THE EFFECT OF FAMILY MEANINGS ABOUT DEMANDS ON FAMILY ADJUSTMENT IN BUSINESS-OWNING FAMILIES

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Dedication

Dedicated to my father, M. S. Lee,

my wife, H. R. Kim, and my daughter, Erin Lee

Abstract

Family scholars have emphasized that, for any given demanding situation, families appraise how difficult it is or will be, and their subjective appraisals or meanings about the demands play an important role in the resilience process. However, they have paid much less attention to empirical testing of the issue, especially in the context of business-owning families which are often faced with diverse business demands and conflicts between family and business systems. The purpose of this study is to examine the role of the family meanings about demands in the resilience process of business-owning families by examining potential pathways of family meanings' effect on family adjustment. Guided by the Family Adjustment and Adaptation Response (FAAR) theory, a hypothesized conceptual model was developed based on the conceptual relationships among the four main constructs of family resilience: *situational meanings of demands* that are represented by business-owning families' subjective difficulty (i.e., tension levels) in managing demands, *coping behaviors* represented by owning families' socially responsible behaviors for community betterment, *resources* represented by perceived business success as an intangible type of resources, and *family adjustment* represented by owning families' functional integrity. The hypothesized model was tested using structural equation modeling procedures. A subsample of 187 business-owning couples from the National Family Business Panel data was drawn for the study. Results showed that business-owning families' subjective difficulty in managing demands was directly associated with their family adjustment in a negative way rather than indirectly associated with adjustment through the mediating

role of coping behaviors or resources. This study provides support for the FAAR theory's assumption that a certain level of tension or subjective difficulty threatens the family's existing stable functioning at the demanding times. This study's results imply that family firm consultants need to pay attention to how an owning family emotionally and cognitively perceive or interpret their difficulties with demands in the consulting process, rather than focusing only on the task-oriented issues. Family therapists' relational and people-oriented expertise might be helpful in lessening the negative effect of owning families' subjective difficulty with demands on family adjustment.

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Chapter 1. Introduction

Although stressful life events can disrupt the quality of family life, many families successfully overcome these stressful life events and adversity. In the past decade, family scholars and clinicians have paid increased attention to what accounts for why some families stay healthy and manage well in the face of adversity and others do not (McCubbin & McCubbin, 1988; Patterson, 2002a). Based on this inquiry that has attracted the attention of family scholars and clinicians, the phenomenon of managing well in the face of adversity has been called *family resilience* (Patterson, 2002a). Family resilience has been conceptualized as the ongoing and dynamic process by which families are able to adjust and function competently in the face of family demands both in the present and over long periods of time (Conger & Conger, 2002; Hawley & DeHaan, 1996; Luthar, Cicchetti, & Becker, 2000; Patterson, 2002a, 2002b).

Although less attention has been paid to the resilience process of the business-owning families (Danes, Lee, Amarapurkar, Stafford, Haynes, & Brewton, 2009), efforts to understand the resilience process has been attempted within the family business context. Family businesses are faced with stressors due to the unique characteristic of family business systems where the family and work system are interconnected to a great degree (Danes, Lee, Stafford, & Heck, 2008). For example, business issues, such as unclear ownership or unfair compensation for family members, may affect the relationships of family members and generate stresses in the family system. The business-owning family is the depository of resiliency and can serve as a stress buffer to the family business system. If owning families have built a stored

capacity for resilience, when a stressor event, such as unclear ownership, is encountered, the store of capabilities in problem solving can be more easily tapped and adapted to new situations (Danes et al., 2009).

Within the family business field as well as the family science field, efforts to understand the dynamic processes of family resilience have largely focused on the identification and management of resources or protective factors in family businesses facing demands, that is, what resources or protective factors buffer the negative effects of demands on family business functioning (Conger & Conger, 2002; Conger, Rueter, & Elder, 1999; Danes et al., 2009; Greeff, Vansteenwegen, & Ide, 2006; Orthner, Jones-Sanpei, & Williamson, 2004; Vandergriff-Avery, Anderson, & Braun, 2004). In line with family business scholars' inquiry focusing on the role of resources in the resilience process, some scholars have used resource-based theory of the firm as the conceptual framework to inform the research directed toward identification and management of the unique resources in family businesses (Sharma, 2004) and others have empirically examined relative contributions of human, social, and financial resources to business-owning family resilience over time (Danes et al., 2009).

Although exploring the protective role of family resources against demands is a focal point in understanding the family resilience process, examining a family's meanings about the demands is another important point for further understanding of the process. For any given demanding situation, families implicitly evaluate how difficult it is or will be. This subjective appraisal or meanings about the demands is related to their level of experienced stress (Patterson, 2002a). Families' subjective meanings about

demands can render families more or less vulnerable in how they respond to the demands. Some sources of stress only exist by virtue of the expectation or interpretation family has (Patterson, 2002a). For example, when an owning family is faced with a business demand of unfair compensation for family members, some family members' stress may be built up because of their higher expectation than others that they should get paid more than other members.

Families' subjective meanings about their demands may predict not only their vulnerability to stress, but also the ways they manage demands (Patterson, 2002a). In the family business context, the decisions regarding the transfer or allocation of resources between the family and business system and across generations at the demanding times are driven by meanings about the demands within the family business system (Bubolz & Sontag, 1993; Sharma, 2004). Depending on the different meanings about the demands, either the family system or the business system is usually favored, rather than both systems being equally favored in terms of the resource flows in the family business systems (Distelberg & Sorenson, 2009). These family meanings about the demands cumulatively create a pattern. A family's subjective difficulty in managing demands could cumulatively lead to the inability to build a repertoire of protective capabilities of the family and perhaps create high risk status (Patterson, 2002a). However, a family's sense of confidence in managing demands can build the family's protective capabilities, increasing the likelihood of showing resilience if and when the family is exposed to a significant risk (Patterson, 2002a). Thus, a family's

subjective meanings shape the nature and extent of the protective capacity of the family as well as perceived demands (Patterson, 2002a, 2002b).

For this reason, Boss (1992, 2002) emphasized that we must listen to family members' meanings of their reality to understand why some families remain resilient whereas others collapse. Family business scholars also have emphasized the role of meanings[1] in the family resilience process within the family business context, but only theoretically. Aronoff and Ward (2011) indicated that shared meanings among family members in business-owned families can help overcome the conflicts inherent in family business. When family and business pull apart over time, or when the goals of the family and the business diverge, and when families need a compelling rationale to stick together, meanings of the demands play a special role in uniting family and business, leading a sense of mission and purpose that transcends those conflicts (Aronoff & Ward, 2011). The scholars also have emphasized that a resilient meaning system, a common focus among the most successful business-owning families, is the most important and enduring living legacy one generation can leave the next in family businesses (Aronoff & Ward, 2011).

Although family business scholars have emphasized the important role of meanings in the resilience process conceptually, they have paid much less attention to empirical testing of the issue. The family business literature about *family meanings* is conceptual, not empirical. Thus, little is known about how a family's subjective

[1] The family business literature used the term of values, but this study used the meanings term as the interchangeable concept with values for the consistent use of terminology. The conceptual issue between family values and family meanings will be addressed in "family meanings vs. family values" in the third section, Family Resilience in the Family Business Context, of the chapter 2.

meanings of demands influence the process by which its members cope with demanding situations within the family business context. To bridge the gap in the literature, this study will empirically investigate the role of the *family meanings of demands* in the resilience process of the business-owning families. To address the role of *family meanings of demands* in the resilience process within a conceptual framework, this study will use the Family Adjustment and Adaptation Response (FAAR) model (Patterson, 2002a, 2002b), an existing conceptual framework about family resilience. The FAAR model was selected as the main conceptual framework of this study for the following reasons: the FAAR model is a clearly delineated conceptual framework, necessary for empirical testing, within which there is clarity and preciseness in the conceptual definitions of constructs, including family resilience and its central elements, and consistency in the use of the constructs. In particular, the FAAR model emphasizes the importance of the *family meanings* construct in understanding the family resilience process (Patterson, 2002a) and has conceptual clarity in defining *family meanings of demands*. Due to these advantages as the conceptual framework, the FAAR model is appropriate for this empirical study whose focus is examining the role of *family meanings of demands* in the family resilience process.

The FAAR model is also appropriate for its application to the family business context. Family businesses have the unique characteristic of adjusting to demands through resource exchanges between family, business and community systems to accommodate needs of the family business system when demands exist (Danes, Loy, & Stafford, 2008; Olson, Zuiker, Danes, Stafford, Heck, & Duncan, 2003). Especially, the

interaction between the family business and its community context is critical because success of the family business depends on whether the business is managed in harmony with the local community culture (Fitzgerald, Haynes, Schrank, & Danes, 2010). The FAAR model also emphasizes the process of exchanges between resources or protective factors that emerge from the individual, family, and community contexts to meet the needs of the family system (Patterson, 1988, 2002a). The exchanges between resources from these different systems make sure that the needs from family demands are met and contribute to family adjustment to demands (Patterson, 1988, 2002a). In the FAAR model, therefore, more attention has been given to the transactions between the multiple sources of protective factors in a family's ecological context (i.e., individual, family, and community contexts) and to the mechanisms that bring multiple protective factors in a family's ecological context into play and how they build on each other to create cascade or chain effects (Patterson, 2002a). The FAAR model also emphasizes the need to take account of community contexts in which a family resides to understand how families respond to demands (Boss, 2001; Patterson, 2002a). Therefore, the FAAR model provides an appropriate conceptual framework for the resilience study of business-owning families with the unique characteristic of adjusting to demands through the resource transactions between family, business, and community systems.

The FAAR model (Patterson, 2002a, 2002b) emphasizes four central constructs that constitute and conceptualize family resilience: (a) *family demands*, (b) *family capabilities*, (c) *family adjustment / adaptation*, and (d) *family meanings*. These constructs are composed of necessary conditions for considering families as resilient,

focusing on the process of how a family successfully adjusts to family demands. In the second chapter, this FAAR model will be presented in more detail along with comparisons with other family stress and coping models in the context of historical development. In the third chapter, the hypotheses for this study guided by the FAAR model as well as sample, methodology, and analysis will be presented. This study, guided by the FAAR theory, was designed to accomplish the purpose that will be described in the next section.

Purpose of the Study

The purpose of this study is to examine the role of the family meanings about demands in the resilience process of business-owning families, guided by the Family Adjustment and Adaptation Response (FAAR) model (Patterson, 2002a, 2002b; Patterson & Garwick, 1994). The overall research question for the study is as follows: how does a business-owning family's meanings about the demands generated by business issues and conflicts between family and business influence the family's adjustment within the family business context? Responding to this research question will significantly contribute to previous literature as described in the next section.

Significance of the Study

Family meanings take on critical importance in understanding the family resilience process (McCubbin & McCubbin, 1993). In the face of family demands, *meanings* shape a business-owning family's response to their demands. Family members react to the demands based on a shared understanding of what's important and their core *meanings* (Aronoff & Ward, 2011). Lack of knowledge about the role of

family meanings of demands represents an important problem because until this knowledge becomes available, our understanding of the family resilience process within the family business context will be biased toward the role of family resources without understanding another critical component, *meanings*. This study will contribute to understanding of the role of *family meanings* in the resilience process in the context of business-owning families through empirically testing the conceptual assumption about the resilience process.

By understanding the role of *family meanings of demands* in the family resilience process and reinforcing *meanings* that give the family a more meaningful and acceptable outlook on the demands, the framework for successful family adjustment can be provided. For example, a family's meanings that included mother's role as the caretaker can be challenged by her return to the work force due to the family's economic crisis. Reframing the demands or changes as inevitable and helpful to the family's commitment to children's future places the family's adjustment in a more meaningful and acceptable light (McCubbin & McCubbin, 1993). Examining *family meanings of demands* also can help overcome the conflicts inherent to family businesses. For example, when a family and business have competing needs and pull apart over time, families need a compelling rationale to stick together. Exploring and reframing *meanings* shared by family members can be the glue that bonds the family and business (Aronoff & Ward, 2011).

In addition, this study will contribute to both family science and family business fields. In the family science field, quantitative empirical evidence that will potentially

contribute to the theoretical validation of the FAAR model will be achieved. Previous literature using the FAAR model (Patterson, 2002a, 2002b) has focused primarily on qualitative investigation rather than quantitative testing. Further, that research has concentrated primarily on the context of families with a child member who has a chronic illness. This study will focus on quantitative investigation to examine the family resilience process within a new context, business-owning families. This study will also contribute to family business literature through bringing greater conceptual preciseness to constructs related to *family meanings*. There has been conceptual confusion among constructs such as "*family values*" and "*family meanings*" in family business literature. Through the greater conceptual clarity of these constructs, future studies would benefit from more conceptually precise constructs that have been measured quantitatively, the principle type of analysis technique in family business literature.

Chapter 2. Background

This chapter addresses the conceptual, theoretical, and empirical background for this study. It consists of three sections: (1) historical development of family resilience, (2) theoretical framework for the study, and (3) family resilience in the family business context. The first section for the study background will address the issue of how family scholars have paid scientific attention to family stress and resilience and developed those theoretical models in the historical context. Through the comparisons among the theoretical models of family stress and resilience that were developed over time, the first section will also explain the reason why this study chose to use a particular theoretical framework. In the second section, the theoretical framework for this study will be described in more detail. In the third section, guided by the theoretical framework, the background about family resilience in the empirical context of this study, that is, family businesses, will be described. The historical development of family resilience will be presented first.

Historical Development of Family Resilience

Stressful life events and conditions can disrupt both personal well-being and the quality of family life. Many families, however, successfully overcome these stressful life events and adversity. In the past decade, family scholars have paid increased attention to the means that families utilize to be resilient despite the challenges they encounter (Patterson, 2002a). The increased scientific attention to family resilience has been influenced by the following three trends in the historical context. First, the emergence of childhood resilience as a major research topic in the developmental

psychology discipline played an important role in the attention to family resilience and its emergence. In the 1970s, studies of children of schizophrenic mothers showed evidence that many of these children thrived despite their high-risk status (Luthar, Cicchetti, & Becker, 2000; Waller, 2001). These studies led to increasing empirical efforts to understand individual variations of healthy functioning in the face of adversity (Luthar, Cicchetti, & Becker, 2000). Many social scientists, since the 70s, have begun to shift their orientation from the causes of disease and problems to the question of why some individuals stay healthy and do well in response to adversity while others do not. This perspective, now called "resilience," has focused primarily on individual functioning (Patterson, 2002a; 2002b) along with the emergence of individual resilience as a major theoretical and empirical topic.

Although early efforts for exploring resilience were primarily focused on personal qualities of resilient children or individuals, as researchers' work in the area evolved, they have increasingly acknowledged that resilience may often derive from factors external to a child or an individual, such as aspects of their families and their wider social environments (Luthar et al., 2000). For example, a well-functioning mother in one family, or the presence of a nurturing grandparent in another, may buffer a child with a risk factor of parental drug abuse against the risk (Luthar et al., 2000). In line with this evidence, some researchers indicated that the label "resilient" may sometimes be more appropriate for protective "families" than the healthy children within them (Baldwin, Baldwin, & Cole, 1990; Luthar et al., 2000). The increased attention to external factors of a child, especially families, in exploring childhood

resilience within the developmental psychology discipline contributed to the perspective that families can be considered resilient as they deal with challenges (Patterson, 2002a) in a general and indirect way, providing a background for the emergence of resilience concept in the family field. The following two trends occurred within the family field influencing the emergence and development of research on family resilience in a more direct way.

The second historical trend that led to the increased attention to family resilience is that there has been a movement in the family field to emphasize family strengths and resources rather than family deficits and pathology (Hawley & Dehaan, 1996; McCubbin & McCubbin, 1988; Patterson, 2002a). For example, some family therapy models, such as the solution-focused and narrative models, assume that clients possess resources and strengths that allow them to resolve their presenting problems. This clinical interest reflects the growing attention to the scientific inquiry about resilient families and the construct of resilience in the family field (Hawley & Dehaan, 1996; McCubbin & McCubbin, 1988). In other words, the line of scientific inquiry about resilient families was initially characterized by an investment in descriptive research listing the family strengths inferred from family therapy field, and this was complemented by efforts to uncover the family resources which facilitated adaptation following a major crisis (McCubbin & McCubbin, 1988).

