A Research Model of Sustainable Family Businesses

Kathryn Stafford, Karen A. Duncan, Sharon Dane, Mary Winter

This paper proposes a research model that outlines the determinants of functional families and profitable businesses—requisites for family business sustainability. Two features distinguish the model from previous models: inclusion of the family in the same detail as the business and emphasis on the key features of family and business. Delineation of the interface between the family and the business permits the use of research methods that allow for variable degrees of overlap of family and business rather than assuming that family businesses constitute either a single system or two separate systems. The research model is also compatible with a variety of theoretical perspectives.

Introduction

Whether studying families that own businesses or businesses owned by families, the prevailing theoretical orientation is a systems paradigm. The issue the literature raises is whether it is preferable to use a dual system or single system paradigm. It is the thesis of this paper that a well-developed systems model of family businesses could guide research based on the single system paradigm as well as on the dual system paradigm. The advantage of such a model is the flexibility it offers in guiding research. A model that incorporates attributes of both the family and the business in a manner that allows business outcomes to be viewed as a function of family *and* business characteristics and vice versa can serve as the basis for the examination of a wide range of important research questions. Examples include relationships between family structure and process and entrepreneurial activities, business involvement and marital stability, and goal congruence and business success.

This paper describes a model of family businesses that is both sufficiently detailed to guide empirical research on family businesses and the owning families, and sufficiently flexible to permit researchers to use more than one theory as they systematically analyze the parts of the whole. This model was developed to guide the design of data collection and analyses for the 1997 National Family Business Survey (NFBS), a U.S. Department of Agriculture-Cooperative States Research, Education and Extension Service regional research project, titled NE-167R, "Family Businesses: Interaction in Work and Family Spheres." Detailed information on data collection and methodological issues pertaining to this survey are provided elsewhere (Heck, Jasper, Stafford, Winter, & Owen, in press; Winter, Fitzgerald, Heck, Haynes, & Danes, 1998).

Model development began with the premise that sustainable family-owned businesses require both minimally functional families and successful businesses. This premise is based on research of home-based businesses that indicates that personal or family management practices affect the revenue of the home-based businesses (Olson, 1994) and on the literature on family businesses that establishes that family conflict threatens business viability (Ibrahim & Ellis, 1994). Although the literature acknowledges the interaction of families and businesses, the dominant perspective is that family influences harm a business and keep it from being managed in a professional manner (e.g., Hollander & Elman, 1988; Kaye, 1991).

The prevailing view claims that families and businesses are believed to be two "naturally separate" institutions or systems (Ibrahim & Ellis, 1994). From this perspective, a business is results oriented and objective, basing decisions on contribution to output, whereas a family is emotion oriented and irrational. Businesses are motivated by the pursuit of profit, and families are motivated by biological imperatives and social norms (Ibrahim & Ellis, 1994). The most frequently recommended strategy for successful coexistence of the two systems by both business management consultants and family therapists is what is sometimes called separation (Ibrahim & Ellis, 1994) or clear boundary definition (Rosenblatt, de Mik, Anderson, & Johnson, 1985).

One of the advantages of a systems model that guides research design is that it provides a means of aggregating research results to provide a picture of the whole system. A system exists in an environment that is, itself, a set of systems. Therefore, which system or subsystem is viewed as the whole is relative. Consequently, in developing a conceptual model to guide empirical research, deciding whether to use a dual or single system paradigm is not as important as including both the family and the business in the model and selecting the key characteristics of the family and the business for inclusion.

The theoretical model developed for the NFBS is built on the prevailing paradigm of overlapping systems. The key features of the overlapping family and business systems are different from the prevailing paradigms, however, in that it is not acceptable to sacrifice the family for the good of the business. The research on home-based businesses shows that many of those businesses were started and managed to support the family and allow it to remain in a specific geographic location—in other words, to live where the members wanted to live (Heck, Owen, & Rowe, 1995). Both the statistics on the distribution of family businesses by size, age, and generation, and the anecdotal evidence from case studies and family therapy suggest the same may be true for family businesses—the businesses were founded to support the family, not the other way around. The researchers who developed the NFBS are, in fact, seeking to answer some of the very questions raised by Whiteside and Herz-Brown (1991) in their article advocating a single system approach: (a) Are there common patterns in the ways business-owning families integrate their families and businesses? and (b) What are the implications of their integration strategies?

The first section of this paper reviews paradigms of family functionality—that is, paradigms of family success, paradigms of business success, and family business models. The second section introduces the conceptual model that guided the NFBS. The final section discusses the implications of the model.

Models of Family Functioning, Business Success, and the Family Business

The first part of this section reviews paradigms of family functionality. The second part reviews paradigms of business success. The last section reviews models of family business that combine both family and business concepts.

Paradigms of Family Functionality. As Sabatelli and Bartle (1995) note, there is a lack of unified theory about the family along with a proliferation of measures of family functioning. Family ecology theory (Bubolz & Sontag, 1993), family development theory (Rodgers & White, 1993), family systems theory (Whitchurch & Constantine, 1993), and family resource management theory (Deacon & Firebaugh, 1988) are potential sources of theoretical models to be used in analyses of business-owning families.

