and attain new customers. The definition of a self-managed family work team was defined as "there must be at least one person on the self-managed work team who was related to a financial advisor via blood or marriage." Every team consisted of at least two family members and the balance was comprised of non-family members. Since the IV (family competence scale) was not designed to assess extended family relationships (e.g., in-laws, and cousins), only teams with parent-child, spousal, and/or sibling relationships were asked to participate in this study.

Approximately 78% of the teams in this study consisted of three (30%), four (32%), or five (16%) team members. Since all of the teams consisted of at least one financial advisor, this means that out of the 78% of teams that consisted of three, four or five team members, at least 40% of each of these teams were comprised of family members. Given the notable ratio (at least 40%) of family members to non-family members in 78% of the teams, this sample may have provided a good opportunity to detect a relationship (if one existed) between the family subsystem and the team system as a whole, versus a study that had 78% of the teams consisting of a 15% ratio of family

members to non-family members. Approximately 51% of the participants in this study were males and 49% were females, and all but two teams were a combination of males and females. Although this study did not control for the position on the team and gender, the sample as a whole was almost equally representative of each gender and this might have helped neutralize any gender bias versus a sample that was primarily representative of one gender. Lastly, the teams in this study resided in 25 different states and 81 different offices. Although the sample was not randomly selected, the teams represented varied markets (e.g., customer affluence), office cultures, and cities across the United States. Although researchers must always be cautious when generalizing the results of one study to other similar studies or samples, given the breadth of geographic representation of the sample in this study, the results may lend itself to a slightly more liberal application to other similar self-managed family work team effectiveness studies in a financial services organization.

#### *Discussion of Hypotheses*

The researcher suggested that two primary systems were present in each self-managed family work team: the system of the entire team and the family subsystem within the team. More specifically, the researcher postulated that the effectiveness of the team depended on the behaviors or characteristics (family competence) of the family subsystem and its relationship to the entire team system. (See Figure 1)

In order to test this postulation, the researcher used McGrath's (1964) input-process-output model to assess the affects of family competence on the self-managed family work team's effectiveness. This model was commonly used when evaluating team

effectiveness (Gladstein, 1984; Tannenbaum et al., 1992; Hackman, 1987; Guzzo & Shea, 1992; Campion et al., 1993). (See Figure 2)

The Beavers family systems model emphasized the concept of family competence. Family competence measures the family's ability or lack of ability, to communicate, coordinate, negotiate, problem solve, manage conflicts, and have confidence in itself (Beavers & Hampson, 1990; 2000; Hampson & Beavers, 1993; 1996). Therefore, it was hypothesized that there would be a relationship between the family subsystem's level of family competence and the overall effectiveness of the self-managed family work team system as it pertained to communication, intragroup conflict, and the confidence it had in itself to effectively do its work (group potency). In addition, the definition of a self-managed family work team in this study was "there must be at least one person on the self-managed work team who was related to a financial advisor via blood or marriage." The reason for this was because the researcher wanted to help ensure that the family subsystem on the team had the potential to significantly affect the team at large, which also included non-family members. Family systems theory posits that the behavior or change of behavior in one part of a system can have a "ripple effect" throughout the entire system (Goldenberg & Goldenberg, 1991). Since the financial advisor position on the team potentially has the most power and influence on the team, it was expected that the family subsystem's functioning, as defined by family competence, would have the potential to affect the team at large. The other positions on the team (financial advisor in training, investment associate, customer associate) more or less support the financial advisor position.

The researcher followed the guidelines recommended by Hackman (1990) to assess team effectiveness. Hackman (1990) suggested that in order to truly assess the effectiveness of a team one had to assess the following criteria: 1) the productivity of the team, 2) the customer's satisfaction with the output of the team, and 3) the effects of the work and team member interaction on the team members. Another reason why the researcher decided to follow these guidelines was because they have been used, at least in part, in prior team effectiveness research (Shea & Guzzo, 1987b; Kirkman & Rosen, 1999; Campion et al., 1993; 1996; Cohen & Ledford, 1994; Jong et al., 2001). The productivity and customer satisfaction measures in this study were based primarily on objective measures tracked by the financial services company. The customer satisfaction measure was both an objective (customer's behavior) and subjective (customer survey) measure. "The effects of the work and team member interaction on the team members" was assessed by a quality of work life measure that was defined by job and group satisfaction and commitment to the team. This measure was a self-report measure and was distributed to the teams by the researcher.

In order to answer the following questions: 1) Is there a relationship between how well the family members function together (family competence) and the effectiveness of the self-managed family work team in a service organization, and 2) if there is a relationship, what family and team factors are related to self-managed work team effectiveness in a service organization, the researcher established and tested the following eight hypotheses:

*Hypothesis # 1:* Family competence will be positively related to intragroup conflict and negatively related to communication, and group potency. Lower scores on

family competence are indicative of better functioning. Based on the Pearson correlation coefficients, there was support for this hypothesis. Family competence had a significant positive relationship with intragroup conflict ( $p < .001$ ) and a significant negative relationship with communication ( $p < .001$ ) and group potency ( $p < .05$ ). The results would suggest that teams with higher levels of family competence had lower levels of intragroup conflict and higher levels of communication and group potency than teams with lower levels of family competence. Since there was no prior research that factored in a family variable to self-managed work team effectiveness the researcher could not compare how these results aligned with prior team research. But the results seem to provide support to the postulation set forth by the researcher: 'there would be a relationship between the family subsystem's level of family competence and the overall effectiveness of the self-managed family work team system as it pertained to communication, intragroup conflict, and the confidence it had in itself to effectively do its work (group potency).' In addition, this finding seems to provide empirical support to the notion that there is a relationship between family functioning and the "health" of a family business. For example, it has been suggested that one reason why approximately 70% of family businesses are not able to survive the transition from the first generation to the next is because of an unhealthy (poor communication, unresolved conflict, sibling rivalry) family system (Ward, 1987).

*Hypothesis # 2: Communication and group potency will be negatively related to the production quintile and intragroup conflict will be positively related to the production quintile. Lower scores on the production quintile indicate a favorable outcome. Based on the hierarchical regression analysis, there was partial support for this hypothesis. The*

analysis found that there was a negative relationship between group potency and productivity ( $p < .05$ ) and a positive relationship between productivity and communication ( $p < .05$ ). No relationship was found between intragroup conflict and productivity.

In this study, team effectiveness was defined, in part, by how productive (the amount of commissions/fees generated by the financial advisors and their length of service) they were. The researcher hypothesized a relationship between the productivity of the team and the overall functioning of the self-managed family work team system as it pertained to communication, intragroup conflict, and the confidence it had in itself to effectively do its work (group potency). The reason for this was because prior research had found evidence to suggest a relationship between team effectiveness and team communication (Campion et al., 1993; 1996), intragroup conflict (Jehn, 1995; Jehn & Chatman, 2000) and group potency (Shea & Guzzo, 1987b; Kirkman & Rosen, 1999). In addition, the researcher postulated that if a team was able to effectively communicate and manage its conflict, and had confidence in itself to effectively do its work, than this would enable the team to organize itself in a way that would increase its ability to be more productive.

The results would suggest that teams with higher levels of group potency are more productive than teams with lower levels of group potency. This finding was consistent with prior team effectiveness research (Shea & Guzzo, 1987b; Kirkman & Rosen, 1999). The results would also suggest that teams with *lower* levels of communication are more productive than teams with higher levels of communication as defined by Campion's et al. (1996) communication scale. This finding was not consistent



with the researcher's hypothesis or the research findings of Campion et al. (1993; 1996).

There are a number of possible explanations for this finding.

The first possible explanation has to do with how productivity and team effectiveness were defined and measured in the Campion et al. (1993; 1996) studies versus this study. The study conducted by Campion et al. (1993) involved teams from one business unit in a financial organization. These teams provided clerical support (e.g., processing paperwork) for others in the company that sold products; they were nonexempt, administrative support jobs. Team effectiveness was defined in part by the team's productivity. Productivity was defined by how much work was completed by the team at the end of each week. A significant positive relationship was found between productivity and team communication. The study conducted by Campion et al. (1996) was conducted in the same financial services organization as the Campion et al. (1993) study, but this study involved teams comprised of exempt professional employees representative of four different business units (information systems, insurance, human resources and financial specialists) in the organization. Since the teams had diverse job responsibilities there was no clear-cut productivity measure to use to assess their productivity. So, the researchers measured the team's effectiveness by having the managers complete a scale evaluating the performance (e.g., quality of work done, productivity, completing work within budget, providing innovative products and services) of their respective teams, and the teams completed a similar scale to evaluate their own performance. Again a significant positive relationship was found between team effectiveness (productivity) and team communication.