Third, in the long history of research in the general area of stress and coping from an individualistic perspective, there has been growing interest in "family" stress and coping (McKenry & Price, 1994) that later led to the conceptual and theoretical

development of family resilience. In the 1950s social scientists became interested in the conceptualization of stress, and since the 1960s, there has been growing interest in coping responses to stress in adaptational outcomes (McKenry & Price, 1994). Along with the increased interest and research work in stress and coping area, many theoretical models that conceptualize and theorize the stress and coping process have been also developed. In the study of "family" stress and coping per se, much of the research work has used some variation of Hill's (1949) family stress model (ABCX model), upon which the current perspectives and models of family stress and resilience build (Hawley & Dehaan, 1996; Hobfoll & Spielberger, 1992; McCubbin & Patterson, 1982; McKenry & Price, 1994; Patterson, 2002a, 2002b; Vandsburger & Biggerstaff, 2004). The next section will focus on how the family stress and coping theories, evolved from the Hill's (1949) family stress model, were developed over time to provide the developmental background of the emergence of the family resilience model that will be used for this study. The comparisons among the theoretical models of family stress, coping, and resilience will also explain the reason why this study selected to use the particular theoretical framework for exploring family resilience.

Development of family stress and coping theories.

ABCX model and its revised models. Most recent theoretical models for understanding the family stress and coping process are rooted in Reuben Hill's (1949) ABCX family stress model (Conger & Conger, 2002; Conger, Rueter, & Conger, 2000; Patterson, 2002a, 2002b; McCubbin & Patterson, 1982; McKenry & Price, 1994; Hobfoll & Spielberger, 1992). Hill (1949) proposed that three elements are present in a

situation which determines whether or not a crisis is created: "(1) the hardships of the stressor event, (2) the resources of the family to meet the event, and (3) the family's definition or meaning of the event (p. 51)." Hill's (1949) ABCX model may be stated as follows: *A* (the hardships of the stressor event) interacts with *B* (the family's resources) and *C* (the family's definition or meaning attached to the event) to produce *X* (family crisis) (Hill, 1949; McKenry & Price, 1994; McCubbin & Patterson, 1982).

The hardships of the stressor event (*A* factor) is a crisis-precipitating occurrence that provokes a variable amount of change in the family system, such as birth or death of a family member, child's school entry, and natural disasters (Hill, 1949; McKenry & Price, 1994). The hardships of the stressor event (*A* factor) ordinarily demand a response of the family in terms of the family's resources (*B* factor) and the family's definition or meaning attached to the event (*C* factor). Family crisis (*X* factor), that may occur as a result of the family's response to the hardships of a stressor event, refers to a situation with any sharp or decisive change in which the usual behavior patterns are found to be inadequate and new ones are called for immediately (Hill, 1949). The degree of family crisis (*X* factor) ultimately depends on the family's definition of the stressor event (*C* factor) as well as the adequacy of the family's resources (*B* factor) to meet the demands of the change associated with the stressor event (Hill, 1949; McKenry & Price, 1994). This ABCX model (Hill, 1949) was the first historically to deal with the *"family*" stress process as opposed to the *"individual*" stress process, having much influence on succeeding other family stress and coping theories.

Wesley Burr (1982) attempted to revise and advance Hill's (1949) ABCX model through a deductive theoretical model. This model (Burr, 1982) explained the relationship between a stressor event (Hill's *A* factor) and the amount of crisis (Hill's *X* factor) through introducing the two new concepts of the family's *vulnerability* and *regenerative power*. According to Burr (1982), the stressor event (Hill's *A* factor) induces a variable amount of change in the family system. The family's *vulnerability* refers to the variation in the ability of a family to prevent a stressor event of change in its social system from creating a crisis (Burr, 1982; McCubbin & Patterson, 1982). The family *vulnerability* is influenced by the definition the family makes of the seriousness of the change (Hill's C factor) (Burr, 1982; McCubbin & Patterson, 1982). Burr (1982) emphasized the concept of *regenerative power*, which indicates the variation in the ability of the family to recover from a crisis (McCubbin & Patterson, 1982). These twin concepts of *vulnerability* and *regenerative power* have become the major reference points for scholars attempting to explain why some families are better able to protect themselves against crises (McCubbin & Patterson, 1982).

McCubbin and Patterson (1982) attempted to advance Hill's original ABCX model (Hill, 1949) and Burr's (1982) model in their Double ABCX model (McCubbin & Patterson, 1982). The Double ABCX model (McCubbin & Patterson, 1982) was inductively arrived at from the observations of families responding to major stressor events, primarily the absence of a husband-father as a prisoner of war, or as a prisoner during the Vietnam War (McCubbin & Patterson, 1982). This model focuses on what happens after the initial stress or crisis (Hill's *X* factor) to achieve the satisfactory

adaptation and what families do over time to adapt to a crisis by adding post-crisis factors to explain how families achieve a satisfactory adaptation to stress or crisis (Hobfoll & Spielberger, 1992; McCubbin & Patterson, 1982; McKenry & Price, 1994; Vandsburger & Biggerstaff, 2004).

The double ABCX model considers family crisis (Hill's *X* factor) as only one phase in the continuum of family adjustment to stress over time. As the double *X* factor, the concept of *family adaptation* is introduced as one possible outcome for the family course of adjustment following a crisis. The *family adaptation* implies a change in the family system, which evolves over a longer period of time and is intended to have long term consequences involving changes in family roles, rules, patterns of interaction, and perceptions (McCubbin & Patterson, 1982). The double *B* factor (*family resources*) consists of two general types: (1) *resources* that are already available to the family and that minimize the impact of the initial stressor and (2) *coping resources* (personal, family, and social) strengthened or developed in response to the "crisis" situation.

Both the Double ABCX model (McCubbin & Patterson, 1982) and Burr's (1982) model commonly demonstrate the shifts of interest and focus in family stress studies through adopting new concepts that complement Hill's (1949) original ABCX model. In line of such interest shifts, Burr (1982) presented the new concept of *regenerative power*, and McCubbin and Patterson (1982) emphasized the concepts of *family coping* and *family adaptation* in their Double ABCX model, attempting to advance Hill's (1949) original ABCX model. The development of these concepts

represented the shifts of interest and inquiry in family stress field from how families respond to the stressor event to how families cope with and adapt to the stressor event.

The double ABCX model that maintains the ABCX model's basic structure adds poststress or postcrisis factors to it, expanding the ABCX model's dimension of time. In the Double ABCX model focusing on a family's adjustment after crisis, McCubbin and Patterson (1982) questioned whether the reduction of "stress or crisis" (Hill's *X* factor) alone is an adequate index of a family's postcrisis adjustment because it might be argued that family stress or crisis potentially help to strengthen family relationships and even stimulate desirable family changes. *Family adaptation*, which is defined as the degree to which the family system alters its internal functions (behaviors, rules, roles, perceptions) and/or external reality to achieve a system (individual or family) – environment "fit", would be a useful concept for describing the outcome of a family's postcrisis adjustment (McCubbin & Patterson, 1982), complementing Hill's (1949) *X* factor, the amount of family "stress or crisis", that generally has been adopted as the major outcome variable describing family disruptions in response to a stressor.

The Double ABCX model (McCubbin & Patterson, 1982) is also a more dynamic model, than Hill's model (1949), that looks at the interaction of family stress variables (McCubbin & Patterson, 1982). The concept of *family coping* was adopted in the Double ABCX model as an effort to examine the interaction of two important variables, *family resources* and *family perception.* McCubbin and Patterson (1982) indicated that adopting the *family coping* concept and examining *family coping* strategies led to a better understanding of family behavior in response to stress through

examining the interaction of *family resources* and *perception.* Attempting to examine the interaction of *family resources* and *perception* through adopting the *family coping* concept, McCubbin and Patterson (1982) suggested what *family coping* behaviors as *resources* (i.e., maintaining family integrity, establishing independence through self-development) and as *perceptions* strategies (i.e., religious beliefs, redefining the hardships) families found helpful to them in managing crisis and working towards adjustment.

In addition, the Double ABCX model (McCubbin & Patterson, 1982) expanded Hill's (1949) ABCX model through more precisely conceptualizing the original model's each factor (i.e., A, B, C, and X factor). For example, in the Double ABCX model, the double A factor (family stressor pile-up) consists of three types of stressors contributing to a pile-up in the family system in a crisis situation: (1) *the initial stressor event*, which plays a part in moving the family into a "crisis" state, (2) *the family life changes and events*, and (3) *stressors as consequences of the family's efforts* to cope with the hardships of the situation (McCubbin & Patterson, 1982).

While Burr's (1982) model and the double ABCX model (McCubbin & Patterson, 1982) attempted to revise and expand the original ABCX model (Hill, 1949), centering around the A, B, C, and X factors of the original model, other family stress researchers attempted to explain the family stress process by emphasizing a particular factor of the ABCX model, that is, the B (family resources) or C (family perception) factor.

Resources vs. perception-focused family stress models. The important question for family stress researchers is increasingly not whether the stressor event causes a crisis, but rather what factors combine with the stressor event to increase or mitigate its impact on crisis. These lines of inquiry have emphasized the importance of *family resources* and *family perception* that Hill (1949) labeled as the B and C factors in the ABCX model (McCubbin & Patterson, 1982). What is important about Hill's (1949) ABCX model is that in it, family stress or crises are seen not as inherent to the stressor event itself, but as a function of the disturbed family's response to the stressor (McKenry & Price, 1994). The family's response to the stressor event (*X* factor) depends on family resources (*B* factor) and family perceptions (*C* factor). In other words, according to the ABCX model, family resources and perceptions or definitions of the stressor mediate and protect families from deteriorating during a crisis (Vandsburger & Biggerstaff, 2004).

Scholars have developed different types of models related to the stress process and coping that vary in terms of which factor in the ABCX model, *B* (family resources) or *C* (family perceptions), they emphasize. Hobfoll (1989) developed the Conservation of Resources (COR) theory, whose basic tenet is that people strive to retain, protect, and build resources and feel threatened by the potential or actual loss of those valued resources (Hobfoll, 1989). As such, Hobfoll (1989) emphasized *B* (family resources) more than *C* (family perceptions) in the ABCX model. In contrast, Boss (1992) emphasized *C* (family perceptions) more than *B* (family resources) in Hill's model. According to her, perceptions influence how one sees and uses resources, but the

sequence begins and ends with perceptions. Boss (1992) also underscored that understanding why some families remain resilient while others collapse requires listening to family members' perceptions or interpretations of their reality. Hobfoll's (1989) COR model that emphasizes a family's resources (*B* in the ABCX model) and Boss' (1992) family stress model that emphasizes a family's perceptions or meanings (*C* in the ABCX model) tend to overlook the whole dynamic process of resilience by emphasizing a particular element of the family stress and coping process.

Emergence of the family stress and coping model adopting resiliency. Both the Double ABCX model (McCubbin & Patterson, 1982) and Burr's (1982) model emphasized the important roles that family strengths, resources, and coping play in explaining the family stress process through incorporating strengths-directed concepts, such as *regenerative power* (Burr, 1982), *family coping,* and *family adaptation* (McCubbin & Patterson, 1982) into their models, attempting to advance Hill's (1949) original family stress model. The development of these new concepts in the family stress and coping models represented the shifts of attention and inquiry in the family stress study field from the inquiry on how families react to stressor events and how families are influenced by stressor events (Burr, 1982) to the inquiry on why and how some families are better able to cope with and manage stressor events (McKenry & Price, 1994). In other words, family stress researchers have increasingly shifted their attention from family dysfunction to the process of family coping. This emphasis, which views stress as prevalent, but not necessarily problematic, has led to an

increasing interest in coping (McCubbin, Joy, Cauble, Comeau, Patterson, & Needle, 1980; McKenry & Price, 1994).

In line with the increased attention to the family coping process, family stress and coping theories had been advanced and adapted to guide the study of resilient families (McCubbin & McCubbin, 1988). The importance of family stress and coping theories to the study of resilient families is based, in part, on the central roles that family strengths, resources, and coping play in understanding family behavior under stress (McCubbin & McCubbin, 1988). McCubbin and McCubbin (1988; 1993) have proposed the Resiliency Model of Family Stress, Adjustment, and Adaptation (The Resiliency Model), adopting the terms such as "resiliency" and "resilient families" first in the developmental context of family stress and coping models.

The Resiliency Model (McCubbin & McCubbin, 1993) attempted to describe families at two related but discernible phases in their response to life changes: *family adjustment* phase and *family adaptation* phase (McCubbin & McCubbin, 1988). In the *family adjustment* phase, a successful or unsuccessful family adjustment is determined by many interacting components in the face of a stressor. The *stressor* (A) and its severity interact with the *family's vulnerability* (V), which is shaped by the pileup of family stresses, transitions, and strains. Family vulnerability interacts with the *family's typology* (T) which is the established patterns of functioning. These components, in turn, interact with the family's *resistance resources* (B), such as quality communication between husband and wife. This, in turn, interacts with the *family's appraisal* (C) of the stressor. The family appraisal interacts with the family's *problem-solving and coping*

strategies (PSC), such as adopting an affirming communication style. These interacting components and processes lead to a positive outcome, that is, bonadjustment (X) or a negative outcome, that is, maladjustment (X). A family's maladjustment results in a state of *family crisis* (McCubbin & McCubbin, 1993).

When a stressor (A) becomes a family crisis through the family's maladjustment, it initiates the beginning of the *family adaptation* phase. The *pileup of family demands* (AA) created by the stressor, family life-cycle changes, and unresolved strains interacts with the family's level of *resiliency* (R). The family's level of *resiliency* is promoted, in part, by newly instituted patterns of family functioning and retained established patterns of functioning (McCubbin & McCubbin, 1993). Depending on differently instituted and established patterns of family functioning, three types of family are introduced, each emphasizing different aspects of family functioning: (1) regenerative family type, which involves family coherence and family hardiness as an important set of patterns, (2) rhythmic family type, which focuses on family time and routines in relatively predictable patterns of family living, and (3) resilient family type, which highlights patterns of family flexibility (i.e., the degree to which the family is able to change roles, rules, and boundaries) and family bonding (i.e., the degree of emotional bonding to form a meaningful and integral family).

These components interact with the *family's resources* (BB) such as strengths and capabilities, which are supported by family and friends (*social support*, BBB) in the community and by the family's appraisals. The family's *situational appraisal* (CC) is formed from the perceived relationship between the family's resources and the demands

of the situation. This interacts with the *family's schema appraisal* (CCC), which refers to the family's blueprint for functioning including family values, goals, priorities, and rules. This interaction between the family's situational appraisal (CC) and schema appraisal (CCC) creates *a family meaning* that is attached to the stressor and the changes it produces. The family resource and appraisal components interact with the *family's problem-solving and coping* repertoire (PSC) to facilitate *family adaptation* (Bonadaptation or Maladaptation, XX) to the family crisis situation (McCubbin & McCubbin, 1993).

The Resiliency Model (McCubbin & McCubbin, 1993), an expansion of the earlier efforts to explore why and how some families are better able to cope with and even thrive on hardships (McCubbin & McCubbin, 1988; McKenry & Price, 1994), emphasized more *family adaptation* than *family adjustment,* while Hill's (1949) ABCX framework focused on *family adjustment* (McCubbin & McCubbin, 1993). *Family adaptation* in the Resiliency Model was used to describe the outcome of family efforts to bring a new level of balance, harmony, coherence, and functioning to a family-crisis situation (McCubbin & McCubbin, 1993) and thus it is the central concept in understanding the family's struggle to manage a family-crisis situation over time.

The Resiliency Model (McCubbin & McCubbin, 1993), which came out of the family stress conceptual framework rooted in Hill's (1949) ABCX model, embraced previous theoretical efforts for understanding the family stress and coping process by incorporating many concepts developed from previous models (e.g., *family vulnerability, family coping, family adjustment* and *family adaptation*) and expanded the models by

developing the new concepts (e.g., *family types, family resiliency, family schema and meaning*). The Resiliency Model also explained the dynamic interactions among the concepts in a more systematic and organized way than previous models. Consequently, this Resiliency Model played a central role in the transition from the attention to the family stress and coping to the family resiliency through incorporating the resiliency concepts in the family stress and coping model.

However, the Resiliency Model's framework (McCubbin & McCubbin, 1993) had some limitations in applying the model to empirical studies on family resilience. Although the Resiliency Model adopted the term of "resiliency" as an effort to advance the earlier family stress and coping models for the first time in the developmental history of family stress models, the conceptual definitions of the resiliency terms are not clear enough to applying the model to resilience empirical studies. For example, there are conceptual confusions between the resiliency-related concepts such as "resiliency" and "resilient" families. According to McCubbin and McCubbin (1988), who proposed the Resiliency Model, family resiliency is conceptualized as "characteristics, dimensions, and properties of families which help families to be resistant to disruption in the face of change and adaptive in the face of crisis situations (p.247)." However, the "resiliency" concept in the Resiliency Model (McCubbin & McCubbin, 1988; 1993) was also adopted as a term that corresponded with instituted patterns of family functioning and represented a particular family type, that is, "resilient families." These instituted patterns of family functioning provide a process by which family unity and durability were maximized in the context of families under stress (McCubbin &

McCubbin, 1993). In other words, the "resiliency" concept in the Resiliency Model (McCubbin & McCubbin, 1988; 1993) was defined as a dual-aspect term that refers to both family characteristics or properties and family processes. This way of conceptualizing "resiliency" is not sufficient in addressing the inquiry about family resilience, such as what accounts for why some families stay healthy in the face of adversity and others do not (McCubbin & McCubbin, 1988; Patterson, 2002a) because such conceptual definition of "resiliency" in the model is not clear enough to applying the model to resilience empirical studies.