Family ecology theory. Family ecology theory differs from other theoretical orientations in that its focus is on families as they interact with their environment. The family is viewed as "interdependent with its natural physical-biological, human-built, and social-cultural milieu" (Bubolz & Sontag, 1993, p. 419). Grounded in the heritage of home economics, family ecology theory is a synthesis of ecology and general systems theory and underscores the importance of resource management in family adaptation and in creating environment sustainability. The focus is on the whole, defined as the family and its interdependence with external systems. But the roles of the individuals who constitute the family can also be examined. Bubolz and Sontag propose that, ideally, family ecological research (a) views individuals as physical-biological and social-psychological entities who are organized in a family system and who interact with one another and (b) studies the interdependence of individuals and the family system and all systems external to the family system. Their criteria for research based on family ecology theory are consistent with the objectives of the NFBS.

A limitation of family ecology theory is its highly abstract theoretical concepts. Bubolz and Sontag (1993) note that this abstraction creates an opportunity for defining concepts and identifying the links between concepts more concretely, although they acknowledge that this is not easy work. Notwithstanding the high level of abstraction, Feetham (Roberts & Feetham, 1982) used the theory to develop the Feetham Family Functioning Scale, one of the most well-established self-report instruments for measuring family functioning (Sawin & Harrigan, 1995).

Family development theory. The unique contribution of family development theory lies in its focus on explaining how families change. Early formulations of the theory suggested that families pass through a predetermined sequence of life-cycle stages. According to Mattessich and Hill (1987), one criticism was that many families did not fit into the normative life cycle that early theorists described. Another criticism was that the theory ignored the historical timing of significant life events. A third criticism was that the theory did not recognize the relationship between the family career and the development of other careers, such as education and work.

In an effort to address these issues, White (1991) asserts that family development has no determined cycle; rather, it is a stochastic process. Stages are marked by events, such as marriage, birth, death, and divorce, that change the structure of the family. As a result of the structure change, the interaction patterns within the family are qualitatively different from the previous stage. White also stresses that the timing and sequencing of the events determine how families function as they move into new stages. Additionally, societal norms, expectations, and sanctions, which are implicitly determined by the historical context, determine the order, prescribe the timing, and influence the effects of transition from one stage to another. Sequencing and timing norms are influenced by several institutions, and each individual family is influenced by specific sets of expectations and norms, depending on its institutional affiliations and family structure. Thus, families involved in family-owned businesses have a unique set of pressures and experiences that are different from either the family or the business realms, but which could be explored from either perspective.

General systems theory and family systems theory. Psychiatry, not psychology, was the path by which general systems theory was introduced to family social science. Thinking about families as systems for intervention laid the groundwork for family therapy (Whitchurch & Constantine, 1993). The key concepts of general systems theory as related to families are the mutual influence of system components, hierarchy, boundary, equifinality, and feedback. Whitchurch and Constantine note that family systems literature tends to fall into one of three main areas: (a) the understanding of family processes, (b) the relationship between the family system and other systems, or (c) morphogenesis, the study of how the structure of family systems changes.

Research studies that take a systems approach to families are well developed in the literature in only a few areas. Marital interaction was the first area in which family systems theory was used. Systems approaches also have been used in the area of family dysfunction, where problems such as bulimia, anorexia, alcoholism, and family violence are seen as symptoms of a family problem rather than as the problems of an individual. The most highly developed area in which systems theory has been used is in the development of marital and family taxonomies. The leading family taxonomies, Olson's Circumplex Model (Olson, Sprenkle, & Russell, 1979) and the Beavers systems model (Beavers, 1982), are both based in family systems theory.

Criticisms of general systems theory include the difficulty of operationalizing concepts due to the ambiguity of the theory; difficulty in specifying relationships among concepts, which then leads to lack of explanatory power; and lack of parsimony in the theory (Whitchurch & Constantine, 1993). Nevertheless, its application to families, in the form of family systems theory, has been useful in applied research on family functioning and measures of family functionality.

Family resource management theory. According to Gross, Crandall, and Knoll (1980), the first theoretical framework in family resource management was developed around 1940. By 1966, Maloch and Deacon introduced the systems approach to the study of family resource management. By 1975, the Deacon and Firebaugh systems model was the most widely used approach to the study of family resource management.

In the Deacon and Firebaugh (1988) model of family resource management, the family system is described in terms of relationships rather than structure. The family is composed of two subsystems: personal and managerial. The purpose of the personal subsystem is procreation and socialization of family members. The purpose of the managerial subsystem is to support the development of family members. Inputs from the family's external environment are filtered through the personal subsystem to reach the managerial subsystem. Inputs to the managerial subsystem are demands for action and resources. The managerial subsystem plans and implements the use of resources to meet demands. The outputs of both the managerial subsystem and family system are satisfaction and changed resources.