In the Campion et al. (1993) study, productivity was defined by how much work the team completed at the end of each week. In the Campion et al. (1996) study, manager and team member perceptions determined effectiveness (productivity). In this study, productivity was defined by a measure that was objective and external to the team's (or manager) perceptions; the amount of commissions/fees generated by the financial advisors. The commissions/fees were dependent on an external variable – the customer. Unlike the teams in the Campion et al. (1993; 1996) studies, the teams in this study were subject to exogenous factors (e.g., market conditions, the customers' investing preferences, corporate pricing, advertising, and competition) that were outside their control.

A second possible explanation may be related to the fact that the teams in this study and each of the Campion et al. (1993; 1996) studies were responsible for accomplishing different tasks. The teams in this study were responsible for administrative tasks, customer service, and selling financial products and services. The teams in the Campion et al. (1993) study were responsible for administrative type tasks. The teams in the Campion et al. (1996) represented four different business units each having different responsibilities and tasks. Therefore, the communication and cooperation required to be effective for the teams may have been different given the nature of the tasks (Straus, 1999; Steiner, 1972; McGrath, 1984). According to McGrath (1984), most group tasks can be classified into the following categories: "generate" (brainstorming and planning), "choose" (problem solving, judgement, and decision making), "negotiate" (conflicting viewpoints and interests), and "execute" (physical movement, coordination, and dexterity). Each of these task typologies required different

processes that could be plotted along a two-dimensional continuum (Straus, 1999): the horizontal axis reflects a cognitive-behavioral continuum and the vertical axis represents a cooperative-conflictual continuum. Therefore, the information-systems teams in the Campion et al. (1996) study, the administrative teams in the Campion et al. (1993) study, and the teams in this study who were responsible for administration, customer service, and selling products and services may have had to use different processes to effectively complete their work. For example, given the varied complex responsibilities of the teams in this study, they may have had to spend more time brainstorming, planning, problem solving and making decisions than the teams in Campion et al. (1993) who were responsible for providing administrative support (processing paperwork) to employees of the company.

A third possible explanation may have to do with the fact that in the Campion et al. (1993; 1996) studies the performance or productivity of the *entire* team was assessed to determine their effectiveness. In this study, only the financial advisors on the team were given a productivity ranking in the company. Therefore, no matter how well the team communicated the productivity measure still was largely dependent on the performances of the financial advisor, external customer, and exogenous variables such as market conditions and the customers' investing preferences, for example.

A fourth possible explanation is that more productive or high performing teams may have higher expectations regarding team communication. So it is plausible that the more productive teams in this study may have had more effective team communication than the lower productive teams, but they rated themselves with a higher standard in mind and therefore had lower ratings.

A fifth possible explanation may have to do with the limitations of self-report measures. The communication scale (Campion et al., 1993) was completed by each team member and it attempted to assess their perceptions regarding team communication and cooperation. In addition, the communication scale did not measure the efficiency of the communication or the level of cooperation between team members. It is possible that their perceptions and expectations were not actually aligned with the actual communication behaviors of the team (e.g., team meetings, customer contact system, and team calendar). It may be that team members expected a greater degree of communication and cooperation, but in fact there was enough to be productive.

There are a number of possible explanations for why there was actually a positive relationship, versus a negative or no relationship, between communication and productivity (the lower the level of communication and cooperation, the more productive the team). The first might be that the more time team members spent communicating, the less time they had to be productive. This postulation seems to align with the findings of Yeatts and Hyten (1998), who studied ten self-managed work teams from three different settings: manufacturing, public service, and health care. "Our data showed that in highly coordinated teams, team members spent relatively little time determining who would do what and when, leaving more time for team members to do the work itself" (Yeatts & Hyten, 1998, p. 61). It is possible that the teams in this study who were more productive had more experience in their job and may have had more time working together so they no longer needed as much communication as the teams who were less productive.

The second possible explanation might have to do with the lack of task-interdependence (Shea & Guzzo, 1987b) among team members. For example, if team

members had little task-interdependence, then team communication might have less of a consequence on their productivity than a team that had high levels of task-interdependence and thereby the need for communication may have been greater. Similarly, one might posit that if there was little task-interdependence among team members, then spending time communicating or sharing information might actually detract from the team's productivity.

A third possible explanation, which is related to task-interdependence and task typology (especially regarding McGrath's (1984) "choose" task category), has to do with what Steiner (1972) has called "process loss." Process loss refers to the phenomenon when the quality of a group's decision is less than what would be expected given the knowledge and skills of the team members. Communication is typically seen as the process through which a group's decision is made. "The effect of the communication process is not always valenced in a positive direction. Communication may serve to detract from the quality of the decision that should have been made given knowledge of the potential of the group" (Salazar, 1995, p. 173). For example, Pavitt and Curtis (1994) suggest that as long as a group has a member that is competent enough to make a given decision, then the group will make the correct decision as evidenced by the following quote:

If the group has a competent member, it will get the correct answer. Interaction serves only a limited function. It simply allows a competent member to inform the other members of the correct solution. Interaction serves such a limited purpose that we can eliminate it. The group will have the same odds of getting the answer whether or not its group members interact. Essentially, the odds that a

group will find the correct solution are the same as the odds it contains a competent member. (p. 42)

To reiterate, in this study productivity was defined as the amount of commissions/fees generated by the financial advisor, only the financial advisor on a team was given a productivity ranking, and the financial advisors were the team members most competent to interact with the customers via sales generation. Therefore, one can posit that this type of decision-making task would not be interdependently linked to other team members, especially to non-financial advisor team members. In addition, as Pavitt and Curtis (1994) alluded to, it may be an inefficient use of time to for the financial advisor to communicate to the team regarding team productivity as defined in this study. This may help explain why the more productive teams in this study had lower communication scores than the lower productive teams.

Lastly, the other possible explanation for the positive relationship may have to do with the composition of the family work teams in this study: there were family and non-family members within each team. In the family business literature, family members have been referred to as "insiders" and non-family members as "outsiders." There might have been a perception from the "outsiders" that the family members were not as communicative with them as they were to one another. This perception combined with the team focused on being productive may have led the non-family members to provide lower ratings on team communication. The researcher conducted an informal survey in 1998 with approximately twenty of the family work teams in this financial services organization. Part of the survey involved interviewing the non-family members on each team to assess their feelings and experience of being the "outsiders" on the team. The

researcher learned that in many cases the “outsiders” did not feel part of the team when they were not included in team decisions, when the family members went to lunch together, or when family members would discuss their plans for after-work hours without including them. This anecdotal evidence might also lend support to the notion that the “outsiders” on the more productive teams perceived even less communication than the “outsiders” on the less productive teams. It is possible that the less productive teams spent more time communicating and by necessity involved the “outsiders” in team discussions and decisions.

Another possible reason for why the “outsiders” on the team may have felt there were low levels of communication and cooperation was because the family members on the team might have already developed complex, non-verbal, and almost predictive (e.g., read one another’s minds) communication patterns between them, given their long history together, and therefore the “apparent” perceived lack of communication and cooperation by the “outsiders” was actually a result of them not understanding the family members’ communication patterns, and/or the family members assumed that the “outsiders” experienced enough communication and cooperation to effectively do their work.

The results of this analysis would also suggest that there was no relationship between the amount of intragroup conflict and the team’s productivity. This finding is not consistent with the research findings of Jehn (1995), and Jehn and Chatman (2000). There are a number of possible explanations for this finding. The first possible explanation has to do with how productivity and team effectiveness was defined and measured in the Jehn (1995) and Jehn and Chatman (2000) studies versus this study. The study conducted by Jehn (1995) involved “work groups” and “management teams”

within a company. Individual performance appraisals, “departmental output reports,” and performance ratings by supervisors, managers and vice presidents determined the effectiveness (performance) of the teams. A significant relationship was found between the level of team conflict and team effectiveness. The teams in the Jehn and Chatman (2000) study consisted of “production units” and “management teams” in household goods moving company. Team effectiveness for the “production units” was measured by “departmental records provided and standardized by the firm’s quality developmental analysts” (p. 64). The management team’s effectiveness was measured by “supervisors’ (most often a vice president) ratings of performance, consisting of a 7-point Likert scale from 1 = ‘Not at all effective’ to 7 = ‘Very Effective’ (p. 64). A significant relationship was again found between the level of team conflict and team effectiveness.

To reiterate, in this study, productivity was defined by a measure that was objective and external to the team’s (or managers) perceptions; the amount of commissions/fees generated by the financial advisors. The commissions/fees were dependent on an external variable – the customer. Unlike the teams in the Jehn (1995) and Jehn and Chatman (2000) studies, the teams in this study were subject to exogenous factors (e.g., market conditions, the customers’ investing preferences, corporate pricing, advertising, competition) that were outside their control.