The study of family resilience is guided by the general proposition: In the face of normative or non-normative stressors, transitions, strains, and crises, the resilient family unit has, creates, and utilizes effectively the instrumental and expressive resources within and outside of the family system to protect the system from deterioration or breakdown and to promote adjustment and adaptation to the stressful situation (McCubbin & McCubbin, 1988). Based on this proposition, family resilience has necessary main elements for its definition. These elements are composed of necessary conditions for considering a family to be resilient. The three conditions are: (1) a *family-level outcome* to assess the degree to which a family is competent in accomplishing the outcome, (2) *risk factors* associated with the expectation that a family will not be successful, and (3) *protective factors* that preclude a poor expected outcome (Patterson, 2002a). Although any application of this perspective requires clear conceptual definitions of family outcomes, significant family risk, and protective mechanisms as well as family resilience that is composed of the three factors (Patterson,

2002a), previous family stress and coping theories, including the Resiliency Model, do not provide the clear conceptual definitions of these constructs for considering a family to be resilient. Luthar et al. (2000) indicated that empirical studies on resilience must be presented within a clearly delineated theoretical framework within which there are clarity and consistency in the use of definitions and terminology, including precise statements of the criteria used to operationalize resilience.

Patterson (2002a, 2002b) attempted to make clear the conceptual confusions about family resilience in the Family Adjustment and Adaptation Response (FAAR) model (Patterson, 2002a, 2002b) integrating the family resilience perspective and the family stress and coping models. This model also complemented the previous family stress theories' limitations in applying to family resilience study. While each FAAR model construct (i.e., *family demands, family capabilities, family meanings*, and *family adaptation*) is comparable with an ABCX model factor, the FAAR model is more systematically structured than other theories, focusing more on the dynamic process of family resilience, and emphasizing families' meanings or perceptions in the resilience process, a primary focus of this study. This is the primary reason why this study chose to use the Family Adjustment and Adaptation Response (FAAR) model (Patterson, 2002a, 2002b; Patterson & Garwick, 1994) to achieve the purpose of this study to examine how the *family meanings* influence the resilience process. *Family meanings* is an important concept in the family resilience process. *Family meanings* will be examined in the context of development of family stress and coping models. Through examining *family meanings'* development, how *family meanings* have developed in the

developmental history of family stress and coping models, how each model gave the importance to the *family meanings* concept in the family resilience process and whether the FAAR model still has more precise and clear definitions about the family meanings concept than any other models. And then, the FAAR model as the theoretical framework of this study will be further described in the next section: Theoretical Framework for the Study.

Family meanings in the development of family stress and coping models.

Since Hill (1949) first introduced the concept of the "family definitions or meanings (p.52)" attached to the stressor event (*C* factor) in his family stress model (ABCX model), most family stress and coping models emphasized the important role of family meanings in the family stress and coping process (Hill, 1949; McKenry & Price, 1994; McCubbin & Patterson, 1982). The degree of family crisis (*X* factor) depends on the family's definition or meaning of the stressor event (*C* factor) as well as the adequacy of the family's resources (*B* factor) to meet the demands of the change associated with the stressor event (Hill, 1949; McKenry & Price, 1994). Hill (1949), who examined the family crises of the war separation, indicated that the definitions or meanings which the families made of the event of war separation demonstrated wide differences. For example, for a family where all members before the father's induction were inseparable and took all their recreation as a group, the absence of the father left a suffering void which could be filled only by his return. However, for a family which suffered neglect from a drinking father for years, his absence was a relief and the allotment checks was doubly appreciated (Hill, 1949). Hill (1949) indicated that the

family's definition or meaning of the stressor event would be the determining factor in deciding whether or not the separation was a crisis, pointing out that if a family felt that it was having difficulty, no matter how easy the situation might seem to others, that family tended to act in a disorganized manner or suffer extreme emotional upset (Hill, 1949). Although Hill (1949) emphasized the importance of the family meanings, this component was not defined precisely and clearly by Hill (1949), and there is no explanation of how it varies (Burr, 1982). Although Hill (1949) did not clearly conceptualize the family meanings component, it was considered as one of the major components in his family stress model (Hill, 1949), influencing succeeding family stress models.

Burr (1982), who attempted to advance and reformulate Hill's (1949) ABCX model, indicated that Hill's (1949) model did not clearly define the component of the family's definition of the stressor event (C), and he inferred from the context of the Hill's literature that the best label for the component is the family's "subjective definition of the severity of the change" (p.9). Burr (1982) also pointed out that Hill (1949) did not tell whether the family's definition of the severity of the change (1) influences the amount of crisis (Hill's *X* factor) directly, (2) influences the amount of crisis indirectly, or (3) is just one of many specific types of resources. Burr (1982) suggested that the second of these three alternatives is the most defensible, and his reformulated model adopted the idea that the family's definition of the severity of the change influences the amount of crisis (Hill's *X* factor) indirectly by influencing the family's vulnerability to stress. In terms of the C component, Burr (1982) advanced

Hill's (1949) model through further clarifying its conceptual label, definition, and relationship with the amount of crisis.

McCubbin and Patterson (1982), who attempted to advance Hill's (1949) original ABCX model and Burr's (1982) model in their Double ABCX model (McCubbin & Patterson, 1982), added the family perception component in post-crisis context (double C factor), expanding the time dimension of prior family stress models. The Double ABCX model classified the family perception component into two different levels: (1) the *family's perception of the stressor event* (C) in the family adjustment (pre-crisis) phase, which is the family's view of how stressful the event may be or is and of available family resources, and (2) the *family's perception of the crisis* (CC) in the family adaptation (post-crisis) phase, which involves not only the family's view of the crisis situation, the pile-up of life events, family resources, but also the meaning families attach to the total family situation (McCubbin & Patterson, 1982). In the family adaptation (post-crisis) phase of the Double ABCX model (McCubbin & Patterson, 1982), the *family perception of the crisis* (CC) interacts with the *family resources* (BB) through the *family coping,* and the interaction of two components leads to the family adaptation. The Double ABCX model (McCubbin & Patterson, 1982) proposed the two different levels of family perception component, adding the component in post-crisis context (CC) and defined each level of family perception more precisely than Hill's (1949) ABCX model and Burr's (1982) model. In terms of the family perception component's relationship with the X factor, which was reframed into the family adaptation from the amount of crisis, the Double ABCX model emphasized

the interacting role of family perception (CC) with family resources (BB) through family coping. Due to the contribution of the two interacting components of family resources and perception to the family adaptation, McCubbin and Patterson (1982) underscored the importance of both family resources and family perception in the Double ABCX model.

The important role of family perception in the family stress process was more emphasized by Boss (1992) than the Double ABCX model. Boss (1992) indicated that understanding why some families remain resilient while others collapse requires listening to family members' perceptions or interpretations of their reality. She emphasized family perceptions (C factor) more than family resources (B factor) in Hill's (1949) model, indicating that perceptions influence how one sees and uses resources, but the sequence begins and ends with perceptions. However, Boss' (1992) family stress model that underscores the family's perception tended to overlook the relational dynamic with other critical components in the whole process of family stress and coping by emphasizing a particular element of the process.

The Resiliency Model of Family Stress, Adjustment, and Adaptation (The Resiliency Model) (McCubbin & McCubbin, 1988; 1993), that played an important role in the transition from the attention to the family stress and coping to the family resiliency, proposed the three levels of family appraisals: (1) the *family's appraisal of the stressor* (C) in the family adjustment phase, (2) the family's *situational appraisal* (CC) in the family adaptation phase, and (3) *family schema and meaning* (CCC) in the family adaptation phase. The Resiliency Model (McCubbin & McCubbin, 1988; 1993)

expanded the concept of the family perception proposed by the Double ABCX model (McCubbin & Patterson, 1982). The *family's perception of the crisis* (CC) in the family adaptation (post-crisis) phase of the Double ABCX model (McCubbin & Patterson, 1982), which involves the meaning families attach to the total family situation as well as the family's view of the crisis situation (McCubbin & Patterson, 1982) was divided into the two levels of family perceptions in the Resiliency Model (McCubbin & McCubbin, 1993): the family's *situational appraisal* (CC) and *family schema and meaning* (CCC) in the family adaptation phase (McCubbin & McCubbin, 1993).

The *family's appraisal of the stressor* (C) in the family adjustment phase is the family's definition of the seriousness of a stressor and its related hardships (McCubbin & McCubbin, 1993). This component interacts with several important components in the family adjustment phase, including the *family's typology* (T) which is the established patterns of functioning, the family's *resistance resources* (B), and the family's *problem-solving and coping strategies* (PSC). These interacting components and processes lead to bonadjustment or maladjustment (X) (McCubbin & McCubbin, 1993).

The Resiliency Model proposed two additional appraisal levels that play an important role in shaping the course of family adaptation (McCubbin & McCubbin, 1993), that is, the family's *situational appraisal* (CC) at the second level and *family schema and meaning* (CCC) at the third level. The family's *situational appraisal* (CC) is formed from the perceived relationship between the demands of the situation, created by the family crisis, and the family's capabilities to manage these demands (McCubbin

& McCubbin, 1993). The family's *situational appraisal* (CC) interacts with critical components in the family adaptation phase, including the family's level of *resiliency* (R) which is determined in part by newly instituted patterns of family functioning, the *family's resources* (BB) which are supported by family and friends (*social support*, BBB) in the community, and the *family's schema appraisal* (CCC) which refers to family values, goals, priorities, and rules. In particular, the interaction between the family's *situational appraisal* (CC) and *schema appraisal* (CCC) creates *a family meaning* that is attached to the stressor and the changes it produces. In other words, in the face of a family crisis situation demanding changes in rules and patterns of functioning, the family is called on to appraise its past and future in an effort to give meaning to the stressor and to the resulting changes in the family system (McCubbin & McCubbin, 1993). The family resource and appraisal components, including the *family schema and meaning* (CCC), interact with the *family's problem-solving and coping* repertoire (PSC) to lead to family bonadaptation or maladaptation (XX) to the family crisis situation (McCubbin & McCubbin, 1993).

One of the primary differences of the Resiliency Model (McCubbin & McCubbin, 1988; 1993) from prior models is that the model emphasized the importance of the third level of family appraisal, the *family schema and meaning* (CCC), because family adaptation calls for possible changes in the family schema, particularly the family's values, goals, rules, and expectations, as well as changes in the family's patterns of functioning to achieve the optimal fit. Developing a shared sense of family meaning to changes created by a family crisis is a difficult and a demanding process,

and the family's sense of congruency is achieved only through patience, negotiation, understanding, and commitment to the family (McCubbin & McCubbin, 1993).

However, the Resiliency Model (McCubbin & McCubbin, 1988; 1993) has some limitations in applying it to an empirical study focusing on the role of family meanings in the family resilience process. The first limitation is that there are conceptual confusions among constructs of the Resilience Model. It is unclear about how the family appraisal at the second level *(i.e., family situational appraisal*, CC factor) can be distinguished from the family appraisal at the first level *(i.e., family appraisal of the stressor*, C factor). According to McCubbin and McCubbin (1993), the *family's appraisal of the stressor* (C) is the family's definition of the severity of a stressor in the family adjustment phase, while the family's *situational appraisal* or *appraisal of situational demands* (CC) is formed from the perceived relationship between the situational demands, created by the family crisis, and the family's capabilities to manage these demands in the family adaptation phase. According to McCubbin and McCubbin (1993), situational demands correspond with contextual difficulties created by the family crisis situation that requires basic changes in the family patterns of functioning to restore stability. For example, the change in patterns of health-care delivery for a child's illness (i.e., a stressor) may create an additional demand (i.e., situational demand or contextual difficulty) for the family, stimulating the family to alter the way it has traditionally functioned, because the family's relationship with a previous health-care provider has provided a sense of continuity and coherence (McCubbin & McCubbin, 1993). As this example shows, situational demands

accompany a stressor and, therefore, it is possible that the family's appraisal of situational demands (CC) overlaps with its appraisal of the stressor (C) because the appraisal of situational demands might include the appraisal of the severity of the stressor in the adjustment phase. Also, the family appraisal of a stressor, in the family adjustment phase, might involve the evaluation of the family's capabilities. Thus, it is hard to distinguish the two levels of appraisals from each other.

The other conceptual confusion in the Resiliency Model stems from the family schema and the family meaning. It is unclear whether or not the family schema is distinguished from the family meaning. McCubbin and McCubbin (1993) distinguished the family schema from the family meaning by indicating that the interaction between the family's *situational appraisal* (CC) and *schema appraisal* (CCC) creates *a family meaning*, while they also treated the family meaning as a construct corresponding with the family schema by using a integrated term of "*family schema and meaning*" as the CCC component. The authors' contrary attitude toward the two terms of the family schema and the meaning add to the conceptual confusion in the Resiliency Model.

Another limitation of the Resilience Model (McCubbin & McCubbin, 1993) is that it is unclear how the three levels of family appraisals are related to each other. In other words, it is not clear how the *family's appraisal of the stressor* (C) at the first level is conceptually associated with other levels of family appraisals, that is, *situational appraisal* (CC) at the second level and *schema appraisal* (CCC) at the third level, although it is possible that the first level's family appraisal may have something to do with the second or third level's appraisals. If the relational structure among the family

appraisals at the different levels is conceptually clearer, family scholars may contribute to knowledge about the different roles of the different levels' family appraisals in the family adaptation process through empirical testing.

To sum up, the Resiliency Model (McCubbin & McCubbin, 1988; 1993) has limitations in applying it to empirical study focusing on the role of *family meanings* in the family resilience process because of the model's conceptually confused definitions of the *family appraisals* concepts and unclear relationships among the family appraisals at the different levels. The Family Adjustment and Adaptation Response (FAAR) model (Patterson, 2002a, 2002b; Patterson & Garwick, 1994) has more conceptual clarity in the definitions of *family meanings* construct than prior family stress models, including the Resiliency Model. The FAAR model that guides this study will be described in the following section.

Theoretical Framework for the Study

This study is theoretically guided by the Family Adjustment and Adaptation Response (FAAR) model (Patterson, 2002a, 2002b; Patterson & Garwick, 1994). The FAAR model was selected as the main conceptual framework of this study for the following reason: the FAAR model has a clearly delineated theoretical framework, necessary for empirical testing, within which there is more clarity and preciseness in the conceptual definitions of constructs, including family resilience and its central elements, and more consistency in the use of the constructs than any other family stress and coping models that were introduced above in the developmental context. In particular, the FAAR model that emphasizes the importance of the *family meanings* construct in

understanding the family resilience process (Patterson, 2002a), has the conceptual clarity in the definitions of *family meanings*. Due to these advantages as the theoretical framework, the FAAR model is adequate to this empirical study for examining the role of *family meanings* in the family resilience process. In order to introduce the theoretical framework based on clearer conceptual definition of *family resilience*, conceptual issues of family resilience will be addressed first prior to introducing the FAAR model.

Conceptual issues of family resilience: capacity vs. process.

There is little conceptual clarity in the literature about how the term "family resilience" is defined, operationalized, and applied (Hawley & Dehaan, 1996; Patterson, 2002a). Patterson (2002a) indicated that a major source of the confusion surrounding family resilience lies in the term's use as both a capacity as well as a process. Some researchers define *family resilience* as family characteristics, dimensions, and properties that help families to be resistant to demands or disruptions (McCubbin & McCubbin, 1988); others conceptualize *family resilience* as dynamic processes that encompass positive adaptation (Conger & Conger, 2002) and fluctuate over time. The empirical studies conducted by Conger, Rueter, and Elder (1999) and Conger and Conger (2002) conceptualized resilience as a dynamic process encompassing positive adaptation in the context of economic adversity. Vandsburger and Biggerstaff (2004), however, conceptualized family resilience as "the ability of the family to develop and/ or maintain healthy family functioning and successfully adapt to life's challenges and risks" (p.68). Orthner, Jones-Sanpei, and Williamson (2004) indicated that important aspects of family resilience are a family's sense of cohesion, ability, and willingness to

communicate, as well as its access to social support. Although Orthner et al. (2004) did not explicitly define *family resilience*, they viewed family resilience in a way similar to Vandsburger and Biggerstaff (2004), as a capacity rather than a process.