Their systems framework emphasizes mechanisms by which the environment influences family resource-use behavior. The first mechanism is through the family's supply of resources and the idea that societal norms and values heavily influence the standards used to assess those resources. The second mechanism is events—unexpected occurrences requiring action—about which information directly enters plan construction, bypassing goal identification. The concept of events acknowledges uncertainty and places control and feedback in a more prominent position. In addition, this systems framework introduced the dynamic concept of sequencing, defined as decisions related to the temporal and spatial ordering of activities to meet demands. Prior to that time, family resource management literature viewed the specification of goals and standards by which attainment of goals would be assessed as sufficient for goal achievement. The introduction of sequencing acknowledged the multiplicity of means by which a single goal could be met and provided a means of coordinating multiple goals.

Paradigms of Business. "Success" is an ambiguous term commonly used by both lay and professional people to describe the achievements of a firm or person. Kuratko, Hornsby, and Naffziger (1997) claim that business owners are motivated by more than just extrinsic rewards, such as increasing personal income. They suggest that intrinsic rewards (e.g., meeting challenges), independence (e.g., maintaining personal freedom), and family security (e.g., building a business) are just as important goal sets that motivate sustained entrepreneurship. Business success, then, is about more than financial success.

Two fundamentally different paradigms have been used to examine the determinants of success. One paradigm is the firm in an economy. The other is an economically mobile entrepreneur. Leading examples of the former are Davidsson's (1991) model of entrepreneurship growth and Greenberger and Sexton's (1987) model of venture success. The leading example of the latter is human capital theory (Becker, 1993; Portes & Zhou, 1992). Schumpeter's (1934) constraint theory and Knight's (1921) choice theory also fall into this latter category, as does assimilation theory (Jiobu, 1988). Not surprisingly, the paradigms propose different determinants of success, although there may be as much variability within paradigm type as between types.

The firm in the economy. Davidsson's (1991) model of entrepreneurship growth views small business financial growth over time as the sum of ability, need, and opportunity. In Davidsson's model, education and entrepreneurship experience are positive determinants of ability. The manager's age or a firm's age and size are determinants of need. The rate of innovation, market growth rate, customer structure, county characteristics, industry structure, geographic dispersion, and community characteristics are determinants of opportunity. Ability, need, and opportunity explained 25% of the variance in actual growth of the small businesses studied.

Greenberger and Sexton's (1987) model of venture success focuses on the role of the entrepreneur and how the entrepreneur's behavior changes as a company grows or succeeds. The model includes components that are important in new venture initiation (vision, personality, control desired, salience of events, self-perceptions, social support, and control possessed), as well as two additional components—organization vision and empowerment of subordinates. Other models determine success by considering macrolevel determinants, such as county/community characteristics and industry structure (Davidsson, 1991), or microlevel determinants, such as individual endowments of the entrepreneur (Greenberger & Sexton), with little consideration to the owner's management capabilities and the impact such capabilities can have on success.

The economically mobile entrepreneur. Models of economic mobility and entrepreneurship, on the other hand, nominally focus on the individual, but they too emphasize either community characteristics and industry structure or the individual endowments of the entrepreneur. As Zuiker (1998) notes, human capital theory is the most frequently used theory among scholars taking this approach. Becker (1993) defines human capital as stocks of skills, knowledge, intelligence, and health that could be used to generate both monetary and nonmonetary resources. Any increases in an individual's stock of human capital would result in "higher future earnings, increased job satisfaction over one's lifetime, and a greater appreciation of nonmarket activities and interests" (Ehrenberg & Smith, 1997, p. 289). Becker (1993) contends that human capital theory "helps to explain such diverse phenomena as interpersonal and interarea differences in earnings, the shape of age-earnings profiles (the relation between age and earnings), and the effect of specialization on skill" (p. 245). Zuiker uses human capital theory in her analysis of Hispanic self-employment in the Southwest. She views assimilation as human capital and incorporates aspects of the family, individual, and relationship capital into her human capital theory of Hispanic self-employment. Sociologists examining economic mobility have proposed cultural and disadvantaged theories (Light, 1979), assimilation theory (Jiobu, 1988), and enclave theory (Portes & Zhou, 1992). These theories place more emphasis on community characteristics than does human capital theory. Cultural theory posits that both the cultural and psychological characteristics of groups predispose members to select business ownership as a means of achievement. Disadvantage theory states that those who are at a disadvantage in the labor market turn to self-employment to avoid low wages and unemployment. This theory has much in common with Schumpeter's (1934) constraint theory, with an ethnic twist. "Assimilation" refers to the process by which groups adopt and are absorbed into the dominant culture. As groups become more assimilated, their members are less disadvantaged in the labor market and become more upwardly mobile. Ethnic enclaves allow their members to compensate for their disadvantages in the labor market by trading with people like themselves and relying on informal group enforcement of informal contracts. Measures of assimilation and enclave membership can be viewed as human capital because although the theories are stated in terms of groups, the measures are individual measures. The measures are also consistent with the "productive" feature of human capital.

Models of Family Business

Most models developed to explain family businesses suggest dual systems rather than a single system (Whiteside & Herz-Brown, 1991). Hollander and Elman (1988) and Whiteside and Herz-Brown argue for viewing the family firm as a single system and the whole as greater than the sum of its parts. They also note that the dual systems approach focuses on characterizing the two systems rather than characterizing the whole that results from the interaction of the two.