A second possible explanation may have to do with the fact that the teams in this study were not management teams and had diverse complex tasks that they were responsible for. The teams in the Jehn (1995) and Jehn and Chatman (2000) studies consisted of management teams and the tasks and responsibilities were different (e.g., “production units in a household goods moving company). Therefore, the results of these



studies may suggest that the relationship between team effectiveness (productivity) and team conflict may be mediated by the nature of the team's tasks (Straus, 1999; Steiner, 1972; McGrath, 1984).

Lastly, another possible explanation may have to do with the fact that in the Jehn (1995) and Jehn and Chatman (2000) studies the performance or productivity of the *entire* team was assessed to determine their effectiveness. In this study, only the financial advisors on the team were given a productivity ranking in the company. Therefore, no matter the amount of conflict within the team the productivity measure still was largely dependent on the performances of the financial advisor, external customer, and exogenous variables such as market conditions or the customers' investing preferences, for example.

*Hypothesis # 3:* Communication and group potency will be negatively related to the customer satisfaction quintile (lower scores indicate higher satisfaction) and intragroup conflict and will be positively related to the customer satisfaction quintile. Based on the hierarchical regression analysis, there was no support for this hypothesis. In this study, team effectiveness was defined in part by a customer satisfaction measure. This measure was based on customer satisfaction surveys and the customer's behavior (increasing or reducing assets managed by their financial advisor). The researcher hypothesized a relationship between customer satisfaction and the overall functioning of the self-managed family work team system as it pertained to communication, intragroup conflict, and the confidence it had in itself to effectively do its work (group potency). There were two primary reasons for this hypothesis. The first was because the researcher postulated that if a team was able to effectively communicate and manage its conflict,

and had confidence in itself to effectively do its work, than this would enable the team to organize itself in a way so as to deliver high levels of customer service and thereby produce more satisfied customers. The second reason was because prior research had found evidence to suggest a relationship between team effectiveness and customer satisfaction (service). For example, Manz et al. (1993) found a relationship between teams and high levels of quality and customer service. Shea and Guzzo (1987b) found evidence to suggest that the higher the level of group potency the higher the levels of internal and external customer service (based on the supervisor's perceptions). Kirkman and Rosen (1999) found a relationship between empowered (group potency was part of the empowerment definition) teams and customer service.

There are a number of possible explanations for the lack of relationship found between the process variables and customer satisfaction quintile. The first possible explanation might be because of the different ways customer satisfaction or service has been assessed in prior research versus this study. In prior team effectiveness research, customer satisfaction outcome measures were typically determined by a manager, employee (internal customer), or team member. In a relatively few team effectiveness studies (Jong et al., 2001; Cohen & Ledford, 1994; Shea & Guzzo, 1987b) was there a customer satisfaction measure used that at least in part was determined by an external customer. In this study, customer satisfaction was determined *solely* by the external customer's feedback and behavior.

In the Jong et al. (2001) study, the customer satisfaction measure was based on returned surveys from external customers that contained "closed and open-ended

questions.” A significant positive correlation between team commitment to service quality and customer perceived service quality (responsiveness and empathy) was found.

In the Cohen and Ledford (1994) study, the customer satisfaction measure was based on the number of customer complaints and on responses from customer surveys. This study did not find a significant difference in customer satisfaction ratings between self-managed work teams and traditional work teams. In the Shea and Guzzo (1987b) study, a survey measure was completed by the team and the team’s supervisor regarding customer service. A relationship was found between group potency and the teams’ and supervisor’s perceived level of customer service. An additional definition was used to measure customer satisfaction; increase in sales. A significant relationship was not found between the team’s performance and sales gain. The researchers concluded:

...changes in customer-service behaviors and not in sales figures may be more appropriate measure of group performance...Customer-service behaviors are substantially more controllable by group members than is the amount of money customers spend – group members can provide good service and not make a sale (p. 29).

This suggestion is consistent with the findings of Jong et al. (2001). To reiterate, in this study the customer satisfaction measure was determined by a combination of customer surveys and behaviors (increasing or reducing assets managed by their financial advisor). The lack of support for this hypothesis is relatively consistent with the findings of Cohen and Ledford (1994) and Shea and Guzzo (1987b).

A second possible explanation for the lack of relationship found is the fact that the process variables were self-report survey data and part of the customer satisfaction

quintile was a behavioral measure (increasing or reducing assets). It may be harder to find a significant relationship between survey data and the actual behavior of the customer and team, especially given the potential exogenous variables associated with customer satisfaction (e.g., the idiosyncratic nature of the customer's service expectations).

A third possible explanation may have to do with the fact that in prior team effectiveness research the customer satisfaction or service measure was based on the performance of the *entire* team. In this study, only the financial advisors on the team were given a customer satisfaction ranking in the company. Therefore, no matter how committed the team was to customer service or the level of customer-service behaviors evidenced by the team, the customer satisfaction measure was still largely dependent on the performances of the financial advisor, external customer, and exogenous variables such as market conditions or the customers' service expectations and experiences.

A fourth possible explanation for the lack of support found for this hypothesis may have to do with the idiosyncratic nature of customer service and satisfaction. The customer's expectations of customer service can vary from wanting to have a pleasant conversation about their family, to how errors or complaints are handled, to wanting the highest performance return on their investments. In addition, market conditions such as the volatile and declining stock market over the past two years can sour many customers. This may have also contributed to lower or mixed customer satisfaction ratings.

Lastly, another possible explanation for the lack of support for this hypothesis may have to do with the number of customers associated with each team. This study did not control for the number of customers associated with each team. As a result, this may

have contributed to this finding. For example, if a team had the capacity to provide high quality customer service to 100 customers, but they had 300 customers, then it was possible that the service quality for all customers suffered. Or, if a team chose to provide different levels of customer service to different customer segments (e.g., individuals with a net worth of more than five million dollars versus individuals with a net worth of less than one million dollars) then it may have been possible that one customer segment was much more satisfied than another customer segment. As a result, when the customer satisfaction measure for the entire team was compiled, it may have brought down the overall customer service rating.

*Hypothesis # 4:* Communication and group potency will have a positive relationship with quality of work life and intragroup conflict will have a negative relationship with quality of work life. Based on the hierarchical regression analysis, there was support for this hypothesis. The analysis found that there was a positive relationship between group potency ( $p < .05$ ), communication ( $p < .0001$ ) and quality of work life and a negative relationship between intragroup conflict ( $p < .0001$ .) and quality of work life. The results suggest that teams with higher levels of group potency and communication, and lower levels of intragroup conflict have higher levels of quality of work life among team members than teams that have the inverse characteristics.

This finding is consistent with prior team effectiveness research. Jehn and Chatman (2000) found that high levels of relationship and process conflict were negatively related to team member commitment, cohesiveness, and member satisfaction. Jehn (1995) found a negative relationship between high levels of task-related conflict and team member dissatisfaction and commitment. Jehn (1995) also found evidence that

suggested that high levels of relationship conflict had a pernicious effect on team member satisfaction and team commitment as evidenced by the following quote: "Personal problems that were considered petty were seen as detrimental to satisfaction and to the group's long-term survival" (p. 266). Campion et al. (1993; 1996) found a significant positive correlation between group potency, communication and employee satisfaction. Kirkman and Rosen (1999) found a significant positive relationship between group potency and job satisfaction and team commitment.

Another possible explanation for this finding was because the data used to test this hypothesis was based solely on self-report measures. It might be easier to find a significant relationship between survey data and survey data, versus survey data and a behavioral measure (e.g., the actual behavior of the customer and team).

*Hypothesis # 5:* Family competence (a lower score indicates better functioning) will have a positive relationship with production and customer satisfaction quintiles (a lower score is better) and a negative relationship with quality of work life. Based on the Pearson correlation coefficients, there was partial support for this hypothesis. A significant relationship was found between family competence and quality of work life, but not between family competence and productivity and customer satisfaction. This hypothesis was postulated in order to establish the framework for "*Hypotheses # 6 – 8*" which address the question of whether or not the process variables (communication, group potency, and intragroup conflict) acted as mediators between the IV and DVs. Baron and Kenny (1986) suggested that in order to determine if a particular variable functions as a mediator, the following conditions must be met: 1) there must be a significant relationship between the independent variable and the presumed mediating

variable (Path a), 2) the presumed mediating variable must have a significant relationship with the dependent variable (Path b), and 3) when Paths a and b are controlled, there is not a significant relationship between the IV and the DV (Path c) that might have otherwise existed.