These empirical studies (Orthner et al., 2004; Vandsburger & Biggerstaff, 2004) that conceptualized family resilience as a capacity share a common feature. They often confuse readers by using several concepts with similar characteristics, such as family resilience, family resiliency, family strengths, family assets, family resources, and family protective factors, without distinct conceptual definitions. For example, in a study of resilience in low-income families, Orthner et al. (2004) not only failed to provide a conceptual definition of family resilience, but also used the term "family strengths" interchangeably with "family resilience." They did not clearly distinguish between the two concepts. This aspect of their study demonstrates that when family resilience is conceptualized as positive capacities, its distinction from family strengths is easy to overlook. Vansburger and Biggerstaff (2004) similarly failed to provide a clear conceptual distinction between "family resiliency" and "family resiliency resources," and measured both concepts through indicators of family hardiness and social support. Just as the Orthner et al. (2004) study did with family resilience and family strengths, this aspect of their study demonstrates the difficulty in differentiating between family resiliency, or resilience, and family resources when family resiliency is conceptualized as positive capacities. The above empirical studies (Orthner et al., 2004; Vansburger and Biggerstaff, 2004) show the disadvantage of conceptualizing family resilience as capabilities rather than processes. Conceptualized as capabilities, family

resilience is often confused with other concepts that represent a family's positive capabilities and qualities, such as family resiliency, family strengths, family assets, family resources, and family protective factors. For empirical studies based on the concept of family resilience, conceptual clarity about whether family resilience is a process or a capacity is vital.

How can family resilience be used differently from family strengths, family assets, family resources, family protective factors, or family resiliency? Based on the literature review, this study recommends that each construct with similar characteristics has distinct conceptual definitions. Family *strengths* or family *assets* can be used to describe families' positive qualities that are helpful in managing their stressful circumstances successfully, regardless of their exposure to substantial demands. *Family resilience*, meanwhile, presumes exposure to demands (risk factors), based on the necessary main elements for the definition of family resilience (i.e., necessary conditions for considering a family to be resilient) proposed by Patterson (2002a) and the general proposition for the family resilience study suggested by McCubbin and McCubbin (1988). Therefore, although the concepts of family *strengths* (or family *assets*) and family *resilience* both involve a family's positive and helpful qualities, the condition of exposure to demands can be considered a distinctive factor for clearly differentiating between them. Additionally, a family's positive qualities can be referred to as *protective factors* within the process of family resilience. In other words, *protective factors* can be used to describe one set of family capabilities within the dynamic process of family resilience. As such, family resilience—involving risk

factors (i.e., family demands), protective factors (i.e., family capabilities), and outcome factors (i.e., family adjustment or adaptation) —constitutes a process rather than a capacity. In the resilience process, family *resources* can be used to describe one component of family capabilities that consist of coping behaviors and resources as Patterson (2002a) proposed.

How can we conceptually distinguish between family resilience and family resiliency? In an attempt to bring forth greater conceptual clarity, Patterson (2002a) defined family resiliency as a capacity and family resilience as a process. Applying these definitions to conceptual issues of family resilience allows us to use "family *resiliency*" to describe the capacity and qualities of a family system to manage their demands successfully (Lavee, McCubbin, & Olsen, 1987; McCubbin & McCubbin, 1988; Patterson, 2002a) and reserve "family *resilience*" to describe the ongoing and dynamic processes by which families adjust and function competently in the face of demands, at a particular time as well as over long periods (Conger & Conger, 2002; Hawley & Dehaan, 1996; Luthar, Cicchetti, & Becker, 2000; Patterson, 2002a, 2002b).

Conger and Conger (2002) enumerated several advantages to conceptualizing resilience as a dynamic process. First, this perspective of resilience focuses on the processes or mechanisms through which individuals become resilient to difficulties over long periods, rather than on rigid, unchanging traits and static situations. Second, the perspective on resilience as a process recognizes that a broad array of events or conditions may have adverse influences on individuals and families. Third, this approach to resilience recognizes diversity in the outcomes that may reflect resilience

(Conger & Conger, 2002). This empirical study chose to use the term *family resilience* to describe a dynamic process in order to create conceptual clarity and consistency among resilience-related terms. In the primary conceptual framework of this study, the Family Adjustment and Adaptation Response (FAAR) model (Patterson, 2002a, 2002b; Patterson & Garwick, 1994), the terms of "*family resiliency*" and "*family resilience*" are used with the clear distinction, respectively representing a concept as a family capacity and as a dynamic process. Due to the advantage as the clearly delineated theoretical framework, including the conceptual clarity and preciseness, the FAAR model (Patterson, 2002a, 2002b; Patterson & Garwick, 1994) was chosen to be a primary conceptual framework of this study for empirically examining the role of family meanings in the family resilience process. The FAAR model will be introduced in the next section.

FAAR model and its four main elements.

In the Family Adjustment and Adaptation Response (FAAR) model, Patterson (2002a, 2002b) emphasizes four central constructs that constitute and conceptualize family resilience as a dynamic process: (a) *family demands*, (b) *family capabilities*, (c) *family adjustment / adaptation*, and (d) *family meanings*. Each construct will be introduced beginning from *family demands*.

Family demands. *Family demands* are made up of (a) normative and non-normative stressors (discrete events of change), (b) ongoing family strains (unresolved, insidious tensions), and (c) daily hassles (minor disruptions of daily life) (Patterson, 2002a). While normative family demands refer to expected family life cycle changes

(e.g., getting married or having a child) non-normative family demands are caused by unexpected and often traumatic events, such as demands from natural disasters or the premature death of a child (Patterson, 2002a).

One major issue related to demands in the resilience process that has been argued by resilience scholars and practitioners is how significant the demand must be before a good outcome can be considered evidence of resilience (Patterson, 2002a). Significant demands usually emerge from high-risk status involving chronic exposure to adverse social conditions (i.e. poverty) and/or traumatic exposure (i.e., war) (Masten & Coatsworth, 1998). Nonnormative types of demands in the FAAR theory (Patterson, 2002a) tend to more fit the definition of significant demands because nonnormative demands are accompanied with high-risk status and/or traumatic exposure.

Although normative *family demands* usually would not be considered a significant demand for families, the FAAR theory (Patterson, 2002a) indicated that normative demands could pose significant demands in some contexts. In other words, a family's meaning of a normative event, influenced by social and cultural factors, can increase the demands, or if a family has few protective resources (i.e., low income or education), the family would be likely to have a harder time addressing normative demands (Patterson, 2002a). Therefore, families who are faced with normative demands are likely to show more dynamic resilience process, including meanings and resources, than families faced with nonnormative demands. The present study focuses on the normative type of demands in the family business context to explore the dynamic resilience process that involves the meaning and resource factors. This study also

focuses on the family's subjective meanings of the demands that will be described in the next section.

Family meanings: situational meanings of demands. *Family meanings* refer to "the interpretations, images, and views that have been collectively constructed by family members as they interact with each other (Patterson, 2002a; Patterson & Garwick, 1994, p.1)." Three sub-constructs of *family meanings* have been described in the FAAR theory: *(a) situational meanings* (i.e., families' definitions of their family demands and capabilities), *(b) family identity* (i.e., how families see themselves internally as a unit), and *(c) family worldview* (i.e., how families see their family in relationship to systems outside of their family) (Patterson, 2002a; Patterson & Garwick, 1994).

The first level of *family meanings* (i.e., *situational meanings*) emphasizes the subjective meaning a family gives to their stressful situations or demands and appraisal of the family's capabilities to manage the demands (Patterson, 2002a; Patterson & Garwick, 1994a). As family members talk with each other about the family demands that they faced, they begin to construct meanings about family demands or the demand pile-up, as well as meanings about their capabilities as a family to manage their demands (Patterson, 2002a; Patterson & Garwick, 1994). The family's subjective meanings of demands (i.e., *situational meanings of demands*) are a focus of the present study because this type of meaning is the most concrete and more immediately available in the family's consciousness, whereas the family's view of the world (i.e., *family worldview*) and its view of the family itself (i.e., *family identity*) are more abstract and

usually implicit (Patterson & Garwick, 1994). A family's *situational meanings of demands* are also more responsive to change than *family identity* and *family worldview* (Patterson & Garwick, 1994). For example, when a stressful demand, such as the diagnosis of chronic illness, happens suddenly and unexpectedly, the first level of family meanings may be one of disbelief or denial (Patterson & Garwick, 1994). Families' subjective appraisal or meanings about the demands is related to their level of experienced stress and adjustment to demands and may predict not only their vulnerability to stress, but also the ways they manage demands (Patterson, 2002a). The *situational meanings of demands* cumulatively create a pattern. A family's subjective difficulty in managing demands could cumulatively lead to the inability to build a repertoire of protective capabilities of the family and perhaps high risk status (Patterson, 2002a). A family's sense of confidence in managing demands, however, can build the family's protective capabilities, increasing the likelihood of showing resilience if and when the family was exposed to a significant risk (Patterson, 2002a). Thus, a family's subjective meanings shape the nature and extent of the protective capacity of the family as well as perceived demands (Patterson, 2002a, 2002b).

Family adjustment and adaptation. There are two types of family outcomes in the FAAR model: *family adjustment* and *family adaptation* (Patterson, 2002a). When families are faced with family demands, they engage in relatively stable patterns of interacting as they try to balance the family demands with their existing capabilities to achieve a level of family adjustment (Patterson, 2002a). During the family adjustment phase, the patterns of family interaction, family roles, and rules of relationship have

been established. These interactional patterns, roles, and rules guide daily activities so that things are predictable, and family members generally know what to expect from each other in the face of demands (Patterson, 1988). How well the family meets demands is reflected in their level of adjustment, which varies on a continuum from good to poor. Good adjustment reflects the adequacy of the family's capabilities relative to the number and type of family demands. However, when the family's existing capabilities are inadequate to meet the demands they face, the demand-capability imbalance increases, family functioning is no longer stable, and the family system is in disequilibrium. When these imbalanced conditions persist and increase, the family moves into a state of *crisis* (Patterson, 1988).

When family demands significantly exceed their capabilities and this imbalance persists, families experience *crisis*, which is a period of significant disequilibrium, and disorganization in a family, where old patterns and capabilities are no longer adequate and change is called for (Patterson, 1988; 2002a). A *family crisis* leads the family to the *family adaptation* phase in which new patterns and rules in the family must emerge because the old family system no longer exists in the same way. *Family adaptation* is defined as a process of restoring balance between family capabilities and family demands at two levels of interaction: individual-to-family and family-to-community (Patterson, 1988; 2002a). The *family crisis* can lead to the family's trajectory of functioning either in the direction of improved functioning (family bonadaptation) or poorer functioning (family maladaptation) (Patterson, 2002a). If the family crisis leads to the family's trajectory of functioning in the direction of family maladaptation, the

family will still experience the significantly continued imbalance, disequilibrium, and disorganization in the family along with the deterioration of family-unit integrity or autonomy (Patterson, 1988; 2002a). If the family outcome is successful (i.e., family bonadaptation), the family will experience the balance, equilibrium, and organization in the family.

The important distinction of *family adaptation*, different from *family adjustment*, is that the demand-capability imbalance in the *adaptation* phase requires second-order change in the family system (Watzlawick, Weakland, & Fisch, 1974) involving changes in family roles, rules, patterns of interaction (e.g., the reassignment of household maintenance tasks, or shifting priorities for how to spend time, etc.) and/or meanings (i.e., new ways of thinking about families themselves and/or their world to better fit the situational conditions they are in) (Patterson, 1988). However, any changes during the *family adjustment* phase are limited to first-order change (Watzlawick, Weakland, & Fisch, 1974), where family structure remains intact and patterns of interaction are modified only slightly (Patterson, 1988). The other distinction is that *family adaptation* usually evolves over a longer period of time and has long-term consequences, whereas *family adjustment* reflects short-term responses (Patterson, 1988). The present study focuses on the *family adjustment* construct as an outcome factor in the family resilience process that represents a short-term response to demands.

Family capabilities: resources and coping behaviors. *Family capabilities* moderate the relationship between families' exposure to demands and their ability to show competence in accomplishing family adjustment (Patterson, 2002a). Two major

types of *family capabilities* in FAAR theory are emphasized: *resources*, which are what the family has, and *coping behaviors*, which are what the family does (Patterson, 1988, 2002a, 2002b). *Family capabilities* that include *coping behaviors* and *resources* contribute to competent *family adjustment or adaptation* in the face of demands.

A resource is a characteristic, trait, or competency. There are the three potential sources of *resources*: individual family members, the family unit, and the community. Examples of *resources* include knowledge and skills acquired from education at the individual level, family cohesiveness (i.e., the bonds of unity running through family life) at the family level, and health and education services at the community level (Patterson, 1988; Patterson, 2002a). In the FAAR model, the family system is seen as a resource-exchange network (Patterson, 1988). Patterson (2002a) emphasized that there are exchanges or transactions between resources that emerge from the individual, family, and community systems. Resources must be allocated among multiple goals of different systems to meet the needs of the family and its members (Patterson, 1988). The process of allocating resources for meeting family demands is a critical aspect of the family adjustment and adaptation response (Patterson, 1988). The exchanges between resources from these different systems make sure that the needs from family demands were met and contribute to family resilience (Patterson, 2002a).

Resources may be tangible, such as money, or intangible, such as self-esteem or sense of mastery. A sense of mastery is the belief that one has some control over the circumstances of one's life, and self-esteem is a positive perception of one's self-worth. These two resources based on perceptions have been emphasized by many stress

scholars as important elements in the stress and resilience process for effective efforts at managing demands (Patterson, 1988). Boss (1992) indicated that perceptions influence how one sees or uses resources, and the stress process begins and ends with perceptions because if people define things as real, they are real in their consequences. In the FAAR model, subjectively perceived resources (i.e., intangible resources) are more important than objective resources in terms of its effects on family adjustment (Patterson, 1988; 2002a). For example, a positive outlook on one's demands and capabilities to manage demands are considered as important perceived resources. In a research about families with an Alzheimer's disease patient, Boss (1992) found that families with the positive outlook could successfully adjust in spite of heavy demands.

Coping behaviors are viewed as the other part of *family capabilities* in the FAAR Model. A coping behavior is defined as a specific effort (covert or overt) by which the family attempts to reduce or manage a demand (Patterson, 1988). *Coping behaviors* concerns what a family does whereas *resources* concerns what the family has. Family *coping behaviors* could be viewed as coordinated problem-solving behaviors of the family system (Patterson, 1988). Examples of *coping behaviors* include developing collaborative relationships with professionals, developing communication competence, and maintaining social integration (Patterson, 1991; Patterson, 2002a).

Conceptual relationships among main constructs of FAAR theory.

According to the FAAR model, families engage in active processes to balance 1) *family demands* with 2) *family capabilities*, and these interact with 3) *family meanings* to arrive at a level of 4) *family adjustment* / *adaptation* (Patterson, 2002a, 2002b).

Relationships among situational meanings, capabilities, and adjustment.

Figure 1 depicts the conceptual relationships among the main theoretical constructs. *Resources* and *coping behaviors* that constitute *family capabilities* are evaluated by the *situational meanings of demands*. When the *family capabilities* are viewed as inadequate or insufficient relative to perceived family demands, there is an imbalance that produces tension and stress (i.e., *maladjustment*) (Patterson, 1988).

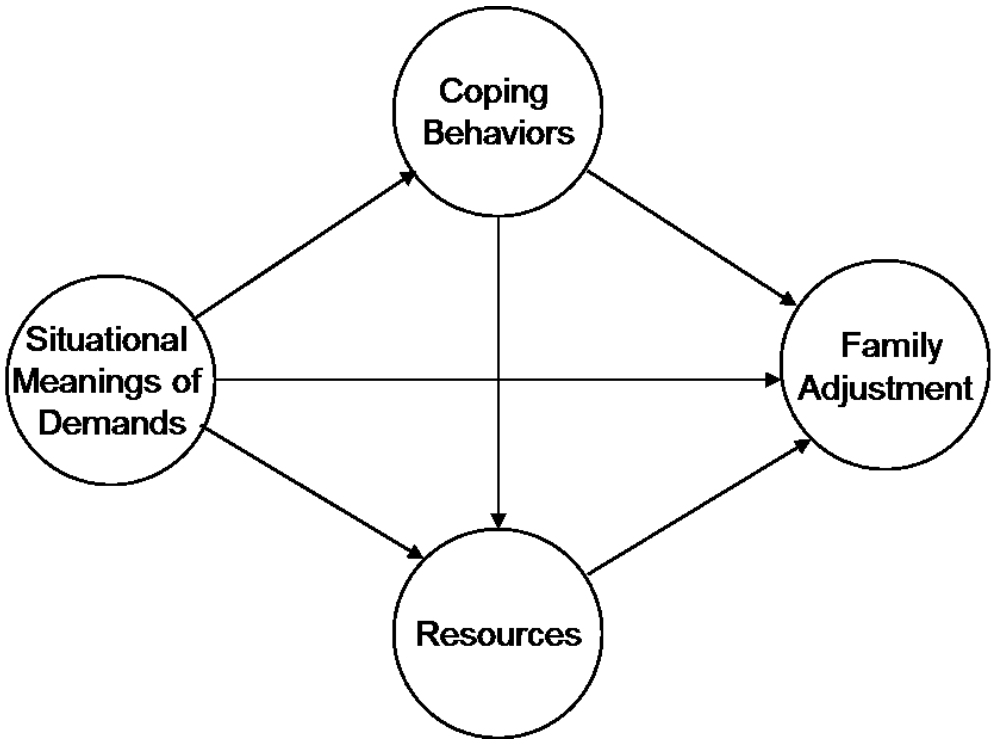

Figure 1. Conceptual model for the effect of family meanings about demands on family adjustment.