Davis and Tagiuri's (1989) model characterizes the whole that results from the overlap of systems. They propose a Venn diagram model of family business in which key attributes of the family business derive from overlapping membership in family, ownership, and management groups. The key attributes deriving from the overlap are simultaneous roles, shared identity, a lifelong common history, emotional involvement, private language, mutual awareness, privacy, and the symbolic meaning of the family company. Each of these attributes is both a strength and a weakness, which explains the common description of their model as a bivalent attribute model.

Churchill and Hatten (1987) propose a research framework for studying family business with succession as its anchor. The framework is built on stages of the family business that derive from the biological reality of parent and child being separated in age and business experience but joined by blood and family experience. They see themselves as adding a temporal dimension to Davis and Tagiuri's model of family business, much as family development theory emphasizes the temporal dimension of families. The stages of a family business are identified as owner-manager, training and development of the new generation, partnership between the generations, and transfer of power. The order of the stages is fixed but the duration of the stages is dependent on the characteristics of the two generations. Inclusion of the third generation, though not precluded, is not readily apparent, according to Churchill and Hatten.

Davis and Stern's (1988) model of family business adaptation, survival, and growth is considered a classic. In their model, the dimensions of the family business that determine its success are the task structure, the legitimizing structure, and family organizational behavior. The family interrelationship system, technology, and market demands are critical inputs from the business environment. Although this is a dual system, the family's interpersonal relationships and intergenerational "process" are aspects of the business environment rather than a full-fledged model of a family system. Davis and Stern (1988) improved previous models of family business in three ways: first, by using adaptation, growth, and survival (in other words, success) as the criterion for determining key attributes rather than difference from nonfamily businesses; second, by referring to Churchill and Hatten's (1987) intergenerational process of families as well as interpersonal dynamics of families; and third, by allowing for influences of market forces and technology.

Wortman (1994) proposes a global conceptual paradigm for family business. Wortman derives his attributes from a survey of literature on family business. The form of this model is very similar to family ecology models, with their emphasis on the focal system's interaction with particular aspects of the environment. It would be more appropriate to call this an ecological model than a single system model. This model is distinguished by the level of detail in the business environment and omission of the family. The attributes of the business itself are philosophy, strategy, strategic process, structure, and behavior.

Danes, Zuiker, Arbuthnot, Kean, and Scannell (1998) have used the Fundamental Interpersonal Relations Orientation (FIRO) model to view the family and its business as a single system. It has its origins in Schutz's (1958) theory of group development and has been adapted for use in both organizational and family settings (Doherty, Colangelo, & Hovander, 1991). The model posits that inclusion, control, and integration are three dimensions of interpersonal dynamics within organizations and, in this order, they constitute a developmental sequence through which group process occurs and viability of the group is maintained (Doherty & Colangelo, 1984). The dimensions are not mutually exclusive, but rather overlapping, and there is no specific instrument to measure each dimension. The FIRO model identifies some major issues involved in family businesses and provides a framework to address some of the complex, interconnected dimensions that are essential in explaining family business viability.

In the FIRO model, "inclusion interactions" refers to structure (who is in or out of the group, clarity of roles, consensus on the decision-making process), connectedness, and shared meaning (consensus about goals and priorities). "Control behavior" refers to the decision-making process between people. The need for control manifests itself as desire for power, authority, and control over others and, therefore, over one's future. Control can be exhibited through group tasks such as the capacity of an individual to be relied on for responsible jobs. Control is also manifested in behavior toward others, for example, in expressions of independence and rebellion. Integration allows for individual and collective creative problem solving, planning for change, trust, and a sense of fellowship. "Integration" refers to managerial interactions that balance the business as an individual system, the family as an individual system, and the family business as a single system working toward the well-being of the whole.

Generally, inclusion can affect family business viability because there is often inappropriate carryover of patterns of interacting, rules, and roles. Family and business systems compete for time, energy, and the financial resources of individual family members and of the family collectively (Rosenblatt, et al., 1985). Dimensions of control can influence viability because the needs or demands of either system can cause a level of tension that leads to decisions that are good in the short run but not for long-term viability (Kaye, 1991). Ward (1987) indicates that less than 30% of successful family businesses make it to the third generation chiefly because they lack a clear framework for thinking about the future of their businesses and their families (integration). When the family business experiences life-cycle transitions or major ongoing stressful events, the members must create new patterns of inclusion, control, and integration.