There was not a significant relationship found between family competence and the production and customer satisfaction quintiles. There are a number of possible explanations for this finding. The first possible explanation for why a relationship was not found is because as the researcher hypothesized, high levels of family competence would be related to team productivity and customer satisfaction via significant relationships with the process variables (see "*Hypothesis # 1*" above). It was hypothesized that high levels of communication and group potency and low levels of intragroup conflict would enable the team to organize itself in a way that would increase its ability to be more productive and produce more satisfied customers. As mentioned earlier in this chapter there is prior team effectiveness research that would give support to this hypothesis (Campion et al., 1993; 1996; Jehn, 1995; Jehn & Chatman, 2000; Shea & Guzzo, 1987b; Kirkman & Rosen, 1999; Manz et al., 1993; Jong et al., 2001).

Evidence was found to suggest a relationship between communication, group potency, and productivity (see "*Hypothesis # 2*" above). No support was found for a relationship between communication, group potency, intragroup conflict and customer satisfaction (see "*Hypothesis # 3*" above). Therefore, no relationship would be found either directly or indirectly, between family competence and customer satisfaction.

Another possible explanation for the lack of relationship between family competence and the production and customer satisfaction quintiles is because the family

competence scale was a self-report instrument subject to the team members' perceptions. Whereby the productivity and customer satisfaction measures were predominantly objective measures (commissions/fees generated and customer behavior). As discussed in "*Hypotheses # 2 & 3*", there were many exogenous variables that may have contributed to the productivity and customer satisfaction measures, making it more difficult to find a relationship to family competence.

There was a significant negative relationship found between family competence and quality of work life ( $p < .001$ ). (By way of reminder, a lower score on the family competence scale was better and a higher score on the quality of work life scale was better.) This finding would suggest that team's with higher levels of family competence would have higher levels of quality of work life among its team members. To reiterate, this relationship was hypothesized because the researcher postulated that family competence would have significant relationships with the process variables (see "*Hypothesis # 1*" above) and the process variables would in turn have a significant relationship to quality of work life (see "*Hypothesis # 4*" above). There was evidence to support this hypothesis.

Another possible explanation for why this relationship was found is because unlike the production and customer satisfaction measures, the quality of work life scale was a self-report instrument. This may have controlled for the exogenous variables that may have been factored into the production and customer satisfaction measures.

*Hypothesis # 6:* The relationship between family competence and the production quintile will be mediated by each of the process variables (communication, group potency, and intragroup conflict). According to Baron and Kenny (1986), since a



significant relationship was not found between family competence (IV) and production quintile (DV) (see "*Hypothesis # 5*" above), the process variables could not mediate a relationship that does not exist. There was no support found for this hypothesis.

*Hypothesis # 7:* The relationship between family competence and the customer satisfaction quintile will be mediated by each of the process variables (communication, group potency, and intragroup conflict). According to Baron and Kenny (1986), since a significant relationship was not found between family competence (IV) and the customer satisfaction quintile (DV) (see "*Hypothesis # 5*" above), the process variables could not mediate a relationship that does not exist. There was no support found for this hypothesis.

*Hypothesis # 8:* The relationship between family competence and quality of work life will be mediated by each of the process variables (communication, group potency, and intragroup conflict). Based on the hierarchical regression analyses, there was partial support for this hypothesis. The researcher hypothesized that family competence would have a significant relationship to the process variables (see "*Hypothesis # 1*" above) because family competence measures the family's ability or lack of ability, to communicate, coordinate, negotiate, problem solve, manage conflicts, and have confidence in itself (Beavers & Hampson, 1990; 2000; Hampson & Beavers, 1993; 1996). Therefore, it was postulated that there would be a relationship between the family subsystem's level of family competence and the overall functioning of the self-managed family work team system as it pertained to communication, intragroup conflict, and the confidence it had in itself to effectively do its work (group potency). There was evidence to support this hypothesis. It was also hypothesized that the process variables would

have a significant relationship to quality of work life (see "*Hypothesis # 4*" above). There was evidence to support this hypothesis as well.

According to Baron and Kenny (1986), in order to determine if the process variables acted as a mediator, family competence should no longer have a significant relationship to quality of work life after factoring in the process variables in the regression equation. There was evidence found to support the notion that the process variables mediated the relationship between family competence and quality of work life.

In order to ensure that the process variables mediated, not moderated, the relationship between family competence and quality of work life, the cross products were entered in the regression equation. The evidence still supported the notion that communication and intragroup conflict mediated the relationship between family competence and quality of work life, but the group potency cross product was found to have a significant relationship to quality of work life. According to Baron and Kenny (1986), a variable acts as a moderator and not as a mediator when the cross product (interaction) between the IV and the process variables is found to be significant.

More specifically, there was evidence found to suggest that when the team's belief in itself to effectively complete its work (group potency) was low, it was necessary that the level of family competence be high in order for there to be a high level of quality of work life among team members. It also suggested that when the family competence level was low, then the group potency level needed to be high in order for there to be a high level of quality of work life among team members.

One possible explanation for this finding is that there might be a reciprocal relationship between the family subsystem and the non-family subsystem on the team at

large. Since a significant relationship was found between family competence and group potency (see "*Hypothesis # 1*" above), group potency and quality of work life (see "*Hypothesis # 4*" above), and family competence and quality of work life (see "*Hypothesis # 5*" above), the evidence would suggest that if the family subsystem on the team had a low level of family competence (therefore a low level of group potency) it might also have a low level of quality of work life, unless the non-family subsystem on the team had a high level of group potency, and visa-versa.

Another possible explanation for this finding might be that the variable group potency had a significant effect on quality of work life, whether the group potency perception or belief was derived from one's familial relationships (family competence) or from other experiences. The adjusted R-square for the regression analysis that included all three-process variables and quality of work life was .69. This suggests that approximately 69% of the variance can be explained by the process variables for the quality of work life measure in this study. This result might also provide further support to the notion that group potency has a potent effect on quality of work life. This notion is further supported by the numerous studies that consistently found group potency as a significant variable in prior team (or group) research (Cohen et al., 1996; Campion, 1993:1996; Shea & Guzzo, 1987b; Kirkman & Rosen, 1999; Gibson et al., 2000; Guzzo et al., 1993; Cohen & Denison, 1990; Saavedra, 1990).

The researcher began this chapter by asking the following questions: 1) Is there a relationship between how well the family members function together (family competence) and the effectiveness of the self-managed family work team in a service organization, and 2) if there is a relationship, what family and team factors are related to

self-managed work team effectiveness in a service organization? After a critical review of the results, the researcher will now attempt to answer these questions. From a theoretical perspective, there was partial support for the postulation that a family subsystem could significantly affect the entire team system and visa versa as evidenced by the moderator variable, group potency. Although there was no relationship found between the family's level of family competence and the team's productivity or customer satisfaction measures, there was a significant relationship found between family competence and the quality of work life for all team members. Therefore, the answer to the first question was yes, but only as it related to quality of work life. In response to the second question, there were three significant findings and two of them were discovered serendipitously.

The first finding, which was hypothesized by the researcher, was that there were significant relationships found between the family's level of family competence and each of the process variables (group potency, intragroup conflict, and communication), each of the process variables and quality of work life, and between family competence and quality of work life. The second finding, which was indirectly hypothesized by the researcher, was that communication and group potency were significantly related to productivity. The researcher postulated that communication and group potency would mediate the relationship between family competence and productivity. But instead, family competence was not significantly related to team productivity. The third finding, which was not hypothesized by the researcher, was that group potency *moderated*, not mediated the relationship between family competence and quality of work life.

Therefore, the answer to the second question was that there seemed to be evidence to

suggest that family competence, intragroup conflict, communication, and group potency were the factors that were significantly related to quality of work life. In addition, communication and group potency were the factors that were significantly related to team productivity.

#### *Practical Implications of the Study*

The findings of this research have practical implications for those who are interested in applying a family systems model to non-clinical settings. First, this study found evidence to suggest that there existed a significant relationship between the Beavers' family system construct of family competence and the quality of work life of members (family and non-family) who worked together on a self-managed family work team. In addition, there was evidence to suggest that family competence was significantly related to team or group processes such as communication, intragroup conflict, and group potency. As a result, family therapists or consultants may want to use the family competence scale (Beavers & Hampson, 1990) as a diagnostic tool when working with families who work together in business. Based on the families' level of family competence it may help the family therapist or consultant determine his or her intervention when working with families in business. Beavers and Hampson (1990) drew a parallel between the work of an organizational consultant and a family therapist as evidenced in the following quotation: "Akin to the experienced organizational consultant, who recognizes that he or she has to assess the structure and function of the company he is entering in order to decide how to proceed effectively, the family therapist must make decisions regarding initial style and strategy" (p. 69).