In the FAAR theory (Patterson, 1988; 2002a), the function of *coping behaviors* is to maintain or restore the balance between family demands and resources. *Coping behaviors* can involve direct action to acquire *resources* not already available to the

family. For example, a family may find medical services for a family member with a chronic illness, or develop self-reliance skills when a spouse dies suddenly in order to increase *resources* (Patterson, 1988). *Coping behaviors* also involve maintaining existing *resources* so they can be allocated and reallocated to meet changing demands. For example, a family may maintain social ties that provide emotional and informational support, or do things together as a family unit to maintain cohesion, and eat a well-balanced diet to maintain health (Patterson, 1988). Based on these theoretical assumptions, *coping behaviors* play a role in acquiring, maintaining, and allocating *resources*. As indicated previously, both *resources* and *coping behaviors* are influenced by the *situational meanings of demands*, and this interactional process among family meanings, coping behaviors, and resources leads to a particular level of family adjustment. These relationships among theoretical constructs (i.e., *situational meanings of demands, resources, coping behaviors*, and *family adjustment*) and the conceptual definition of each construct will be reviewed within the family business context in the next section.

Family Resilience in the Family Business Context

Guided by the theoretical framework of the FAAR model described in the prior section, background literature about resilience in the family business context will be provided in this section. The context of family businesses will be introduced first.

Business-owning families.

Business-owning families are prevalent throughout the U.S. society and constitute a major portion of its economy (Heck & Trent, 1999; Olson et al., 2003). The

1997 National Family Business Survey (1997 NFBS) showed that in 1996, over 8.6 million families (1 out of 10 households) owned a business, that is, a family business (Heck & Trent, 1999; Olson et al., 2003). Moreover, family businesses provide jobs for over half of the nonagricultural labor force (Olson et al., 2003). A family business is defined as "a business that is owned and managed by one or more members of a household of two or more people related by blood, marriage or adoption (Olson et al., 2003, p.640)".

Business-owning families have a unique characteristic that derives from its composition consisting of two different types of systems: family and business. In the family business literature, family is often labeled as the emotional arena, while business is labeled as the rational arena. Family tasks and values are often placed in opposition to those of the business (Olson et al., 2003). The family system is a people-oriented system based on permanent relationships and focused internally on family members, whereas the business system is a task-oriented system based on temporary relationships between employer and employees and focused externally on the consumer (Boverie, 1991; Rodriguez, Hildreth, & Mancuso, 1999). Due to this opposite nature of the two systems, family and business systems within family businesses tend to compete for time, energy, and financial resources, and a certain amount of tension within family businesses often occur surrounding the competition for these resources when either system has demanding times (Olson et al., 2003).

There are two advantages in studying the resilience in the family business context. First, the FAAR theory would be examined within a unique context of family

businesses, thus exploring the universality of the model. Empirical support for developing the FAAR model has been primarily drawn from studies of families with a child member with a chronic illness or disability (Patterson, 2002a). Family businesses represent a unique context, different from any other target families addressed in previous family resilience literature, in which the business system with an opposite nature from the family system is involved, and the two systems create a complicated dynamic, competing for resources in the face of demands. Second, due to the significance of family businesses in the U.S. society based on its prevalence and great influence on the economy, empirical efforts for understanding the resilience process in the family business context is important in further strengthening business-owning families in the face of demands.

Resilience process of business-owning families.

Within family businesses, the owning family is the depository of resiliency and can serve as a buffer to stressors or as a resource drain producing more stress. If owning families have built a stored capacity for resilience, when a stressor event is encountered, the store of capabilities in problem solving can be more easily tapped and adapted to new situations (Danes, Lee, Amarapurkar, Stafford, Haynes, & Brewton, 2009). *Family firm resilience capacity* refers to "a stock or a reservoir of individual and family resources that cushions the family firm against disruptions and is characterized by individual and collective creativity used to solve problems and get work done" (Danes et al., 2009, p.336).

Though empirical studies focus on the protective processes in which a family's resources buffer risk factors and lead the family to adjustment, the decisions about the transfer of resources are driven by values or meanings within the family business system (Bubolz & Sontag, 1993). In other words, depending on the different meanings in a family business system, either the family system or the business system is usually favored in terms of the resource flows, rather than both systems being equally favored (Distelberg & Sorenson, 2009). Aronoff and Ward (2011) also indicated that shared values or meanings among family members in business-owned families can help overcome the conflicts inherent in family business. When family and business pull apart over time, or when the goals of the family and the business diverge, and when families need a compelling rationale to stick together, values or meanings play a special role in uniting family and business, leading to a sense of mission and purpose that transcends those conflicts (Aronoff & Ward, 2011). It is, therefore, important to understand the role of the meanings in the family resilience process within the family business context.

Family meanings in the family business context.

Family meanings vs. family values. Scholars in the family business field have widely used a term, "*family values*" as a construct that is conceptually similar to "*family meanings"* developed in the FAAR model and in the family stress and coping field. It is, therefore, necessary to compare the two terms from these two different disciplines to decide which term will be used, how it will be conceptualized, and how it will be labeled for this study in a consistent way. *Family meanings,* referring to "the

interpretations, images, and views that have been collectively constructed by family members as they interact with each other (Patterson & Garwick, 1994, p.1)," include a set of meanings of *family identity* and *family worldview*. According to the FAAR model, families develop a shared identity from the spoken and unspoken *values* and norms that guide their relationships (Patterson, 2002a), and the formation of the *family identity* is influenced by the family worldview that refers to *values* and beliefs that influence how relationships are structured (Patterson, 2002a; Patterson & Garwick, 1994). As shown above, the term, *values,* was used in conceptualizing *family meanings'* sub-constructs, especially *family identity* and *family worldview*. The way shown in literature to conceptualize family identity and worldview using the values concept suggests the similar aspects of two terms and the possibility to consider either term of *family meanings* or *family values* as a representing one for the other term. For making certain the possibility, it would be further helpful to explore the conceptual definition of family values in family business literature.

In family business literature, *family values* refer to deeply held principles, standards, moral or ethical goals, and behavioral norms that arise from basic beliefs about such fundamental issues as the human nature or the mission of business in society (Aronoff & Ward, 2011; Koiranen, 2002). *Family values* also tend to endure over time (Aronoff & Ward, 2011). The *family worldview* concept in the FAAR model refers to the core values and existential beliefs comprising an orientation to life, which, over time and through shared experience, emerges as a shared set of assumptions and a family orientation to the world (Patterson & Garwick, 1994). Therefore, the term used in

family business literature*, family values*, has a very similar conceptual definition to the *family worldview* concept that emerged from the FAAR model in that both terms of *family values* and *family worldview* include aspects indicating basic beliefs about the world that endure and are stable over time.

Family values, described in the family business literature, also include aspects that correspond with the conceptual definition of *family identity* as well as *family worldview*. Aronoff and Ward (2011) suggested some examples of *family values* statements in business-owing families such as "mutual respect, honesty, and integrity are basic elements of family and business relationships (Aronoff & Ward, 2011, p.83)" and "we are deeply committed to promoting and perpetuating the unity of our family (Aronoff & Ward, 2011, p.83)." These examples of *family values* statements in business-owing families correspond to the *family identity*'s conceptual definition in that the *family values* examples include rules and norms of relationship that guide family members of a business-owning family in how they are to relate to each other. According to FAAR theory, the rules and norms of relationship among family members concerns how families define themselves internally as a unit, that is, *family identity* (Patterson, 2002a; Patterson & Garwick, 1994).

Situational meanings, another subconstruct of *family meanings*, refers to families' definitions of their family demands and capabilities (Patterson, 2002a). This type of meaning is the most concrete and is immediately available in the family's consciousness, and it is also more responsive to change than *family identity* and *family worldview* (Patterson & Garwick, 1994). In the family business context, Aronoff and

Ward (2011) indicated that family values and beliefs shape a business's immediate response to demands. According to them, in the face of demands, there's no time to hold a meeting and develop an organized response, and family business managers and employees react based on their meanings of what's important, that is, shared *family values*. The immediate response to demands shaped by *family values* in the family business context conceptually reflects the characteristics of *situational meanings* about demands that are more immediately available in the family's consciousness and more responsive to change than other types of meanings. Thus, the term *family values* in family business literature tends to embrace the conceptual definition of *situational meanings*, corresponding with both constructs of *family identity* and *family worldview*. In other words, both terms of *family values* and *family meanings* commonly refer to basic beliefs and assumptions, shared by family members, about the family itself and the system outside of the family as well as a concrete level of shared beliefs that represents their immediate response and reaction to demands (i.e., *situational meanings*) based on their basic beliefs.

Based on the common characteristics between *family values* and *family meanings* constructs, this study will use the term of *family meanings* as a concept representing *family values* as used in family business literature for the following reasons. First, *family meanings* conceptually corresponds with *family values* as indicated above. Second, *family meanings* has more conceptual preciseness than *family values*. However, there is lack of clarity in the conceptual definition of *family values* in family business literature and the conceptual confusion among several similar terms with *family values*.

For example, in a book written by Aronoff and Ward (2011) who had initiated the issue of *values* in family businesses, the terms of values, a family's values, family values, business values, and family business values were used interchangeably without any precise conceptual distinctions among those constructs. The concept of *family meanings* in the FAAR model, however, has concise and clear conceptual definitions. This conceptual specification will make using the term of *family meanings* in the study more beneficial and easier in empirically exploring the target construct. Incorporating the family business literature and the FAAR model, *family meanings* is conceptualized in this study as family members' shared values and beliefs that arise from the family system in the face of family-businesses' demands and a concrete level of shared beliefs that represents their immediate response to the demands. In the next section, the issues of how the family business scholars position *family meanings* in their field, particularly in the context of family businesses' resilience process, will be described.

Family meanings in the family business resilience process. The family system and the business system, composing of a family business system, have its own meanings (Bubolz & Sontag, 1993; Distelberg & Sorenson, 2009). For example, the family system typically regards the growth and development of the family system important, while the business system typically regards survival and growth of the business system important. Incorporating the values and beliefs of family system and the business system, the family business system has its own meanings, reflecting a balance of the both systems' values and beliefs (Distelberg & Sorenson, 2009). For example, within a family business system, the family system's goals and resources are

more valued than the business system's goals and resources (Sharma, Chrisman, & Chua, 1997). The process of bringing meanings to life in a family business system starts with the owning family, being rooted in family upbringing. Values and beliefs are nurtured in the family system. Family members form the family system and its meanings within the family business context, along with their interactions with one another sharing common goals and resources (Bubolz & Sontag, 1993). Parents begin early, by taking the initiative in values education for their children and exposing them to activities and institutions that will reinforce values (Aronoff & Ward, 2011). The family may identify and apply meanings that are relevant and helpful to the business (Aronoff & Ward, 2011).

Family meanings play an important role in the face of family businesses' demands. Aronoff and Ward (2011) indicated that *family meanings* shape a family business's immediate response to demands. Demanding situations tend not to lead family businesses to have enough time to hold a meeting and develop an organized response. Family business managers and employees must react to demands based on their basic beliefs of what's important. Moreover, *family meanings* guide decision making in a family business' demands, and motivate family employees by lending meanings to their work (Aronoff & Ward, 2011). Shared *family meanings* also can help overcome the conflicts inherent to family businesses. The values and beliefs shared by the family members are even more important to a family business than to a non-family business because the two realms (i.e., business and family) can have so many conflicting interests (Koiranen, 2002). When business-owning families may experience

the conflicts, such as competition for resources between family and business or conflicts of the need between the family and the business, *family meanings* can be the glue that bonds family and business by leading a sense of mission and purpose that transcends those conflicts in business-owning families (Aronoff & Ward, 2011; Koiranen, 2002). In the face of demands, the earlier a family business leader begins tapping the potential strength of shared meanings, the better the chances of harmony and success, overcoming the demands (Aronoff & Ward, 2011).

Although family business scholars emphasized the role of meanings shared by family members in the face of family businesses' demands, there is little empirical research that tests their assumptions. To bridge the gap in the literature, this study will examine the role of the *family meanings* on the family resilience process in business-owning families, being guided by the FAAR model (Patterson, 2002a, 2002b; Patterson & Garwick, 1994). The family resilience process guided by the FAAR model is constituted by the relationships among four main constructs: *situational meanings of demands, coping behaviors, resources*, and *family adjustment*. In the next section, how these four constructs can be conceptually viewed and redefined within the family business context and how the constructs are interrelated with each other will be described. Based on the conceptual relationships among the four constructs in the family business context, the conceptual model and hypotheses for this study will be proposed at the end of this chapter.

Family adjustment in the family business context.

According to the FAAR model, successful *family adjustment* in the face of demands is reflected by the balance between family demands and capabilities, the stability of family functioning, and the equilibrium and harmony in the family system. When the conflicts and imbalance persist and increase, the family moves into a state of *crisis* (Patterson, 1988). *Family adjustment* in the FAAR model corresponds with the concept of *family functional integrity* in the family business context. *Family functional integrity* connotes a sense of trust, stability, creativity, and openness that brings a business-owing family's interactions or relationships to a higher level of responsiveness and higher resilience (Danes, Lee, Amarapurkar, Stafford, Haynes, & Brewton, 2009; Danes & Morgan, 2004). The concept of *family functional integrity* distinguishes between families that hold together and those that fall apart (Danes et al., 2009), reflecting family rules and norms of relationship that develop *family adjustment*. Based on the conceptual connection between *functional integrity* and *adjustment* discussed above, this study adopts *family functional integrity* as a corresponding concept in the family business context to *family adjustment*.

Situational meanings of demands in the family business context.

Conceptually, *situational meanings of demands* refer to families' subjective definitions of their family demands or their subjective difficulty in managing family demands (Patterson, 2002a). One of the major conditions that give rise to family demands is the relatively continuous presence of strains. A strain is defined as a condition of felt tension associated with the need or desire to change something

(Patterson, 1988). A family's subjective difficulty in managing demands (i.e., *situational meanings of demands*), thus, can be reflected by the level of felt tension. In the family business context, demands in a family system may be generated by business issues, such as unclear ownership, unfair compensation, or unfair workloads among family members. According to Danes, Zuiker, Kean, and Arbuthnot (1999), the unique content of family business demands fall into five areas: justice conflict, role conflict, work/family conflict, identity conflict, and succession conflict. Justice conflict derives from problems of compensation and quality of treatment along with allocation of resources. Role conflict concerns degrees of confusion and disorientation among roles when family members work together or when the family business employs others who are not part of the family. Identity conflicts involve family members' need to differentiate themselves from family expectations and act as independent, autonomous people. Succession conflicts are mostly related to ownership issues (Danes et al., 1999). The demands generated by these business issues produce the different level of tension in business-owning families depending on their subjective definitions of the demands (Danes et al., 1999). In other words, an owning family's level of tension produced by the demands represents *situational meanings of demands* in the family business context because the tension level reflects the family's subjective definition about demands.

Critical demands in business-owning families can be generated by work/family conflicts that concern issues that surface at the intersection of the family and the business subsystems. Work/family conflicts occur due to the unique characteristic of family businesses involving both family and business subsystems that compete for time,

energy, and financial resources (Danes et al., 1999). As the family businesses mature and more complex organizational forms emerge, the overlap of family and business systems begins to generate stressful situations and demands in the organization because family tasks and values are often placed in opposition to those of the business (Danes et al., 1999). Poor balance between family and business systems has been shown to be one of the greatest strains to family businesses over time (Danes, 2006). Due to the poor balance between family and business systems, the needs of the family system can often conflict with the needs of the business system. Business-owning families may have different subjective definitions on how often the needs of their family conflict with the needs of the business. Their subjective definitions on the frequency of the need conflicts between the family and the business systems, therefore, can represent *situational meanings of demands* in the family business context. This type of subjective definition of demands reflects the cognitive aspect of *situational meanings of demands*, whereas the level of tension generated by the business issues represents the emotional aspect of *situational meanings of demands*. Both conceptual terms of *situational meanings of demands* and *subjective difficulty in managing demands* will be used interchangeably in the following sections because families' *situational meanings of demands* conceptually refer to their subjective difficulty in managing family demands (Patterson, 2002a). This term of *subjective difficulty in managing demands* will be used more frequently in the Measures section because it tends to reflect the construct's operational definition for its measurement better than the term of *situational meanings of demands* does.