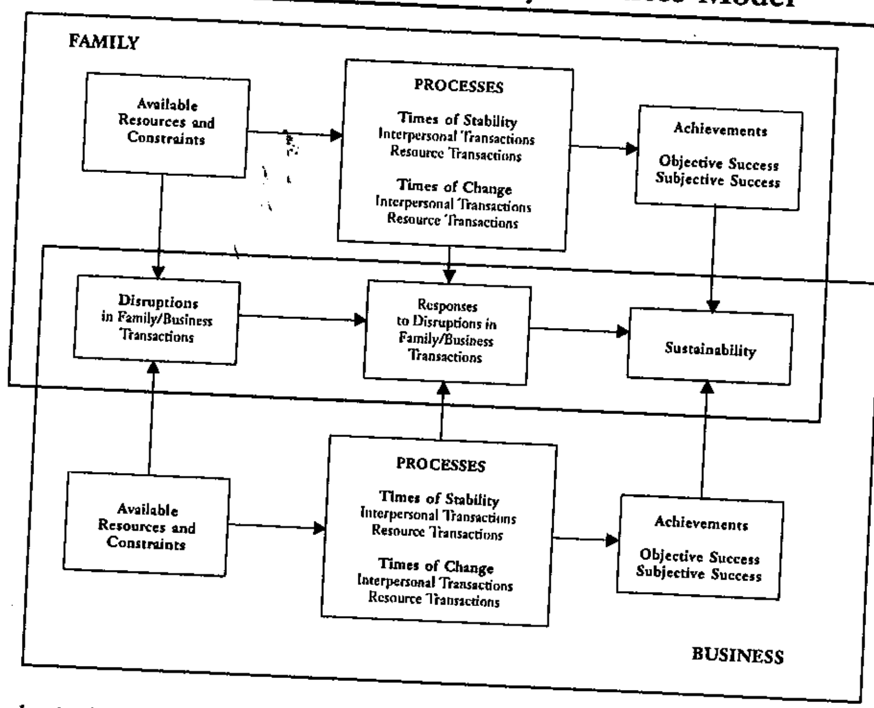
The literature on theories and models of family functionality, business success, and family businesses share much in common. Both developmental and systems paradigms have been used profitably in research on families and family businesses. Human capital theory has been used to analyze both families and entrepreneurial success. The FIRO model has been used to study both families and business organizations. Ibrahim and Ellis (1994), Ward (1987), Benson, Crego, and Drucker (1990), and others emphasize the differences between families and businesses and the need to keep the two apart. However, there appears to be much agreement that both families and businesses have interpersonal relationships and resource-use dynamics as well as purposes and that these overlap to varying degrees in family businesses. What is missing to date is a model of family business with comparable levels of detail for the family and the business. All of the previous family business models that are sufficiently detailed to guide empirical research include the family only as a component of the business environment.

The Sustainable Family Business Research Model

The systems model of family business presented in this paper pairs a model of family business success with a model of family functionality to yield a model of family business sustainability. The focus of the model, depicted in Figure 1, is sustainability of the family business, a function of family achievements and business achievements and transactions between the family and the business—a necessary prerequisite for a *family* business. At the same time, there are family resources and constraints (both broadly defined to include family structure and family processes), which can be viewed as occurring more or less independently of the business. By the same token, there are business resources, constraints, and processes that are more or less independent of the family. It is the thesis of this paper, however, that the resources and processes come together in family/business transactions. Moving from left to right in the figure, any one of the characteristics or processes to the left or in the top or bottom row could affect those to the right or the center. The general goal of research based on this model is to identify family and business resources and constraints, processes, and transactions that are most likely to lead to business and family achievement and sustainable family businesses.

The model differs from previous models of family business in several ways. Perhaps the most

Figure 1: Sustainable Family Business Model



noticeable is the inclusion of the family in the model at a comparable level of detail with the business. The most substantive difference from previous models is the key features of the family and business systems included. The family and business systems include resource use as well as interpersonal relationships because as viable social systems, families are purposive and rational. According to both neoclassical economic theory of the family and Becker's (1965) household production theory, to survive, families must be as efficient in the pursuit of satisfaction as a firm must be in pursuit of profit. Times of change and times of stability are also included as a means of acknowledging the differences in processes that families and businesses engage in when their own structure and environment are relatively stable versus when they are dynamic. Although the model includes analogous processes in the family and business systems, it separates them to call attention to the difference in purpose and specific content of the processes within the two systems.

The family system portrayed in Figure 1 is a purposive social system. As such, it takes available resources and constraints and transforms them via interpersonal and resource transactions into achievements. The achievements are both subjective and objective in nature. Interpersonal and resource transactions may change during times of environmental change, structural change, or both. This portrayal of a family is consistent with Becker's (1965) household production model of the family in economics as well as family ecology, family systems, and family resource management models of families. According to economic theory, the purpose of families is the pursuit of satisfaction. According to family resource management theory, the purpose of families is procreation, socialization, and the support and development of family members. Regardless of the purpose, the achievements that result from family transactions have a subjective component and an objective component. Satisfaction would be an example of a subjective achievement. Level of living would be an example of an objective achievement. It would be appropriate to assess achievements using criteria consistent with the family's purpose.

Available resources and constraints arise from the family's environment and from within the family itself. They include the family members' human capital and family or relationship capital as well as their assets and debts. Family goals can be thought of as a resource that motivates the use of other resources. Societal norms and laws, technology, the economy, and the laws of nature are important constraints on family choice.

The family combines market goods and services and its own labor to yield achievements. The transactions necessary to yield some achievements are relatively goods intensive; others are relatively labor intensive. For example, resource transactions are relatively goods intensive; interpersonal transactions are relatively labor intensive. It is more important for the family to select appropriate transactions for the desired achievement than it is to classify transactions as either interpersonal or resource. Most real transactions are both. The model classifies transactions as interpersonal and resource to acknowledge explicitly both dimensions of family transactions and to establish the relevance of both bodies of literature. Families have distinctive styles of interpersonal interaction and conflict management. But, as Whiteside and Herz-Brown (1991) also note, families have tasks to accomplish and management styles and structures to accomplish them.