A second practical implication has to do with the effects of quality of work life on productivity and the "bottom-line" of the organization. Prior research has found evidence to suggest that low levels of quality of work life have a negative affect on team morale (Jehn, 1997) and productivity (Gladstein, 1984), and contribute to higher rates of employee absenteeism (Cohen & Ledford, 1994; Cohen et al., 1996) resulting in greater dollars lost from the organization. In addition, Heskett et al. (1994) posited in their service-profit chain model, that customer service was ultimately related to the profitability of the organization. The first couple of links in their service-profit chain were "employee satisfaction" and "employee retention." Heskett et al., (1994) illustrated the affects of losing a valued broker at a securities firm in the following quotation: "Conservatively estimated, it takes nearly five years for a broker to rebuild relationships with customers that can return \$1 million per year in commission to the brokerage house – a cumulative loss of at least \$2.5 million in commissions" (p. 29). Given what might be at stake for teams and ultimately organizations when there are low levels of quality of work life among its employees, it may be advantageous for management to proactively assess the quality of work life among their employees and provide any necessary interventions (e.g., training, rewards, and professional development meetings) to improve the employee's quality of work life.

Anecdotally speaking, the researcher spoke to someone in the financial services organization and learned that the "financial advisors in training" who were part of a team were twice as likely to stay employed at the organization than those not associated with a team. As a result, management has encouraged that all new "financial advisors in training" should be part of a team.

A third practical implication of this study has to do with the fact that approximately 70% of family businesses are not able to survive the transition from the first generation to the next. One of the reasons suggested for this trend is because of unhealthy (poor communication, unresolved conflict, sibling rivalry) family systems (Ward, 1987). If family therapists and consultants were able to assess the family's level of family competence, they might be able to provide an intervention that could increase the success of transitioning the family business from the first generation to the next.

Fourth, because of the growing trend in family businesses - moving away from the "single-owner manager" model and shifting to a family-team management model (Fischetti, 1999; Aronoff, 1998) - and how little information was available that provided insight into the characteristics of successful family work teams (Fischetti, 1999), the findings of this study may begin to shed some light. Self-managed work teams and family teams who manage family businesses are similar in that they are comprised of members who share common goals, are identified and identifiable as a social unit in an organization (Cohen & Bailey, 1997; Guzzo & Dickson, 1996; Alderfer, 1977), and are autonomous in that they either have (family team) or are given (self-managed work team) significant authority to carry out their work. Therefore, one might postulate that since family competence was significantly related to intragroup conflict, communication, group potency, and ultimately quality of work life in self-managed family work teams, then these findings might provide some insight into the variables associated with family-team management models in family businesses. This postulation would ultimately have to be tested within a family business setting to assess its credibility and relevance.

Fifth, even though the researcher did not find a significant finding between family competence and productivity, the study did find a negative relationship between communication and productivity, and a positive relationship between group potency and productivity. In other words, teams with lower levels of communication and higher levels of group potency were more productive than teams with the inverse characteristics. These findings give the consultant specific areas of group process to focus on in order to positively affect productivity. In addition, to positively affect the "bottom-line" of a company, consultants and trainers can design training modules that focus on creating efficient methods of communication based on the task at hand, and/or increase the team's level of group potency by teaching them how to think different or by putting them through simulations that could build up their confidence.

Lastly, another practical implication of this research is that it may enable family therapists to expand their practices beyond a clinical setting and into a business environment (Leahy, 1996). The findings in this study may give them more credibility in a business setting. Consultants who consult to family businesses are aware of the fact that the health of the family system can have a positive or negative affect on the business as evidenced by the following quotations: "We believe that a strong, healthy family enhances the possibility for a strong, healthy business, and visa versa" (Aronoff et al., 1997, p. 3). "In family businesses, what is personal and what is business may be inseparably combined in an intense emotional interrelationship. When conflicts are severe, both the health of the family and the sustainability of the business may be at stake" (Bettis, 1997, p. 12). Therefore, it might be easier for a family therapist to be "accepted" into a business environment when they can not only highlight their experience



working with families in a clinical setting, but also leverage the empirical research showing a relationship between family systems theory and self-managed family work teams.

### *Limitations*

This study had a number of limitations that may affect the ability to generalize the results to other teams or organizations. First, the self-managed family work teams only resided in one financial service organization. The results might be different if it involved other financial service organizations or other types of organizational settings because teams in other organizations may be responsible for different tasks and may be rewarded for different behaviors thereby resulting in different outcomes. Second, although the sample did have representation from various states and offices across the United States, the selection of the teams did not result from random sampling. As a result, the researcher cannot be certain that the sample in this study was actually representative of all the self-managed family work teams in the organization. Third, since the self-managed family work teams in this study resided only in the United States, one cannot assume that teams that reside in other countries or across countries would reflect the same results. Teams in other countries or across countries may have different customs, reward systems, and economic milieus that could affect the outcomes. Fourth, this research study provided a snapshot of the teams at one moment in time. As the Beavers systems model, work team research, and family life-cycle literature suggest, families and teams can progress or regress over time, therefore the results could in fact change depending on the time of the snapshot taken. Fifth, this study assessed the relationship between the family subsystem and entire team system. It did not assess the relationship between the

different types of family subsystems represented on the teams (e.g., father-son vs. husband-wife) and the entire team system. The dynamics between different family compositions may be different thereby resulting in different outcomes. Sixth, due to the correlational design of this study, casual conclusions cannot be drawn. This is especially relevant because the family, team, and effectiveness measures may have a reciprocal relationship. For example, a more productive team may contribute to higher levels of group potency and lower levels of intragroup conflict. Seventh, this study did not control for other variables that have been found relevant in prior team effectiveness research. For example, task-interdependence (Shea & Guzzo, 1987b), task typology (Straus, 1999; Steiner, 1972; McGrath, 1984), or commitment to service quality (Jong et al., 2001). Assessing the task-interdependence, especially as it related to task-typology, between team members may have provided further insight into their communication needs. Assessing the team's commitment to service quality may have provided greater understanding into the relationship of customer service and customer satisfaction. Eighth, 78% of the teams in this study consisted of three, four, or five team members. The results may have been different if 78% of the teams in this study consisted of ten or more team members because it may have been harder to detect a relationship (if one existed) between the family subsystem and the entire team system, all things being equal. Ninth, this study was conducted during a major downturn in the financial markets. This may have affected the outcome measures in this study, especially customer satisfaction. Lastly, the independent variable, process variables, and one of three dependent variables (quality of work life) were based on self-report measures.

Self-report measures are not always the most reliable way to measure because of the possibility of individuals interpreting questions differently or trying to give a more socially desirable response. Another potential limitation as a result of using self-report measures in this study is the issue of common method variance. Common method variance is called into question when two or more variables are collected using the same method (e.g., paper-and-pencil response format) and from the same source (Fiske, 1982; Podsakoff & Organ, 1986). It has been suggested that this common method of collecting data can lead to inflated correlations. More specifically, the potential concern is that the relationships found between variables may be the result of the measurement method rather than the hypothesized relationships. In this study that IV, process variables, and one of the DVs (quality of work life) were collected from the same questionnaire and were found to be significantly correlated. Nunnally and Bernstein (1994) suggest that one way to ameliorate common method variance effects is by using reverse coding so that one end of a Likert scale does not always equal the "best" or "worst" score. Due to the nature of the self-report scales in this study, the conflict and family competence scales had a different Likert scale in both range (1-5 versus 1-7) and direction (on some scales "1" was the "best" score and on the others "1" was the "worst" score) than the other self-report scales. In addition, one of the items on the quality of work life scale had to be reverse-scored. The two remaining DVs (productivity and customer satisfaction) were not self-report measures and were gathered from the financial service organization.

Although this study differed from other studies in that aggregate rather than individual self-report scores were used, the common method variance may still be a concern. Having said this, there is reason to believe that if common method variance did

in fact inflate correlations between the self-report variables in this study, it still may not be the only reason for the relationships found. For example, the R<sup>2</sup> value for the process variables and quality of work life regression analysis was .70, and communication and conflict were significantly related to quality of work life at the .001 alpha level. This may suggest that even if the correlations were inflated due to common method variance there may still exist significant relationships between these variables given the robustness of the R<sup>2</sup> and alpha values.