Coping behaviors in the family business context.

According to the FAAR model, a *coping behavior* as a part of *family capabilities* is defined as a specific effort (covert or overt) by which an individual or a group of individuals such as the family attempts to manage a demand (Patterson, 1988). In the FAAR model, more attention has been given to the transactions between the multiple sources of *family capabilities* in a family's ecological context (i.e., individual, family, and community contexts), emphasizing the need to take account of community contexts in which a family resides to understand how families respond to demands (Boss, 2001; Patterson, 2002a). In the family business context, the interaction between the family business and its community context is critical because success of the family business depends on whether the business is managed in harmony with the local community culture (Fitzgerald et al., 2010).

In the FAAR model, one of the critical family coping strategies is *maintaining social integration* that is protective for families. This process involves transactions between families and community systems. *Maintaining social integration* is a reciprocal process between a community that is open and encouraging of involvement by persons with disabilities and family initiative to help reduce physical and psychological barriers that can isolate them (Patterson, 1991; Patterson, 2002a). *Maintaining social integration* as a coping behavior in the FAAR model corresponds with *socially responsible behaviors* in the family business context.

Socially responsible behaviors of family businesses refer to behaviors for the commitment and contribution that family businesses make to community betterment.

The examples of these behaviors include providing assistance to community development, donating to local schools and youth programs, and participating in community activities (Fitzgerald et al., 2010). Most business-owning families live, work, and operate within the same community. This may, in turn, cause them to have greater attachment and stronger sentiment toward their communities and a greater likelihood to work for the common good (Niehm, Swinney, & Miller, 2008). Benefits of *socially responsible behaviors* of family businesses are a healthy environment and a thriving community in which to live and do business, as well as a positive public image for the family business.

In times of demands or disruption, family businesses' *socially responsible behaviors* to keep close contact or assist other organizations in community maintain social ties with other organizations in community and facilitate social integration that provide them with support from those organizations. These *socially responsible behaviors* of family businesses can affect the short-term family business viability, achievement, and adjustment at the demanding time by developing customer loyalty (Fitzgerald et al., 2010). Family businesses' coping behaviors or efforts to assist others in community and keep close contact with others in community can maintain or increase their existing resources.

Resources in the family business context.

In the family business context, resources are objects, personal characteristics, conditions, or energies valued (Danes et al., 2009). The stock of individual and family resources cushions the family business against demands and acts as conduits to the

protection or achievement of valued goals (Danes et al., 2009). If owning families have built stored resources, when a disruption is encountered, the store of trust and creativity in problem solving can be more easily and quickly tapped and adapted to new situations (Danes et al., 2009).

Resources in family businesses include physical capital resources (plant, raw materials, location, cash), human capital resources (skills, knowledge, training, relationships), organizational capital resources (competencies, controls, policies, culture, information, technology) (Habbershon & Williams, 1999). Resources include both physical and intangible assets such as individual and corporate skills, organizational processes, firm attributes, information, knowledge, and a positive outlook of business success. Family businesses have been described as unusually dynamic and rich in these intangible resources (Habbershon & Williams, 1999). The bundle of resources is identified as idiosyncratic to a particular firm in a particular environment because no two firms have the same set of experiences, acquired the same assets and skills, built the same organizational cultures, or the same collection of resources in the same competitive arena at the same point in time (Habbershon & Williams, 1999).

Among the bundle of resources, a particular type of resource in the family business context (i.e., *perceived business success*) was selected to conceptually represent *resources* identified in the FAAR theory. This type of resource conforms to the conceptual characteristics of *resources*. *Resources* in the FAAR theory conceptually include two characteristics in terms of its relationships with other concepts, especially *family adjustment* and *coping behaviors*. First, *resources* theoretically

contribute to competent *family adjustment* in the face of demands (Patterson, 1988, 2002a, 2002b). Second, *resources* are positively affected by *coping behaviors*. *Resources* are obtained and maintained as the consequence of *coping behaviors* (Patterson, 1988). For example, as the consequence of a family's *coping behaviors* to maintain social ties, emotional and informational support from its community (i.e., *resources*) can be obtained, and as the consequence of a family's *coping behaviors* doing things together as a family, family cohesion (i.e., *resources*) can be acquired and maintained (Patterson, 1988).

In the family business context, the particular type of *resources* (i.e., *perceived business success*) conforms to these two conceptual characteristics: (1) a contribution to *family adjustment* (i.e., family stability and integrity) and (2) a positive association with *coping behaviors* (i.e., socially responsible behaviors). In other words, *perceived business success* as an intangible type of resource contributes to *family adjustment* (i.e., family stability and integrity) at the demanding time and has a positive association with *coping behaviors* represented by *socially responsible behaviors,* according to family business literature. Olson et al. (2003) indicated that the less the business has cash flow problems and, reversely, the more its business managers perceive business success, the more likely the owning family is to have the stability and integrity. Also, family businesses that are committed to community through their *socially responsible behaviors* were more likely to report subjective perception of their business success by developing customer loyalty and a positive public image for the business (Besser, 1999; Fitzgerald et al., 2010; Miller & Besser, 2000; Niehm, Swinney, & Miller, 2008).

These studies empirically support that *perceived business success* has the conceptual conformity with the concept of *resources* in the FAAR theory that contributes to *family adjustment* and is positively associated with *coping behaviors.* In addition, *perceived business success* conforms to the FAAR theory that emphasized subjectively perceived resources (i.e., intangible resources) as more important ones than objective resources (i.e., tangible resources) in terms of its effects on family adjustment (Patterson, 1988; 2002a).

Success of family businesses will either be tangible or intangible in nature. Tangible business success includes objective financial rewards which are made possible by the financial performance of the business whereas intangible business success includes subjectively perceived satisfaction of business goal achievement (Hornsby, Kuratko, & Naffziger, 1997; Olson et al., 2003). Cooper and Artz (1995) issued a caution that satisfaction with business success (i.e., intangible business success) and more objective types of business success (i.e., tangible business success) are different things and should not be substituted for each other. According to Hornsby et al. (1997), the business goals that business managers seek for success have both an extrinsic and intrinsic nature. Extrinsic goals include acquiring wealth and increasing income, whereas intrinsic goals include gaining public recognition, enjoying the excitement, and accomplishing personal growth. Thus, the business success should not be solely studied in financial terms because business managers are motivated by these intrinsic goals as well as financial rewards (Hornsby et al., 1997). Furthermore, business managers' satisfaction of these intrinsic goals' achievement can be detected by their subjective

perceptions rather than any objective financial rewards. *Perceived business success*, therefore, provides a more comprehensive context of business success by including business managers' satisfaction of intrinsic goal achievement as well as extrinsic one. For these reasons, the present study focuses on *perceived business success* as a type of resource.

Conceptual Relationships among Four Constructs in the Family Business Context

In this section, the conceptual relationships among the four main constructs depicted in Figure 1 will be described in the family business context, guided by the FAAR model (Patterson, 2002a, 2002b; Patterson & Garwick, 1994). These conceptual relationships among constructs guide the hypothesized conceptual model shown in Figure 2 and hypotheses that will be described in the next section.

First, subjective difficulty in managing demands (i.e., *situational meanings of demands*) negatively influences *family adjustment* in the family business context. According to the FAAR theory, when a family is faced with demands, there are some unresolved residue of strains (i.e., *situational meanings of demands*) that create a certain level of stress and threaten the family's existing homeostatic and stable functioning (i.e., *family adjustment*) because the family demands call for change in the family system (Patterson, 1988). These demands for change produce tension in the system that persists until some *family capabilities* are available in managing the demands. When there are no available capabilities, the state of stress or demand-capability imbalance (i.e., maladjustment) arises (Patterson, 1988). In the family business context, *family adjustment* corresponds with the *functional integrity* of the owing families.

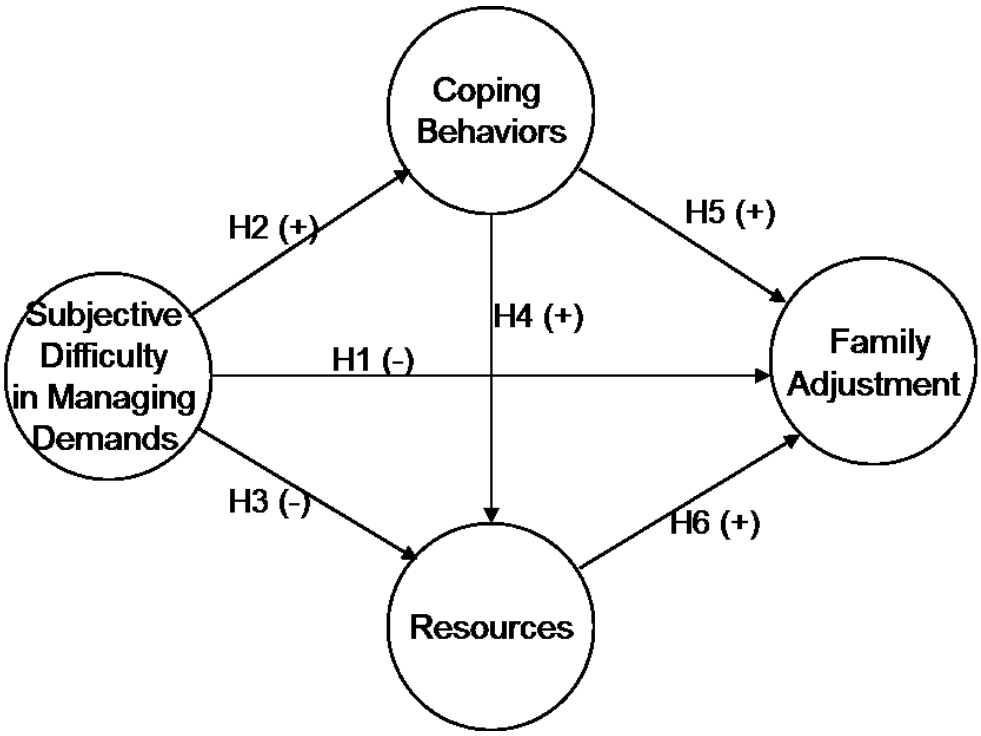

Figure 2. Hypothesized conceptual model for the effect of family meanings about demands on family adjustment.

Family business literature supports the conceptual relationship between *situational meanings of demands* and *family adjustment* (i.e., *family functional integrity*). For both spouses in farm business-owing couples, decreased tensions (i.e., *situational meanings of demands*) were associated with a high level of *functional integrity* in the family system (Danes & Lee, 2004).

Second, subjective difficulty in managing demands (i.e., *situational meanings of demands*) positively affects *coping behaviors*. According to the FAAR theory, *coping behaviors* can involve direct actions to reduce the number and/or intensity of perceived demands. For example, at the community level, families could join together to

eliminate a hazardous waste-disposal site from their neighborhood to reduce the demands (Patterson, 1988). Managing the tension associated with ongoing strains is a necessary function of *coping behaviors* because of the inevitable residue of strain families have as part of their demands. Taking time out for playing together as a family, using humor appropriately, and the open expression of emotion and affection in a responsible, non-blaming manner are ways to manage and release tensions (Patterson, 1988). *Coping behaviors* are represented by *socially responsible behaviors* in the family business context. *Socially responsible behaviors* by family businesses are a means of ameliorating demands (Fitzgerald et al., 2010). Thus, when a family business subjectively perceives higher strains or tensions (i.e., *situational meanings of demands*), it leads to more *socially responsible behaviors* where owning family members contribute to community betterment which, in turn, creates commitment to the family business from members of the community. Meanings and values of the owning families are the fuel creating the predisposition toward social responsibility to the community (Fitzgerald et al., 2010).

Third, subjective difficulty in managing demands has a negative relationship with *resources.* Subjective difficulty in managing demands is represented by tensions about business issues and the conflicts of need between family and business, and *resources* are reflected by subjectively *perceived business success* within the family business context. Family business scholars indicated that there is a negative association between the two constructs. Danes et al., (1999) indicated that tensions from business issues were the significant predictor of the level of success in achieving the most

important business goal for business managers. The higher the level of tensions identified, the less success achieved in business goals (Danes et al., 1999; Olson et al., 2003). Olson et al. (2003) also indicated that as the tension level in the family business system increases, perceived business success decreases. In other words, higher levels of tension are not helpful in achieving success for the business (Olson et al., 2003). The conflicts of need between family and business have been considered as one of the greatest tension producers in family businesses (Danes, 2006). For example, when preschool-aged children are present in a business-owning family, the demands of caring for young children and the business demands often collide and create a high level of tension (Danes & Lee, 2004). It is, thus, assumed that as the conflicts of need between family and business increases, perceived business success decreases. In other words, the family-business need conflicts also have a negative relationship with perceived business success. This stream of logic provides support for the following hypothesis linking subjective difficulty in managing demands (i.e., *situational meanings of demands*) to *resources* in the family business context: Subjective difficulty in managing demands that is represented by tensions and the conflicts of need between family and business has a negative relationship with *resources* that are reflected by *perceived business success* within the family business context.

Fourth, *coping behaviors* positively influence *resources*. The function of *coping behaviors* is to maintain or restore the balance between demands and resources. *Coping behaviors* can involve direct action to acquire additional resources not already available to the family and involve maintaining existing resources so they can be allocated and

reallocated to meet changing demands (Patterson, 1988). Maintaining social ties that provide emotional and informational support, doing things together as a family to maintain cohesion, and eating a well-balanced diet to maintain health are examples (Patterson, 1988). In the family business context, through the socially responsible commitment to community, family businesses attempt to meet social expectations in terms of conserving resources and developing the community (Fitzgerald et al., 2010; Niehm, Swinney, & Miller, 2008). *Socially responsible behaviors* as coping behaviors directly enhance a firm's public image and prestige, thereby increasing the number of customers buying its products, the willingness of bank officers to give it attractive rates on loans, the probability of suppliers treating it fairly, and the number of collaborators seeking it out as a partner in lucrative ventures (Besser, 1998). In other words, the family businesses that are committed to community through their *socially responsible behaviors* are more likely to benefit from community support, customer loyalty, and a positive public image for the business that affects business managers' subjective perception of their business success (Fitzgerald et al., 2010; Niehm et al., 2008). Similarly, Miller and Besser (2000) indicated that small business managers with a higher sense of community social values were more likely to report perceived business success than firms with low values. Besser (1999) also found that business managers' support and commitment to their community was associated with perceived business success in a study of 30 Iowa communities. This logic provides support for the following hypothesis linking *coping behaviors* to *resources* in the family business context: *coping behaviors* that are represented by *socially responsible behaviors*

positively influence *resources* that are reflected by *perceived business success* within the family business context.

Fifth, *coping behaviors* positively influence *family adjustment*. In the family business context, repeated interactions between family business and community develop a bonded and interdependent psychological state during stable times. In times of change or high demands, the *socially responsible behaviors* tend to establish a network of supportive relationships between the business-owning family and the community to address the demands (Fitzgerald et al., 2010; Steier, 2001). The supportive relationship between family and community provides the family with a clearer sense of community norms and expectations regarding family behaviors and roles under demands (McCubbin, 1979). In other words, the business-owning family that has a supportive relationship with its community may have a clearer and more realistic sense about what behaviors and roles of family members, corresponding with the community norms and expectations, are expected at the demanding time. The family members' clear and realistic sense of their behaviors and roles under demands leads to less role strains and the predictable and stable patterns of family interaction that represent the *family adjustment* condition (Patterson, 1988). Thus, a business-owning family's *socially responsible behaviors* that establish the network of supportive relationship between the family and the community affect *family adjustment* that is reflected by the family's stability to demands. More *socially responsible behaviors* of owning families, therefore, influence higher family stability (i.e., *family adjustment*).

Sixth, *resources* have a positive relationship with *family adjustment*. In the family business context, it is hypothesized that *perceived business success* as intangible *resources* positively influences the family stability and integrity that reflect *family adjustment*. This hypothesis can be supported by empirical study about the relationship between *family adjustment* and a characteristic of the business (i.e., business cash flow problems) that is significantly related to the business success. According to Olson et al., (2003), having business cash flow problems was negatively associated with the perceived business success in the family business context. Thus, the more the business had cash flow problems, the less its business managers perceived business success. The business characteristic of cash flow problems that had a negative association with the business success had the same effect on the family. The business cash flow problems negatively affected the family stability and integrity (Olson et al., 2003). In other words, the less the business had cash flow problems (i.e., the more its business managers perceived business success), the more likely the owning family was to have the stability and integrity. It is, therefore, hypothesized that *perceived business success* as intangible *resources* is positively associated with the family stability and integrity that represent *family adjustment*. It is reasonable that business success perceived by business managers can reflect perceived stability in the business system along with less cash flow problems, and such business stability can positively contribute to the stable relationships among family members because they may have less concern about financing or economic instability and spend more time and energy for the family stability and integrity.