The business system in Figure 1 also is a purposive social system. As such, it takes available resources and constraints and converts them into achievements via resource and interpersonal transactions. According to neoclassical economic theory of the firm, the purpose of a firm is to maximize profit, defined as revenue in excess of cost (Ferguson, 1972). The purpose of the business should provide the criteria for assessment of success, whether that be indicated by objective measures, such as adaptability, growth, and survival, or subjective measures, such as owner's sense of achievement or pleasure in providing a way of life that is consistent with personal values.

Available resources include the human capital of employees and owners and firm culture as well as assets and debts of the business. Goals and objectives that are consistent with the business's mission, clear strategies, and group commitment to the mission also are resources for the firm. Technology is both a resource and a constraint. The economy, culture, and laws of nature constrain the choice of transactions.

Business managers choose transaction processes appropriate to achieve the desired goals and objectives efficiently, resulting in objective success, subjective success, or both. Actual transactions are both interpersonal and resource transforming. These transactions for businesses are commonly referred to as "production of goods and services." The model classifies transactions as interpersonal or resource rather than goods or services to acknowledge explicitly the emotional orientation of businesses as well as their task or resource orientation. As Whiteside and Herz-Brown (1991) note, business organizations have distinctive styles of interpersonal interaction and conflict management.

At the interface of the family and business systems, both the family and the business respond to disruptions in their regular transaction patterns. These disruptions may come from either outside the family and business or within. Outside sources of disruption include public policy changes, economic upheavals, and technological innovation. Inside sources of disruption include marriage, birth, death, and divorce of family members. The disruptions may be either good or bad. They require a response from both the family and the business.

The extent of overlap between the family and business systems will vary from family business to family business. In family businesses where the prevailing orientation is to keep family and business separate, there is little overlap or, diagrammatically, a small area of interface between the two systems. Conversely, in family businesses where overlap is great, the area of interface between the family and business systems is considerable.

Sustainability results from the confluence of family success, business success, and appropriate responses to disruptions. In other words, sustainability requires consideration of the family as well as the business. Sustainability also requires consideration of the ability of the family and business to cooperate in responding to disruptions in a way that does not impede the success of each.

Implications of Using the Model to Guide Research

The Sustainable Family Business Research Model has several important implications for research on family businesses. This model is grounded in systems theory and, as such, shares the advantage of systems models—it mirrors reality. Here, the organism is the family business and it is understood within the context of its environment. A systems perspective is not new to the study of family businesses; however, debate has centered on whether family businesses are more accurately viewed as a single system or as dual systems of family and business. The Sustainable Family Business Research Model permits both points of view. The key features of the model are its attention to the overlap or interface between the family and the business, its treatment of family business sustainability, and the flexibility the model offers to researchers.

The model also suggests variables that are appropriate to the study of family businesses. Resources and constraints must be viewed broadly and measured not just for the business, but also for the family. To discover the extent of the overlap of the business and family spheres, measures of time spent in family and business activities as well as measures of the extent to which family money finances the business and business profit supports the family are needed. Process variables include such managerial activities as decision making, planning and control strategies, and the use of technology and human resources in both the business and family realms. With respect to sustainability, both objective measures, such as profit and goal achievement, and subjective measures, such as feelings of satisfaction and judgments on the quality of life for both the family and business, are relevant and should be obtained.

The Family Business Interface. The Sustainable Family Business Research Model draws attention to the interface between the family and the business and allows examination of the degree of intermingling between family and business. It suggests that, rather than an either/or, single or dual systems perspective, family businesses are better understood viewed as existing on a continuum. At one end are the family businesses that behave as if family and business are two separate spheres. At the other are family businesses where family and business are completely enmeshed. In short, the model assumes that family and business in business-owning families are intermingled to some degree and that separate spheres and complete enmeshment are simply special cases.

Because the model is a systems model, family businesses are viewed as trying to achieve homeostasis. When disruptions occur, it is possible to ascertain whether the change is coming from within the family business or from the environment. Further, it is also possible to ascertain to what extent the family and the business respond to the change and how those responses affect the sustainability of the family and the business.

The model recognizes that both the family and business systems are critical to the understanding of family businesses. Families are not viewed as irrational units but as rational, self-directed systems. Without the business, there isn't a family business; however, without the family there also isn't a family business. The model suggests that it is not the business that makes a family business unique from other business arrangements; rather, it is the family.

Family Business Sustainability. The model implies that both business success and family functionality are important in judging the sustainability or viability of family businesses. Business-owning families may or may not be functional and family businesses may or may not be successful. Research based on the Sustainable Family Business Research Model can distinguish those families that manage to be successful at both family and business from those that are successful in just one sphere or in neither. The model outlines analogous processes for the family and the business, but allows family and business to differ on specifics of the characteristics and the way the processes work in each. Research questions include: Do some families sacrifice the business for the family? Do others consistently put the business ahead of family? What are the characteristics of those families that are both highly functional and successful in business? For example, are these families successful in both spheres because they follow the same practices in both their business and family lives or because they use different strategies in each? How does the resource and relationship dynamic change in the family and in the business when disruptions occur? Further, how can research help change families that are not as successful as they would like to be?