Another reason to support this postulation is because of the fact that even though family competence was found to be significantly related to the process variables and quality of work life via Pearson correlations, family competence was *not* found to be significantly correlated (not even at a .10 alpha level) to quality of work life via the regression analysis. Podsakoff and Organ (1986) suggest that if a substantial amount of common method variance exists, then the variables involved would function as a single factor. The researcher has already pointed out that family competence did not have a significant relationship to quality of work life when entered into the regression analysis with the process variables and quality of work life. In addition, when family competence and the process variables were entered into a regression analysis with productivity, family competence and intragroup conflict were not found to have significant relationships with productivity. Maybe even more importantly, communication and group potency *were* found to have significant relationships with productivity; to reiterate, productivity was an objective, behavioral outcome measure. Therefore, there was evidence found to support a significant relationship between self-report and behavioral outcome measures.

Lastly, there have been studies conducted that have found evidence to suggest that the problem of common method variance is not as much of a problem as one may think (Kline, T.J.B., Sulsky, L.M., & Rever-Moriyama, S.D., 2000; Glick, Jenkins, & Gupta, 1986; Spector, 1987). For example, Spector (1987) stated: "The study found little evidence for method variance as a biasing agent and concluded that the problem may be mythical. In the very few cases where method variance was detected, it tended to have a statistically insignificant effect" (p. 438).

#### *Future Research Recommendations*

This study did not find a significant relationship between family competence and team productivity or customer satisfaction. Since the productivity and customer satisfaction measures in this study were based primarily on the financial advisor, it may be advantageous to expand this type of study to include team effectiveness measures that assess the entire team. Also, it may be advantageous to use both objective and subjective measures to assess productivity and customer satisfaction. Lastly, the use of in-depth interviews of team members and customers may provide further insight into the relationship between the variables assessed in this study.

This study did not control for other variables that have been found relevant in prior team effectiveness research such as task-interdependence (Shea & Guzzo, 1987b) and task typology (Straus, 1999; Steiner, 1972; McGrath, 1984). Assessing the task-interdependence, especially as it related to task typology, between team members may have provided further insight to why lower levels of communication as defined by Campion's et al. (1993) communication scale, was significantly related to team productivity. To reiterate, if team members had little task-interdependence, then team

communication might have less of a consequence on their productivity than a team that had high levels of task-interdependence and thereby the need for communication may be greater. Similarly, one might posit that if there was little task-interdependence among team members, then spending time communicating or sharing information might actually detract from the team's productivity. This may be indicative of the findings in this study.

Future studies should control for the type of family composition on the team. For example, the dynamics of a husband-wife subsystem versus a parent-child subsystem might be different, which in turn may impact the team's effectiveness. It may also be advantageous to conduct this type of study with extended family members (e.g., cousins) who work together in business. This type of study may provide the much needed insight for family teams that manage a family business (Fischetti, 1999).

Since families and teams change over time it may be advantageous to conduct a study that controlled for the team's stage of development (Tuckman, 1965) and/or the life cycle stage of the family members on the team (Goldenberg & Goldenberg, 1991; Davis & Tagiuri, 1996). The reason for this is because Tuckman has found evidence to suggest that teams go through various stages of development. Each stage of development requires certain "tasks" to be accomplished in order for the team to move onto the next stage. For example, Tuckman's second stage is referred to as the "storming" stage. This is a time when the team may experience their highest level of conflict. If they do not manage their conflict effectively, they may get stuck in this stage or break up the team. Similarly, families go through various stages and each stage requires certain "tasks" to be accomplished, if not they too may get stuck at this stage. For example, parents have to be willing to allow their adult child to differentiate (differentiation of self) from them as

well as the adult child has to be willing to accept the responsibilities of being an adult (Bowen, 1978). Otherwise, the parent-child relationship may stay in a fused or enmeshed state, leading to high levels of anxiety in the family system. This in turn may have a negative affect on the parent-child relationship, and based on the findings of this study, a potentially negative affect on the quality of work life of team members.

Given the importance of customer satisfaction and loyalty (Goodstein & Butz, 1998; Heskett et al., 1994) to the self-managed family work team and ultimately the service organization, more empirical research is needed to help identify what family and/or team factors contribute to high levels of customer satisfaction. This study did not find evidence to suggest a relationship between the IV or process variables and the customer satisfaction measure. In addition to using in-depth interviews of team members and customers to better understand the relationship to customer satisfaction, as stated above, it may also be advantageous to control for such variables as consistent customer service standards and customer segmentations across all teams. In addition, based on the finding of the Jong et al. (2001) study (positive correlation between team commitment to service quality and customer perceived service quality) it would make sense to control for the team's commitment to service quality. Future studies should use outcome measures that distinguish between customer-service behaviors which are much more in the control of the team members, and customer behaviors due to the myriad of potential exogenous variables related to customer behavior (Shea & Guzzo, 1987b).

Lastly, future self-managed family team effectiveness research should address and control for the very important variables of gender (Dumas, 1996; Marshack, 1994, Knudson-Martin, 2000), leadership styles (Dyer, 1986; Sorenson, 2000), and ethnicity

(McGoldrick, Pearce, & Giordano, 1982; Dannhaeuser, 1996; Lansberg & Perrow, 1996; Hurd, Moore, & Rogers, 1995). The significance and complexity of each of these variables could justify a study unto themselves.

### *Conclusion*

A series of analyses were run to answer the following question: Is there a significant relationship between how the family members who work together on a self-managed work team function together (family competence), and the overall work team's effectiveness as defined by productivity, customer satisfaction, and the quality of work life of team members? More specifically, if there was a significant relationship, was it mediated by how well the team at large communicated, the confidence the team had in itself to effectively do its work (group potency), and the amount of intragroup conflict.

The data suggested that when a team had a high level of family competence it also had high levels of communication and group potency, and low levels of intragroup conflict. This same team had higher levels of quality of work life among team members than the teams who had lower levels of family competence, communication and group potency, and higher levels of intragroup conflict. Second, the data suggested that the relationship between family competence and quality of work life was mediated by communication and intragroup conflict, and was moderated by group potency. Third, teams with lower levels of communication and higher levels of group potency were more productive than teams with higher levels of communication and lower levels of group potency. Fourth, family competence was not found to be significantly related to how productive the team was. Finally, family competence, group potency, communication, and intragroup conflict were not found significantly related to customer satisfaction.



Based on the breadth of geographic representation, the almost equal representation of males and females, 78% of the teams ranging from three to five team members, and the primary focus on three types of family compositions (parent-child, spousal, and sibling), the family therapist, business consultant, and self-managed work team researcher can feel relatively comfortable making inferences about this sample, even with all its limitations. It appeared to be a population that was appropriately suited for this study's research design.

This study was the first attempt to empirically bridge the gap between family systems and self-managed work teams in service organizations. It appears that this study was successful in beginning to build a bridge between family systems and the work team literature. Even though there were no significant relationships found between family competence, the process variables, and customer satisfaction, the study provided both the family therapist, business consultant, and self-managed work team researcher with greater insight into family's that work together in business, especially as it related to their quality of work life. This study may have provided a tool to both the family therapist and business consultant who consult to families who work together in business. They can use the family competence scale (Beavers & Hampson, 1990) to diagnose the family's level of "health" and then determine the intervention needed to meet the needs of the family and business.

In addition, this study may have provided the much-needed insight into which factors contribute to effective family work teams. This is particularly important given the trend in family businesses related to how they are managed and the apparent fragile stage of business succession. Lastly, based on the important financial relationship

between the quality of work life of employees and the organization's "bottom-line" it would seem imperative that management proactively assesses the quality of work life of their employees.

In closing, the Beavers family systems model was used in this study to evaluate the relationship between family competence and team effectiveness in self-managed *family* work teams. The rationale for this study was built on the presupposition that a systems paradigm can be used to understand the relationship between family and business systems. More specifically, the researcher wanted to show (and did) that the wealth of family systems research and knowledge is not limited to a clinical setting, but in fact can be applied to business settings via work teams.