Hypothesized Conceptual Model

Based on the conceptual relationships among the four main constructs shown in Figure 1, a hypothesized conceptual model was developed. Figure 2 depicts the hypothesized conceptual model that will be empirically tested to examine the effect of family meanings of demands on family adjustment within family businesses. The hypothesized conceptual model (Figure 2) incorporates the assumptions of the theoretical relationships among four main constructs proposed by FAAR theory (Patterson, 2002a, 2002b; Patterson & Garwick, 1994). In Figure 2, the theoretical term of *situational meanings of demands* was replaced with the interchangeable term, *subjective difficulty in managing demands* because this term, *subjective difficulty in managing demands,* tends to reflect the construct's operational definition for its measurement better than the theoretical term (i.e., *situational meanings of demands*) does. The model (Figure 2) can be described as the following hypothesized statements:

Hypothesis 1. *Subjective difficulty in managing demands* (i.e., *situational meanings of demands*) will be negatively associated with *family adjustment.*

Hypothesis 2. *Subjective difficulty in managing demands* will be positively associated with *coping behaviors.*

Hypothesis 3. *Subjective difficulty in managing demands* will be negatively associated with *resources.*

Hypothesis 4. *Coping behaviors* will be positively associated with *resources.*

Hypothesis 5. *Coping behaviors* will be positively associated with *family adjustment*.

Hypothesis 6. *Resources* will be positively associated with *family adjustment*.

Chapter 3. Methodology

This chapter addresses the methodological elements for this study. Study data, sample, measures, and analysis will be described in this chapter.

Sampling Procedures

This study's sample was drawn from the National Family Business Panel (NFBP) data. The NFBP is a national, representative household sample of family firms. The sampling frame for the NFBS consisted of households rather than businesses (Winter, Danes, Koh, Fredericks, & Paul, 2004). The NFBP was designed to address the complex dynamic between the family and business systems in achieving family business survival and success. The NFBP data are longitudinal over ten years with the three waves of 1997, 2000, and 2007 (Danes, Stafford, Haynes, & Brewton, 2009). Using a probability sample of all 50 states, interviewers at the Iowa State University (ISU) Statistical Laboratory screened more than 14,000 household telephone numbers in 1997 to ascertain whether someone in the household was qualified as either the owner or the manager of a family business. A total of 1536 households included someone who met the criteria (Winter, Fitzgerald, Heck, Haynes, & Danes, 1998; Winter et al., 2004).

Further restrictions were placed on the sample because the focus of the 1997 project was the interaction between the family and the business systems in a family business setting (Winter et al., 2004). To qualify as a family business, the business owner-manager had to have been in business for at least 1 year, to have worked at least 6 hours per week year-round for a minimum of 312 hours per year in the business, to be

involved in its day-to-day management, and to reside with another family member. More than 1100 households met the restrictive criteria (Danes et al., 1999; Winter et al., 1998; Winter et al., 2004). Qualifying households were administered two different 30-minute telephone interviews, one for the family manager and the other for the business manager. The family manager was identified as the person in the household who takes care of most of the meal preparation, laundry, and cleaning; schedules family activities; and oversees child care. The business manager was identified as the person who takes care of most of the business work. For some family businesses, separate individuals held those roles, and for other family businesses, one individual held those combined roles. When those roles were held by the same individual, a 45-minute combined interview was administered (Danes et al., 1999; Winter et al., 1998; Winter et al., 2004). For the 1997 project, a total of 794 family businesses were identified and administered at least one of the interviews. Only the business manager was interviewed in 35 households, and only the family manager completed the interview in 86 households (Winter et al., 1998; Winter et al., 2004). Table 1 shows the demographic characteristics of family business panel data in 1997. Numbers for this data were based on 673 households, instead of 794, because there were 35 households and 86 households where either family or business manager interview was not completed. This data's characteristics will be described in the next section along with the characteristics of the subsampled data for this study.

To provide family business data over time, follow-up interviews were conducted with 1997 respondents three years later, in 2000. Because of the interest in tracking the

family business over time, the 86 households in which the business manager was not interviewed in 1997 were omitted from the sample in 2000, making the initial sample size 708 instead of 794 (Winter et al., 2004). Of the 708 households, 155 were not re-interviewed in 2000 because 61 households could not be located, 93 households refused to be interviewed, and 1 respondent died before the 2000 interview. Due to this attrition, data were gathered in 2000 from 553 households, more than three-fourths of the households surveyed in 1997 (Winter et al., 2004).

Sample Description

For the present study, a subsample of 187 couples from the 2000 wave of the NFBP was drawn. These couples owned and managed a business in 2000 and each couple consists of a business manager who takes care of most of the business work and a family manager who takes care of most of the household work, including scheduling family activities and overseeing child care. These couples were selected for this study because they represent family data to examine *family meanings*. *Family meanings* are conceptually defined as the interpretations that have been collectively constructed by family members, rather than an individual (Patterson, 2002a). An important element of *family meanings* in this study, *situational meanings of demands,* was measured by family responses from both business manager and family manager to conform to the conceptual definition of *family meanings*.

However, *family capabilities* (i.e., *coping behaviors* and *resources*) and *family adjustment* were measured by an individual family member who has more knowledge and information about either family or business system. According to Grotevant and

Carlson (1989), self-report measures of one individual family member's perception of the family system are appropriate for the assessment of family constructs when knowledge of individual family members' attitudes is of interest and the individual respondent can provide useful information about systems variables more accurately than other family members.

In the present study, *family adjustment,* conceptually reflected by the state of the *functional integrity* of owning family, was measured by responses from family managers who took care of most of the household work because family managers were likely to have more knowledge and information about the state of the stability and integrity of their owning family. *Family capabilities*, conceptually reflected by *socially responsible behaviors* of family businesses (i.e., *coping behaviors*) and *perceived business success* (i.e., *resources*), were measured by responses from business managers who took care of most of the business work because business managers were likely to have more useful knowledge and information about how their family business system copes with business issues through socially responsible behaviors for community betterment and how successful their business has been.

This way of measuring family resilience constructs in the family business context reflects the unique characteristic of the family business system that consists of the business system and family system. Family tasks and values are often placed in opposition to those of the business (Olson et al., 2003). The family system is a people-oriented system based on permanent relationships and focused internally on family members, whereas the business system is a task-oriented system based on temporary

relationships between employer and employees and focused externally on the consumer (Boverie, 1991; Rodriguez et al., 1999). Due to this characteristic of business-owning families, it is assumed that business managers who took care of most of the business work have more task-oriented and externally-focused information that represent *family capabilities* of their owning family (i.e., *socially responsible behaviors* and *perceived business success*), whereas family managers who took care of most of the household work have more people-oriented and internally-focused information that represent *family adjustment* of their owning family (i.e., *family functional integrity*). In other words, family resilience constructs of *family capabilities* and *family adjustment* within the family business context are more appropriately measured by either the business manager or family manager who better represent each system's values and tasks.

Table 1 and 2 show the demographic characteristics of data for this study. Table 1 shows the characteristics of the family business panel data collected in 1997 (n=673). In the family businesses, 71.9 % of the business managers were male and 85.4 % of the family managers were female. The average household size in 1997 was three (*SD* = 1.4). The average age of family businesses was 17.7 years (*SD* = 20.0). In terms of numbers of employees, 70.4 % of family businesses had three or less employees whereas 11.3 % of family businesses had 10 or more employees. About half of the family businesses (52.6 %) had one or two residential family employees in their businesses. 73.7 % of family managers worked for their businesses for average 30.7 hours a week. More than half of the family managers working for their businesses

(68.5 %) were paid for their works. Less than half of total 673 family managers (45.5 %) worked for wages or a salary in another job.

Table 1

Demographic Characteristics of Family Business Panel Data in 1997 (n = 673)

Characteristic	Business Manager			Family Manager		
	M	*SD*	%	*M*	*SD*	%
Gender			71.9 (M)			85.4 (F)
Age	46.1	11.1		44.6	10.8	
Household size				3.4	1.4	
Business age (years)	17.7	20.0				
Employees of business						
3 or less			70.4			
4 to 9			17.1			
10 to 19			6.0			
20 or more			5.3			
Residential family employees						
1			20.8			
2			31.8			
3 or more			11.5			
no family employees			35.8			
Family managers in business						
Work for business						73.7
Working hours per week				30.7	20.6	
Paid for the work						68.5
Work in another job						45.5

Table 2 shows the demographic characteristics of the subsampled business-owning couples for the study. In the subsampled couples who own and manage a business in 2000, most of the business managers were male (96.8 %) and most of family managers were female (96.3 %). Most couples were married (98.9 %) and were primarily White (97.3 %).

The average age of business managers was 50.2 (*SD* = 10.9) whereas that of family managers was 47.9 (*SD* = 10.7). More than half of business managers (66.7 %) and family managers (70.5 %) had high education including college, bachelors, and graduate degree. The average household size (i.e., average numbers of people who live in household of a couple in 2000) was three (*SD* = 1.3). All the family businesses of these couples (n=187) were still open in 2000 compared to 1997 when the NFBP data were collected. The average age of family businesses was 25.9 years (*SD* = 23.3). This average age of family businesses indicates that the couples of this study have taken care of both the business and household work in solid family businesses that have lasted for over 25 years.

Table 2

Demographic Characteristics of Couples who Own a Business in 2000 (n = 187)

	Business Manager			Family Manager		
Characteristic	*M*	*SD*	%	*M*	*SD*	%
Gender			96.8 (M)			96.3 (F)
Age	50.2	10.9		47.9	10.7	
Education						
High school or less			33.2			29.4
College (no Bachelors)			28.3			35.8
Bachelors			26.2			23.5
Graduate work or degree			12.2			11.2
Household size				3.2	1.3	
Business age (years)	25.9	23.3				

The analysis method of this study (i.e., Structural Equation Modeling procedure) that will be further described in the next section often requires a large enough sample

size to maintain power and obtain stable parameter estimates (Kline, 2011; Maruyama, 1998; Schumacker & Lomax, 2004). Bentler and Chou (1987) suggested that 5 to 10 cases per observed variable would be sufficient for the parameter estimation. This study with 15 observed variables and a sample size of 187 has about 12.5 cases per observed variable. Maruyama (1998) provided a formula to produce the minimum sample size for the parameter estimation: 3n + 50 (n is numbers of indicators). The sample size of 187 in this study is much larger than the minimum sample size of 95 produced using this formula. Anderson and Gerbing (1984; 1988) also recommended that a sample size of 150 or more usually be sufficient for reasonable and stable parameter estimates. Although this study's sample size is considered to be sufficient for parameter estimates by those SEM scholars, the probable lack of power that may accompany the study with a relatively small sample size increases the possibility that a meaningful finding could be judged nonsignificant (Type II error) (Gudmunson, Danes, Werbel, & Loy, 2009). For this concern, the power analysis was performed. The statistical power is the probability of rejecting the null hypothesis (H_0) when it is false and the alternative hypothesis (H_a) is true (Cohen, 1992; Schumacker & Lomax, 2004). In the context of SEM, the null hypothesis indicates the degree of close fit between the model and data (i.e., close-fit null hypothesis) (MacCallum, Browne, & Sugawara, 1996; Schumacker & Lomax, 2004). The conventionally proposed level for general use of the power value is .80. The power should equal or exceed the traditional .80 level because a smaller value than .80 would incur too great a risk of a Type II error (Cohen, 1992; Kline, 2011; Schumacker & Lomax, 2004). For the power estimate, MacCallum,

Browne, and Sugawara (1996) suggested that power can be computed given specified values of significance level, degrees of freedom, sample size, and null and alternative hypothesis values that reflect the effect size. The null value specified as .05 represents the terminal point of the interval for the close-fit null hypothesis and the alternative value specified as .08 represents the upper threshold for reasonable approximation error (Kline, 2011; MacCallum et al., 1996). The resulting power from the computation method using the null and alternative hypothesis values, sample size, degrees of freedom, and significance level, proposed by MacCallum et al., (1996) can be interpreted as the probability of rejecting the null hypothesis of close fit between the model and data. An extremely low power results in a very low likelihood of rejecting any sensible hypothesis about close fit, and statements of support of models must be considered highly suspect (MacCallum et al., 1996). This study adopted the method and the SAS syntax for power estimate that MacCallum et al. (1996) suggested. In this study, the estimated power using the SAS 9.2 program was .90, indicating high possibility to decrease the Type II error.

Analysis Strategy

Hypotheses will be tested using Structural Equation Modeling (SEM) procedures. SEM procedures are used to provide a quantitative test of conceptual models hypothesized by a researcher in the social and behavioral sciences (Anderson, 1987; Schumacker & Lomax, 2004). SEM is particularly valuable in testing conceptual hypotheses where the causal relationships among the study constructs are specified (Byrne, 2010; Hoe, 2008). The causal relationships are represented by a series of

structural (i.e., regression) equations (Anderson, 1987; Byrne, 2010; Hoe, 2008). SEM is appropriate for this study because the primary interest of this study is to test conceptual hypotheses created based on FAAR theory that include the causal relationships among constructs. Figure 2 depicts the hypothesized conceptual model for this study. Based on the theoretical framework, structural equation models are developed to test the conceptual hypotheses (Schumacker & Lomax, 2004). Structural equation models include two major types of variables: *latent variables* and *observed variables* or *indicators*. Conceptual constructs that are not observed directly are termed *latent variables*, whereas measures that are presumed to represent the conceptual constructs are termed *observed variables* or *indicators*. Latent variables consist of *exogenous latent variables* that are synonymous with independent variables and *endogenous latent variables* that are synonymous with dependent variables (Byrne, 2010; Schumacker & Lomax, 2004). A structural equation model involves developing a measurement model about how sets of indicators define conceptual constructs or latent variables and a structural model about how these constructs are related to each other (Byrne, 2010; Kline, 2011; Schumacker & Lomax, 2004). Figure 3 depicts the structural equation model for this study incorporating the measurement and structural models. This proposed model is composed of three endogenous latent variables (i.e., *coping behaviors, resources*, and *family adjustment*), one exogenous latent variable (i.e., *situational meanings of demands*), and 15 indicators to measure these latent variables.

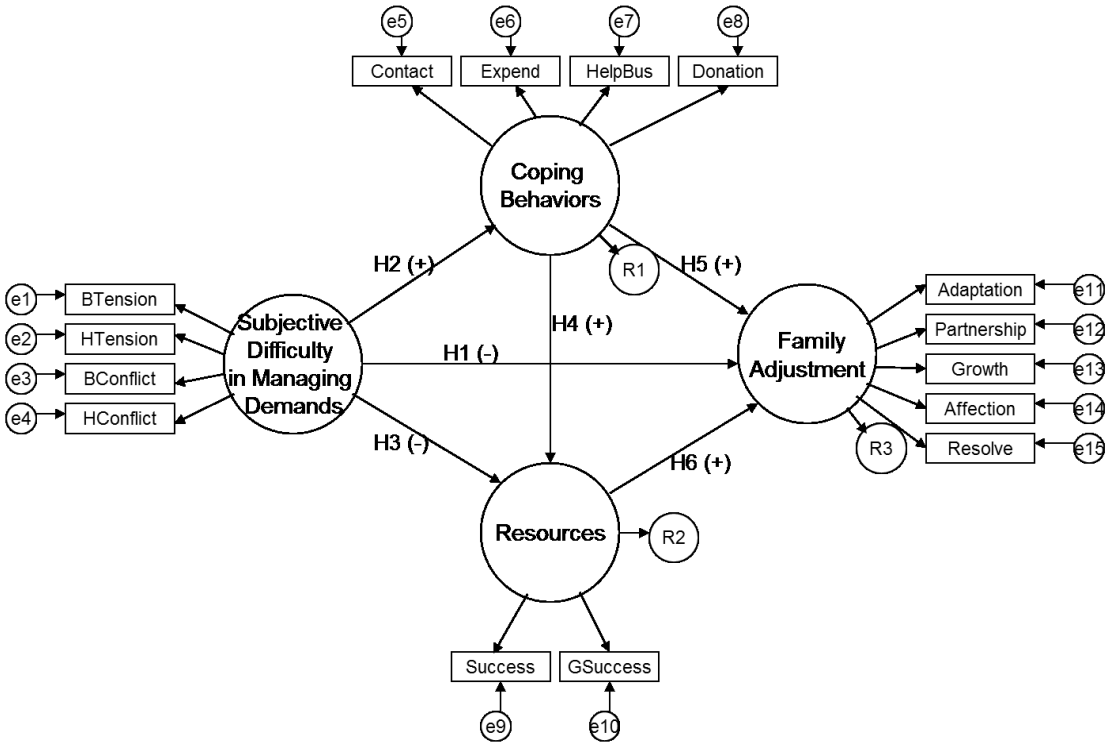

Figure 3. Structural equation model (measurement and structural model).