Flexibility for Research. Because the Sustainable Family Business Research Model is rooted in systems theory, it permits research from a variety of theoretical perspectives. Family ecology theory, family resource management theory, family development theory, human capital theory, and, of course, family systems theory are all compatible with the model. So, too, are the FIRO model and family business systems models. Although these theories and models are all relevant to the study of family businesses, most do not provide research models that specifically address the study of families in business.

Although the model views both family and business as critical to a complete understanding of family businesses, it permits research from either a single or dual system perspective. Researchers whose interest is in one particular area, that is, the family system or the business system, can focus on that area without losing sight of the larger context. Indeed, research can attend to some of the effects of the "other" system even when the focus is ostensibly on the family or on the business.

References

Beavers, W. R. (1982). Healthy, midrange, and severely dysfunctional families. In F. Walsh (Ed.), *Normal family processes* (pp. 45-66). New York: Guilford.

Becker, G. S. (1965). A theory of the allocation of time. *The Economic Journal, 75*, 493-517.

Becker, G. S. (1993). *Human capital: A theoretical and empirical analysis with special reference to education* (3rd ed.). Chicago: University of Chicago Press.

Benson, B., Crego, E. T., & Drucker, R. H. (1990). *Your family business: A success guide for growth and survival.* Homewood, IL: Dow Jones-Irwin.

Bubolz, M. M., & Sontag, M. S. (1993). Human ecology theory. In P. G. Boss, W. J. Doherty, R. LaRossa, W. R. Schumm, & S. K. Steinmetz (Eds.), *Sourcebook of family theories and methods: A contextual approach* (pp. 419-448). New York: Plenum.

Churchill, N. C., & Hatten, K. J. (1987). Non-market-based transfers of wealth and power: A research framework for family businesses. *Journal of Small Business, 25*, 51-64.

Danes, S. M., Zuiker, V., Arbuthnot, J., Kean, R., & Scannell, E. (1998). Business and family goals and tensions. In *Fifth Annual International Family Business Program Association Proceedings*, San Antonio, TX, July 23-25.

Davidsson, P. (1991). Continued entrepreneurship: Ability, need, and opportunity as determinants of small firm growth. *Journal of Business Venturing, 6*, 405-429.

Davis, J. A., & Tagiuri, R. (1989). *Bivalent attributes of the family firm.* Santa Barbara, CA: Owner Managed Business Institute.

Davis, P., & Stern, D. (1988). Adaptation, survival, and growth of the family business: An integrated systems perspective. *Family Business Review, 1*(1), 69-85. (Reprinted from *Human Relations, 34*, pp. 207-224, 1980.)

Deacon, R. E., & Firebaugh, F. M. (1988). *Family resource management: Principles and applications.* Boston: Allyn & Bacon.

Doherty, W. J., & Colangelo, N. (1984). The family FIRO model: A modest proposal for organizing family treatment. *Journal of Marital and Family Therapy, 10*, 19-29.

Doherty, W. J., Colangelo, N., & Hovander, D. (1991). Priority setting in family change and clinical practice: The family FIRO model. *Family Process, 30*, 227-240.

Ehrenberg, R. G., & Smith R. S. (1997). *Modern labor economics: Theory and practice* (6th ed.). Reading, MA: Addison-Wesley.

Ferguson, C. E. (1972). *Microeconomic theory* (3rd ed.). Homewood, IL: Richard D. Irwin.

Greenberger, D. B., & Sexton, D. L. (1987). A comparative analysis of the effects of the desire for personal control on new venture initiations. *Frontiers of entrepreneurship research.* 1987: *Proceedings of the Seventh Annual Babson College Entrepreneurship Research Conference* (pp. 239-253). Wellesley, MA: Babson College.

Gross, I. H., Crandall, E. W., & Knoll, M. M. (1980). *Management for modern families* (4th ed.). Englewood Cliffs, NJ: Prentice-Hall.

Heck, R. K. Z., Jasper, C. R., Stafford, K., Winter, M., & Owen, A. J. (in press). Using a household sampling frame to study family businesses: The 1997 National Family Business Survey. In J. A. Katz (Ed.), *Advances in entrepreneurship, firm emergence and growth* (Vol. 4). Stanford, CT: JAI Press.

Heck, R. K. Z., Owen, A. J., & Rowe, B. R. (1995). *Home-based employment and family life.* Westport, CT: Auburn House.

Hollander, B. S., & Elman, N. S. (1988). Family-owned businesses: An emerging field of inquiry. *Family Business Review, 1*(2), 145-164.

Ibrahim, A. B., & Ellis, W. H. (1994). *Family business management: Concepts and practice.* Dubuque, IA: Kendall/Hunt.

Jiobu, R. M. (1988). *Ethnicity & assimilation*. New York: State University of New York.

Kaye, K. (1991). Penetrating the cycle of sustained conflict. *Family Business Review, 4*(1), 21-41.

Knight, F. H. (1921). *Risk, uncertainty and profit*. New York: Houghton Mifflin.