Since this was the first attempt at applying a family systems concept to work team effectiveness research, the researcher took on a major endeavor. There was no former research to build upon and the researcher had to navigate through three fields of study (family systems, family businesses, and self-managed work teams) to select the variables for this study. This was not an easy task since many variables had been found to contribute to family health and work team effectiveness as evidenced by the following quote; "[I]t is important to recognize that there is a myriad of factors that affect groups in organizations, and member interdependence is only one component of group effectiveness" (Straus, 1999, p. 175). Other examples include:

We found no single quality that optimally functioning families demonstrated and the less fortunate families somehow missed. On the contrary, optimally functioning or competent families appeared to be so because of the presence and interrelationship of a number of variables. (Lewis et al., 1976, p. 205)

And:

Influences on group effectiveness do not come in separate, easily distinguished packages...To try to sort out the effects of each possible determinant of team effectiveness can lead to the conclusion that no single factor has a very powerful effect...Moreover, there are many different ways a group can behave and still perform work well, and even more ways to be nonproductive...There is no single performance strategy that will work equally well for different groups – even groups that have identical official tasks...Rather than attempting to manage group behavior in real time, leaders might better spend their energies creating contexts that increase the likelihood (but not guarantee) that teams will prosper – taking care to leave ample room for groups to develop their own unique behavioral styles and performance strategies. For researchers, these assumptions challenge traditional models of group effectiveness in which specific causes are tightly linked to performance outcomes. They invite an alternative kind of theorizing—one that is more congruent with the facts of life in social systems. (Hackman, 1990, pp. 8-9)

Nonetheless, given the great challenge of designing this study the researcher was able to identify variables that were found related. This may in part have to do with building upon the prior research found in three different fields of study, but also it may have to do with the fact that a (family) systems paradigm was at the foundation of this study. This aligns with the recommendation by Hackman (1990) that it may be more advantageous to use a social systems paradigm to understand team effectiveness than a linear or reductionistic model.

Over 25 years ago the pioneering work of Lewis et al. (1976) suggested that family competence demonstrated in small tasks (e.g., negotiation or conflict resolution) is indicative of family competence in larger tasks (e.g., managing a family). In this study, there was evidence to suggest that the more "competent" the family members are that work together in business, the more effective the team could be (e.g., quality of work life). This researcher hopes that 25 years from now, the findings from this study would have provided a foundation upon which greater insight into family-work team effectiveness was found and understood.

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## APPENDIX A

**This packet is for the *FAMILY MEMBERS* on the team.**

Thank you for participating in this study regarding *family work team effectiveness*. This study involves you providing some demographic information and completing a questionnaire. In addition, I will obtain your team's production and customer satisfaction quintile rankings from the Advisory website for the purpose of assessing team effectiveness.

**Your responses to the attached questionnaire will be kept strictly confidential. Under *NO* circumstances will your responses be shown to anyone at this company or anywhere else. Neither your identity, your team's identity, nor this company's identity will be revealed in any reporting of this study, either verbally or in writing, because I will be reporting only aggregate data.** All questionnaires will be coded with a three-digit number indicating the team as well as a letter code indicating different team members. Only I will know which team members belong to which team based on a master list. This list is to be used for the sole purpose of tracking and reporting. The questionnaires and master list will be stored separately in my home office in a locked file cabinet for a period of three years, after which they will be destroyed by shredding.

It will take approximately 25 minutes to complete this questionnaire. The questionnaire consists of questions pertaining to family and team functioning, and work satisfaction. Please read the instructions on the questionnaire carefully and take your time in answering the questions. The honesty and accuracy of your responses will determine the potential value of this study. You may ask questions about this study at anytime. You have the right to discontinue your participation at any time. If you should exercise this option, you do not need to offer an explanation for doing so and you will not be penalized in any way.

Although this study is *not* expected to cause any undue stress, if it should, I encourage you to speak with a trusted friend, family member, or a professional at this company's employee assistant office.

Upon completion of the questionnaire, please mail it back to me in the enclosed postage-paid, self-addressed envelope. By completing and returning the questionnaire, this will indicate that you have agreed to voluntarily participate in this study.

If you have any questions regarding this study, please call me at \_\_\_\_\_ . Your help in this study is greatly appreciated!

Sincerely,

Richard Orlando

This study has been reviewed and approved by the Seton Hall University Institutional Review Board (IRB) for Human Subjects Research. The IRB believes that the research procedures adequately safeguard the participant's privacy, welfare, civil liberties, and rights. The Chairperson of the IRB may be reached at 973-275-2975.

**BEFORE YOU BEGIN THE QUESTIONNAIRE,  
PLEASE PROVIDE THE  
FOLLOWING INFORMATION:**

**Position on the team (please check one):**

- Financial Advisor \_\_\_\_\_
- Financial Advisor in Training \_\_\_\_\_
- Investment Associate \_\_\_\_\_
- Customer Associate \_\_\_\_\_
- Other (please fill in) \_\_\_\_\_

**Gender (please check one):** Male \_\_\_\_\_ Female \_\_\_\_\_

**Please check *all* that describe your *family* role on the team:**

Father \_\_\_\_\_  
 Mother \_\_\_\_\_  
 Husband \_\_\_\_\_  
 Wife \_\_\_\_\_  
 Son \_\_\_\_\_  
 Daughter \_\_\_\_\_  
 Brother \_\_\_\_\_  
 Sister \_\_\_\_\_  
 Other (please fill in) \_\_\_\_\_

**Age:** \_\_\_\_\_

**LOS @ this company:** \_\_\_\_\_ years, \_\_\_\_\_ months

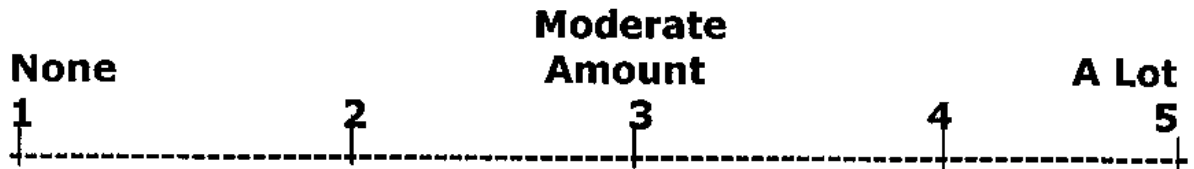
**LOS on your team:** \_\_\_\_\_ years, \_\_\_\_\_ months

**PLEASE CIRCLE THE NUMBER THAT BEST FITS YOUR ANSWER**

**1=Strongly Disagree 2=Disagree 3=Slightly Disagree  
4=Neither 5=Slightly Agree 6=Agree 7=Strongly Agree**

<b>1) Members of my team are very willing to share information with other team members about our work.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>2) Teams enhance the communication among people working on the same task.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>3) Members of my team cooperate to get the work done.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>4) My team members are loyal to each other.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>5) My team expects to work together for a long time.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>6) My team members trust each other.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>7) All in all, I am satisfied with my job.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>8) In general, I like working here.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>9) In general, I like working in my team.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>10) All in all, I am satisfied with my team.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>11) In general, I don't like my team.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>12) My team has confidence in itself.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>13) My team believes it can become unusually good at producing high-quality work.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>14) My team expects to be known as a high-performing team.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>15) My team feels it can solve any problem it encounters.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>16) My team believes it can be very productive.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>17) My team can get a lot done when it works hard.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>18) No task is too tough for my team.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>19) My team expects to have a lot of influence around here.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>

PLEASE CIRCLE THE NUMBER (1, 2, 3, 4, 5) THAT BEST  
FITS YOUR ANSWER



20) How much friction is there among members in your team?	1	2	3	4	5
21) How much are personality conflicts evident in your team?	1	2	3	4	5
22) How much tension is there among members of your team?	1	2	3	4	5
23) How much emotional conflict is there among members in your team?	1	2	3	4	5
24) How frequently are there conflicts about ideas in your team?	1	2	3	4	5
25) How often do people in your team disagree about opinions regarding the work being done?	1	2	3	4	5
26) How much conflict about the work you do is there in your team?	1	2	3	4	5
27) To what extent are there differences of opinion in your team?	1	2	3	4	5
28) How much has your team had to work through disagreements about varying opinions?	1	2	3	4	5
29) How often do members of your team disagree about who should do what?	1	2	3	4	5
30) How frequently do members of your team disagree about the way to complete a group task?	1	2	3	4	5
31) How much conflict is there about delegation of tasks within your team?	1	2	3	4	5

- **FOR EACH QUESTION ON THE NEXT PAGE, CIRCLE THE NUMBER (1, 2, 3, 4, 5) THAT BEST FITS YOUR ANSWER.**
- **ALL QUESTIONS PERTAIN TO HOW YOU PRESENTLY VIEW YOUR FAMILY WHEN YOUR FAMILY IS NOT AT WORK.**

**VERY IMPORTANT, PLEASE READ CAREFULLY:**

If you are the **Mother** or **Father** on the team, answer the questions thinking **ONLY** about your spouse (significant other) and children – whether they all work on the team or not.

If you are the **Husband** or **Wife** on the team, answer the questions thinking **ONLY** about your spouse (significant other) and children – whether they all work on the team or not.

If you are the **Brother** or **Sister** on the team, answer the questions thinking **ONLY** about your siblings and parents - whether they all work on the team or not.

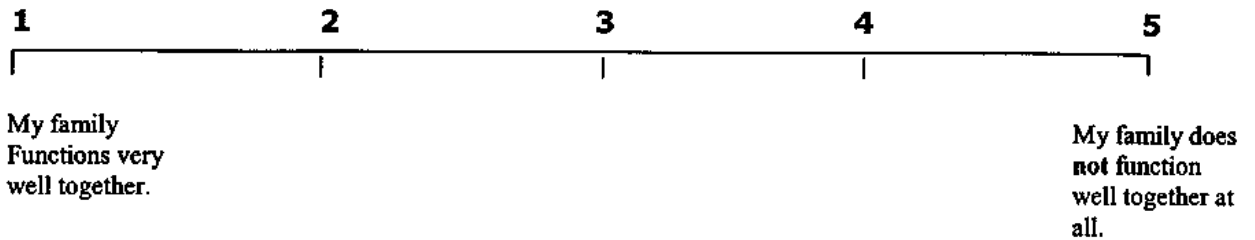
If you are the **Son** or **Daughter** on the team, answer the questions thinking **ONLY** about your siblings and parents - whether they all work on the team or not.

**Note:** If your family no longer lives together, think of your most recent experiences when your family was together, when answering the following questions on the next page: **5. "In our home, we feel loved."** **6. "Our happiest times are at home."**

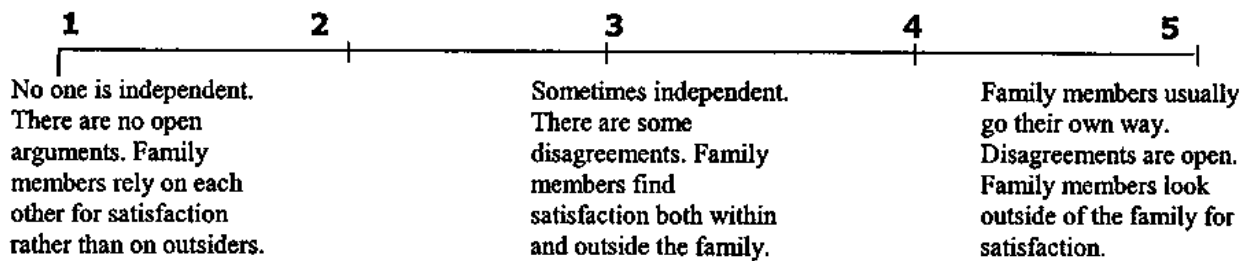
1	2	3	4	5
<b>Yes: Fits Our Family Very Well</b>		<b>Some: Fits Our Family Somewhat</b>		<b>No: Does Not Fit Our Family</b>

<b>1. Our family would rather do things together than with other people.</b>	1	2	3	4	5
<b>2. We all have a say in family plans.</b>	1	2	3	4	5
<b>3. The adults in this family understand and agree on family decisions.</b>	1	2	3	4	5
<b>4. There is closeness in my family but each person is allowed to be special and different.</b>	1	2	3	4	5
<b>5. In our home, we feel loved.</b>	1	2	3	4	5
<b>6. Our happiest times are at home.</b>	1	2	3	4	5
<b>7. The adults in this family are strong leaders.</b>	1	2	3	4	5
<b>8. The future looks good to our family.</b>	1	2	3	4	5
<b>9. We usually blame one person in our family when things aren't going right.</b>	1	2	3	4	5
<b>10. Family members go their own way most of the time.</b>	1	2	3	4	5
<b>11. Our family is proud of being close.</b>	1	2	3	4	5
<b>12. Our family is good at solving problems together.</b>	1	2	3	4	5
<b>13. When things go wrong we blame each other.</b>	1	2	3	4	5
<b>14. Our family members would rather do things with other people than together.</b>	1	2	3	4	5
<b>15. Family members pay attention to each other and listen to what is said.</b>	1	2	3	4	5
<b>16. My family is happy most of the time.</b>	1	2	3	4	5

**17. On a scale of 1 to 5, I would rate my family as:**



**18. On a scale of 1 to 5, I would rate the independence in my family as:  
(please circle the number)**



## APPENDIX B

**This packet is for the *NON-FAMILY MEMBERS* on the team.**

Thank you for participating in this study regarding *family work team effectiveness*. This study involves you providing some demographic information and completing a questionnaire. In addition, I will obtain your team's production and customer satisfaction quintile rankings from the Advisory website for the purpose of assessing team effectiveness.

**Your responses to the attached questionnaire will be kept strictly confidential. Under *NO* circumstances will your responses be shown to anyone at this company or anywhere else. Neither your identity, your team's identity, nor this company's identity will be revealed in any reporting of this study, either verbally or in writing, because I will be reporting only aggregate data.** All questionnaires will be coded with a three-digit number indicating the team as well as a letter code indicating different team members. Only I will know which team members belong to which team based on a master list. This list is to be used for the sole purpose of tracking and reporting. The questionnaires and master list will be stored separately in my home office in a locked file cabinet for a period of three years, after which they will be destroyed by shredding.

It will take approximately 20 minutes to complete this questionnaire. This questionnaire consists of questions pertaining to team functioning and work satisfaction. Please read the instructions on the questionnaire carefully and take your time in answering the questions. The honesty and accuracy of your responses will determine the potential value of this study. You may ask questions about this study at anytime. You have the right to discontinue your participation at any time. If you should exercise this option, you do not need to offer an explanation for doing so and you will not be penalized in any way.

Although this study is *not* expected to cause any undue stress, if it should, I encourage you to speak with a trusted friend, family member, or a professional at this company's employee assistant office.

Upon completion of the questionnaire, please mail it back to me in the enclosed postage-paid, self-addressed envelope. By completing and returning the questionnaire, this will indicate that you have agreed to voluntarily participate in this study.

If you have any questions regarding this study, please call me at \_\_\_\_\_ . Your help in this study is greatly appreciated!

Sincerely,

Richard Orlando

This study has been reviewed and approved by the Seton Hall University Institutional Review Board (IRB) for Human Subjects Research. The IRB believes that the research procedures adequately safeguard the participant's privacy, welfare, civil liberties, and rights. The Chairperson of the IRB may be reached at 973-275-2975.



**BEFORE YOU BEGIN THE QUESTIONNAIRE, PLEASE  
PROVIDE THE FOLLOWING INFORMATION:**

**Position on the team (please check one):**

- Financial Advisor \_\_\_\_\_
- Financial Advisor in Training \_\_\_\_\_
- Investment Associate \_\_\_\_\_
- Customer Associate \_\_\_\_\_
- Other (please fill in) \_\_\_\_\_

**Gender (please check one):** Male \_\_\_\_\_ Female \_\_\_\_\_

**Age:** \_\_\_\_\_

**LOS @ this company:** \_\_\_\_\_ years, \_\_\_\_\_ months

**LOS on your team:** \_\_\_\_\_ years, \_\_\_\_\_ months

**PLEASE CIRCLE THE NUMBER THAT BEST FITS YOUR  
ANSWER**

**1=Strongly Disagree 2=Disagree 3=Slightly Disagree 4=Neither  
5=Slightly Agree 6=Agree  
7=Strongly Agree**

<b>1) Members of my team are very willing to share information with other team members about our work.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>2) Teams enhance the communication among people working on the same task.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>3) Members of my team cooperate to get the work done.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>4) My team members are loyal to each other.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>5) My team expects to work together for a long time.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>6) My team members trust each other.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>7) All in all, I am satisfied with my job.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>8) In general, I like working here.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>9) In general, I like working in my team.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>10) All in all, I am satisfied with my team.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>11) In general, I don't like my team.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>12) My team has confidence in itself.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>13) My team believes it can become unusually good at producing high-quality work.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>14) My team expects to be known as a high-performing team.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>15) My team feels it can solve any problem it encounters.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>16) My team believes it can be very productive.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>17) My team can get a lot done when it works hard.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>18) No task is too tough for my team.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>19) My team expects to have a lot of influence around here.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>

PLEASE CIRCLE THE NUMBER (1, 2, 3, 4, 5) THAT BEST FITS  
YOUR ANSWER

1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5

None

Moderate  
Amount

A lot

20) How much friction is there among members in your team?	1	2	3	4	5
21) How much are personality conflicts evident in your team?	1	2	3	4	5
22) How much tension is there among members of your team?	1	2	3	4	5
23) How much emotional conflict is there among members in your team?	1	2	3	4	5
24) How frequently are there conflicts about ideas in your team?	1	2	3	4	5
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27) To what extent are there differences of opinion in your team?	1	2	3	4	5
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29) How often do members of your team disagree about who should do what?	1	2	3	4	5
30) How frequently do members of your team disagree about the way to complete a group task?	1	2	3	4	5
31) How much conflict is there about delegation of tasks within your team?	1	2	3	4	5