Kuratko, D. F., Hornsby, J. S., & Naffziger, D. W. (1997). An examination of owner's goals in sustaining entrepreneurship. *Journal of Small Business Management, 35*(1), 24-33.

Light, I. (1979). Disadvantaged minorities in self-employment. *International Journal of Comparative Sociology, 20*, 31-45.

Mattessich, P., & Hill, R. (1987). Life cycle and family development. In M. B. Sussman & S. K. Steinmetz (Eds.), *Handbook of marriage and the family* (pp. 437-469). New York: Plenum.

Olson, D. H., Sprenkle, D., & Russell, C. (1979). Circumplex Model of Marital and Family Systems I: Cohesion and adaptability dimensions, family types, and clinical applications. *Family Process, 18*, 3-28.

Olson, P. D. (1994). *Home-based business in rural America - defining and predicting success*. Unpublished master's thesis, The Ohio State University, Columbus.

Portes, A., & Zhou, M. (1992). Gaining the upper hand: Economic mobility among immigrant and domestic minorities. *Ethnic and Racial Studies, 15*(4), 491-522.

Roberts, C. S., & Feetham, S. L. (1982). Assessing family functioning across three areas of relationships. *Nursing Research, 31*(4), 231-235.

Rodgers, R. H., & White, J. M. (1993). Family development theory. In P. G. Boss, W. J. Doherty, R. LaRossa, W. R. Schumm, & S. K. Steinmetz (Eds.), *Sourcebook of family theories and methods: A contextual approach* (pp. 225-254). New York: Plenum.

Rosenblatt, P. C., de Mik, L., Anderson, R. M., & Johnson, P. A. (1985). *The family in business: Understanding and dealing with the challenges entrepreneurial families face*. San Francisco: Jossey Bass.

Sabatelli, R. M., & Bartle, S. E. (1995). Survey approaches to the assessment of family functioning: Conceptual, operational, and analytical issues. *Journal of Marriage and the Family, 57*, 1025-1039.

Sawin, K. J., & Harrigan, M. P. (1995). *Measures of family functioning for research and practice*. New York: Springer.

Schumpeter, J. A. (1934). *The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle*. Cambridge, MA: Harvard University Press.

Schutz, W. C. (1958). *FIRO: A three dimensional theory of interpersonal behavior*. New York: Rinehart.

Ward, J. L. (1987). *Keeping the family business healthy: How to plan for continuing growth, profitability, and family leadership*. San Francisco, CA: Jossey-Bass.

Whitchurch, G. G., & Constantine, L. L. (1993). Systems theory. In P. G. Boss, W. J. Doherty, R. LaRossa, W. R. Schumm, & S. K. Steinmetz (Eds.), *Sourcebook of family theories and methods: A contextual approach* (pp. 325-352). New York: Plenum.

White, J. M. (1991). *Dynamics of family development: The theory of family development*. New York: Guilford.

Whiteside, M., & Herz-Brown, F. (1991). Drawbacks of a dual system approach to family firms: Can we expand our thinking? *Family Business Review, 4*(4), 383-395.

Winter, M., Fitzgerald, M. A., Heck, R. K. Z., Haynes, G. W., & Danes, S. M. (1998). Revisiting the study of family businesses: Methodological challenges, dilemmas, and alternative approaches. *Family Business Review, 11*(3), 239-252.

Wortman, M. S. (1994). Theoretical foundations for family owned business: A conceptual and research-based paradigm. *Family Business Review, 7*(1), 3-15.

Zuiker, V. S. (1998). Hispanic self-employment in the Southwest rising above the threshold of poverty. In S. Bruchey (Ed.), *Garland studies in the history of American labor*. New York: Garland Publishing.

Kathryn Stafford is an associate professor in the Department of Consumer and Textile Sciences in the College of Human Ecology, The Ohio State University, Columbus. Karen A. Duncan is an assistant professor in the Department of Family Studies in the Faculty of Human Ecology, University of Manitoba, Winnipeg. Mary Winter is a professor in the Department of Human Development and Family Studies and associate dean of research and graduate education in the College of Family and Consumer Sciences, Iowa State University, Ames. Sharon M. Danes is a professor in the Family Social Science Department in the College of Human Ecology, University of Minnesota, St. Paul.

This paper reports results from the Cooperative Regional Research Project, NE 167R, "Family Businesses: Interaction in Work and Family Spheres," partially supported by the Cooperative States Research, Education and Extension Service (CSREES); U.S. Department of Agriculture; the experiment stations at University of Hawaii at Manoa, University of Illinois, Purdue University (Indiana), Iowa State University, Michigan State University, University of Minnesota, Montana State University, University of Nebraska, Cornell University (New York), North Dakota State University, The Ohio State University, Pennsylvania State University, Texas A & M University, Utah State University, University of Vermont, and University of Wisconsin-Madison; and the Social Sciences and Humanities Research Council of Canada (for the University of Manitoba). An earlier version of this paper was presented at the Annual Conference of the American Association for Consumer Interests, Washington, D.C., March 25-28, 1998, as part of the symposium, "Concepts and Challenges: Surveying Families in Business."

Figure 1: Sustainable Family Business