This model is a recursive model because all of the structural relationships are unidirectional and no two latent variables are reciprocally related (Kline, 2011; Schumacker & Lomax, 2004). To test a structural equation model, the SEM procedures combine the logics of path analysis and factor analysis. SEM employs the path analysis logic to test unidirectional causal relationships among latent variables and the factor analysis logic to specify the relationships between sets of indicators and underlying latent variables (Maruyama, 1998; Schumacker & Lomax, 2004). The SEM procedures overcome the limitation of path analysis in which each construct is measured by a single measure, presumably without measurement error. Latent variables in a structural equation model are each defined by a set of indicators rather than a single measure

(Maruyama, 1998; Schumacker & Lomax, 2004). The factor analysis logic in SEM allows for extraction of measurement error of indicators that can result in biased parameter estimates (Schumacker & Lomax, 2004). The factor analysis logic attempts to determine which sets of indicators share common covariance or correlation characteristics that define latent variables (Schumacker & Lomax, 2004). Typically, a structural equation model is tested with a linear equation system through SEM. This method investigates the extent to which variations in one variable correspond to variations in one or more other variables based on covariances (Hoe, 2008). The Pearson correlation coefficient and standard deviations, therefore, provide the basis for testing models among measured and/or latent variables (Schumacker & Lomax, 2004). Table 3 shows correlations as well as means, standard deviations, and ranges for all indicators in this study. Using the path and factor analysis logics, SEM estimates the parameters of the specified model(s) (Schumacker & Lomax, 2004). Maximum Likelihood (ML) is the estimation method that maximizes the likelihood that the data were drawn from the population (Kline, 2011). This ML estimation method will be used for estimating the parameters of the structural equation model in this study. The LISREL 8.8 (Jöreskog & Sörbom, 1993) will be used to apply the SEM procedures with the ML estimation method to this study.

The SEM methods have some assumptions about the data that should be met prior to conducting the SEM analyses. These assumptions must be met because violation of them could result in bias (Kline, 2011). The first assumption is that the SEM analyses should not be affected by outliers because the extreme or atypical data

values affect the mean and correlation coefficient values (Byrne, 2010; Kline, 2011; Schumacker & Lomax, 2004). The second important assumption is that the data are normally distributed. The estimation in SEM with maximum likelihood (ML) techniques assumes multivariate normality of variables. Multivariate nonnormality is detectable through the inspection of univariate distributions (Kline, 2011). Skewness (i.e., lack of symmetry) and kurtosis (i.e., flatness) in data are two ways by which the univariate nonnormality of data is represented (Byrne, 2010; Kline, 2011; Schumacker & Lomax, 2004). Although there are few clear-cut standards for interpreting the skewness index (SI) and the kurtosis index (KI), Kline (2011) offered a guideline for those interpretations. Variables with absolute values of SI above 3.0 are described as extremely skewed, whereas those with absolute values of KI from about 8.0 to over 20.0 are described as indicating extreme kurtosis (Kline, 2011). A conservative rule of thumb is that absolute values of KI above 10.0 suggest a problem, and absolute values of KI above 20.0 indicate a more serious one (Kline, 2011). The third assumption is that multicollinearity among independent variables can cause problems in the SEM analyses. Multicollinearity can occur when the independent variables are strongly related and what appear to be separate variables actually measure the same thing. If the correlations among independent variables become too large, then the solution from SEM analyses potentially becomes unstable (Kline, 2011; Maruyama, 1998).

Prior to performing SEM, preliminary analyses were conducted to evaluate whether assumptions for the SEM analyses have been met or not. Outliers, normality of data, and multicollinearity among variables were examined. First, there were no outlier

cases for each variable when the data distribution was examined. Second, to evaluate the data normality, the skewness index (SI) and the kurtosis index (KI) were examined using PASW 18.0. The SI and KI of variables did not indicate extreme skewness or kurtosis because there were no variables with absolute values of SI over 3.0 or absolute values of KI over 8.0, when applying Kline's (2011) guideline to the interpretations of those indexes. Third, multicollinearity was examined by examining the intercorrelations among variables (Table 3). Multicollinearity was not a concern for this study because there were no substantial correlations greater than .80 or .90 that multicollinearity can primarily emerge (Kline, 2011; Maruyama, 1998).

The goal of SEM analysis is to determine the extent to which the conceptual model is supported by sample data. If the sample data do not support the conceptual model, then the original model can be modified and tested (Schumacker & Lomax, 2004). There are several indicators to determine the overall fit of SEM models, and most SEM scholars recommend evaluating the models by observing more than one of these indicators (Hoe, 2008). To evaluate the fit of the model to the data, this study will use the commonly applied fit indices as follows; the chi-square statistic, the Incremental Fit Index (IFI), the Tucker-Lewis Index (TLI), the Comparative Fit Index (CFI), and the Root Mean Square Error of Approximation (RMSEA). The Bentler and Bonett's (1980) normed fit index (NFI) is one of the most widely used fit indexes, but it is affected by sample size and does poorly for small samples (Bollen, 1989; Maruyama, 1998). This study, therefore, will use Bollen's (1989) Incremental Fit Index (IFI) that provides an adjustment to the normed fit index for sample size and degrees of freedom.

The IFI is relatively stable for the same model in different samples. An acceptable threshold for this index is 0.90 or greater (Bollen, 1989).

Tucker and Lewis' (1973) Tucker-Lewis Index (TLI) compares a proposed model's fit to a nested baseline or null model and measures parsimony by assessing the degrees of freedom from the proposed model to the degrees of freedom of the null model. The TLI is also resilient against variations in sample size. An acceptable threshold for this index is 0.90 or greater (Hoe, 2008). Bentler's (1990) Comparative Fit Index (CFI) was developed to overcome the limitation of sample size effects. This index ranges from 0 to 1, with 0.90 or greater representing an acceptable fit (Hoe, 2008). Steiger's (1990) Root Mean Square Error of Approximation (RMSEA) index measures the discrepancy in terms of the population, not the sample, by measuring the discrepancy between the observed and estimated covariance matrices per degree of freedom (Hoe, 2008). Thus, the value of this fit index is expected to better approximate the population and not be affected by sample size. The RMSEA values less than 0.05 indicate good fit, and values up to 0.08 indicate reasonable fit (Hoe, 2008). A low chi-square value, indicating non-significance, would indicate a good fit because non-significance means that there is no considerable difference between the actual and predicted matrices (Hoe, 2008). Therefore, low chi-square values, which result in significance levels greater than 0.05 or 0.01, indicate that actual and predicted inputs are not statistically different (Hoe, 2008). In summary, this study will use the following indicators and criteria to evaluate the goodness-of-fit; the values of IFI, TLI and CFI $>$ 0.90 indicates good fit, the value of RMSEA $<$ 0.08 indicates acceptable fit, and the chi-

square statistic (χ^2), indicating non-significance, would indicate a good fit (Hoe, 2008). In this study, findings of marginal significance ($p < .10$) will be considered acceptable if there are compelling reasons to suggest that the associated findings are meaningful.

Measures

Measures that represent each of the latent variables depicted in Figure 3 are described in this section. The correlations, means, standard deviations, and ranges for all study variables are reported in Table 3.

Family adjustment.

How well a family is able to meet demands is reflected in their level of adjustment, which varies on a continuum from good to poor (Patterson, 1988). When the demand-capability imbalance increases and persists, family functioning is no longer stable, and the family system is in disequilibrium (i.e., poor adjustment) (Patterson, 1988, 2002a). *Family adjustment* in the FAAR model conceptually corresponds with the state of *functional integrity* that connotes a sense of trust, stability, creativity and openness that brings an owning family's interactions or relationships to a higher level of responsiveness and higher resilience (Danes et al., 2009; Danes & Morgan, 2004). *Family adjustment* as an endogenous latent variable will be measured by five indicators of the family APGAR index (Smilkstein, 1978) from the 2000 wave of the NFBP that assesses the state of *family functional integrity*. The family APGAR that reflects five components of family functioning (i.e., Adaptation, Partnership, Growth, Affection, and Resolve) was developed to assess a family's function as a screening instrument in the medical field (Smilkstein, 1978). In the family business field, the family APGAR has

been used to measure the *functional integrity* of the owning family or the family functionality (Danes & Lee, 2004; Danes et al., 1999; Fitzgerald et al., 2010; Olson et al., 2003; Philbrick & Fitzgerald, 2007). The five components of family functioning are represented by the five indicators of the family APGAR index that ask how often respondents are satisfied with five aspects of his or her family life as follows: the way a respondent's family provides help when something is troubling (Adaptation in Figure 3)[2], talks over things and shares problems with the respondent (Partnership), supports the respondent's wishes to take on new activities (Growth), expresses affection and responds to the respondent's emotions, such as anger, sorrow, or love (Affection), and shares time together (Resolve). Each indicator was measured on a 5-point satisfaction scale (1 = never, 5 = always) reflecting the respondent's level of satisfaction with each component of the *functional integrity* of the owning family. A high family APGAR score would suggest that the family could adjust to the stressful situations due to its high functional integrity and stability, from family members' view, and a low score would suggest that the family environment might be stressful to the family members (Smilkstein, 1978). The reliability was high ($\alpha = .79$).

Family adjustment, conceptually reflected by the state of the functional integrity of owning families, was measured by responses from family managers who took care of most of the household work, including scheduling family activities and overseeing child care. Family managers were likely to have more knowledge and information about the state of the stability and functional integrity of their business-owning family.

[2] Labels in parentheses represent both the APGAR index's components and the indicators in this study.

Situational meanings of demands.

According to Patterson (2002a), families' situational meanings of demands conceptually refer to their subjective difficulty in managing family demands. The different level of tensions caused by business issues, such as unclear ownership, unfair compensation, or unfair workloads among family members, represent subjective responses to demands or subjective difficulty in managing demands within the family business context (Danes et al., 1999). An owning family's subjective difficulty in managing demands, therefore, can be reflected by the level of felt tension. Subjective difficulty in managing demands (i.e., *situational meanings of demands*) as an exogenous latent variable was measured by two indices created based on seven items that queried about the level of tension that business issues generate in the home life, using a 5-point scale (1 = no tension at all, 5 = great deal of tension). The seven items represent subjective responses (i.e., level of tension) to specific stressful demands (i.e., business issues) in the family business context. These business issues are reflected by the following seven items: competition for resources between family and business, unfair workloads among family members in the business, failure to resolve business conflicts, unfair compensation for family members, unequal ownership of the business by family members, confusion over decision authority, and confusion among family members over who does what in the business. One index created based on the seven items from business managers (BTension in Figure 3) represents the tension level of business managers, and the other index from family managers (HTension in Figure 3) represents the tension level of family managers. Subjective difficulty in managing demands (i.e.,

situational meanings of demands) as an exogenous latent variable was measured by responses from both business managers and family managers to conform with the conceptual definition of the *family meanings* construct that refer to the interpretations that have been collectively constructed by family members, rather than an individual (Patterson, 2002a). The reliability of the seven items from family managers was high (α = .81), whereas that from business managers was moderate (α = .68).

In addition to the two indices of the tension level, two items from business managers (BConflict in Figure 3) and family managers (HConflict in Figure 3) were included for measuring *situational meanings of demands*. These two items represent their subjective meanings about conflicts of needs between family and business by asking them how often they would say that the needs of their family conflict with the needs of the business, using a 5-point scale (1 = never, 5 = always). The reason why these items were included was that critical demands in the family business context can be generated by conflicts of needs between family and business systems due to the unique characteristic of family businesses involving both family and business subsystems that compete for time, energy, and financial resources (Danes et al., 1999). The conflict of needs between family and business systems was the primary factor that produced tensions in the family business context both in real time and longitudinally (Danes, 2006). Business-owning families may have different subjective definitions about how often the needs of their family system conflict with the needs of their business system. Their subjective meanings about the need conflicts represent *situational meanings of demands* in the family business context. The two items

(BConflict and HConflict) reflect the cognitive aspect (i.e., interpretation or view on demands) of *situational meanings of demands*, whereas the two tension indices reflect the emotional aspect of *situational meanings of demands*. Both sets of indicators, thus, measure diverse aspects of *situational meanings of demands*.

The theoretical term for the exogenous latent variable, *situational meanings of demands*, shown in Figure 1 was replaced with the conceptually interchangeable term, *subjective difficulty in managing demands*, in Figure 2 and 3 that depict the conceptual model and the structural equation model because this term reflects the exogenous variable's operational definition for its measurement better than the theoretical term (i.e., *situational meanings of demands*) does. The exogenous latent variable was measured by indicators about the level of tension that business issues generated and indicators about the view on family-business conflicts as described above. The operational definition of the exogenous latent variable is, thus, based on the both sets of indicators (i.e., the level of tension on business issues and the view on family-business conflicts). The term of *subjective difficulty in managing demands* represents the operational definition of the construct more appropriately than the theoretical term of *situational meanings of demands* by indicating business-owning families' subjective hardship to demands of business issues and family-business conflicts.

Family capabilities: coping behaviors.

The construct of *coping behaviors* is a part of *family capabilities* that conceptually consisted of *resources* and *coping behaviors*. A coping behavior is defined as a specific effort by which a family attempts to manage a demand (i.e., what a

family does) whereas a resource represents a characteristic, trait, or competency (i.e., what a family has) (Patterson, 1988). *Resources* and *coping behaviors*, therefore, will be measured by two different item sets that are conceptually interrelated with each other as *family capabilities* and that reflect what a business-owning family does (i.e., *coping behaviors*) and what the family has (i.e., *resources*) in times of demands.

According to the FAAR model, when a family is proactive in maintaining its existing social network and in developing new relationships, the family can create supportive relationships with a community, and the supportive social ties between the family and a community can serve as one of the most powerful buffers of family demands (Patterson, 1991). These proactive behaviors for coping with family demands are termed *maintaining social integration* as one of the important family coping behaviors. *Maintaining social integration* refers to a reciprocal process between a community that is open and encouraging of involvement by persons with disabilities and family initiative to help reduce physical and psychological barriers that can isolate them (Patterson, 1991; Patterson, 2002a). *Maintaining social integration* as a coping behavior in the FAAR model corresponds with *socially responsible behaviors* in the family business context. *Socially responsible behaviors* of family businesses refer to behaviors representing the commitment that family businesses make to community betterment. Examples of *socially responsible behaviors* include helping other businesses in community, donating to local schools and youth programs, participating in community activities, and keeping close contact with local organizations (Fitzgerald et al., 2010). These *socially responsible behaviors* of family businesses maintain their

existing social network, develop new relationships, and create supportive relationships with a community. Furthermore, the supportive social ties between the owning family and a community facilitated by *socially responsible behaviors* serve as a powerful buffer of family demands (Fitzgerald et al., 2010). Thus, *socially responsible behaviors* that correspond with *maintaining social integration* can be considered as coping behaviors for coping with family demands in the family business context.

Contributions, donations, or provision of technical assistance are classified as professional support given to the community by a business (Kilkenny, Nalbarte, & Besser, 1999). Kilkenny et al.(1999) generated the measure of professional support given to the community by a business. The measure was an average of the ordered categorical responses to 'I purchase locally regardless of cost', 'I am willing to spend resources to help the community', 'how often my business has provided support for local youth programs,' and 'how often my business provided support for local bond issues' (Kilkenny, Nalbarte, & Besser, 1999). Fitzgerald et al. (2010) used two categorical variables where business managers were asked how often they engaged in activities of providing financial or technical assistance and donating to youth programs in community to measure *socially responsible behaviors* of family businesses.

For the present study, four items were selected based on conceptually supported measures of *socially responsible behaviors* present in the family business literature (Kilkenny et al., 1999; Fitzgerald et al., 2010) and the conceptual conformity with *coping behaviors* in the FAAR model. Four items that measure *coping behaviors* as an endogenous latent variable are as follows: (1) Your business keeps in close contact with

local economic development organizations (Contact in Figure 3) (1 = strongly disagree, 5 = strongly agree), (2) As a business owner or manager, you are willing to expend resources to help this town (Expend) (1 = strongly disagree, 5 = strongly agree), (3) As a business manager you have helped other businesses in the community (HelpBus) (1 = strongly disagree, 5 = strongly agree), and (4) How often in the past 3 years has your business provided donations to local schools or youth programs? (Donation) (1 = never, 5 = very often). The Cronbach's Alpha of four items was .63.

These four items measuring *socially responsible behaviors* as *coping behaviors* in the family business context represent a business-owning family's behavioral efforts (i.e., what the owing-family does) to manage business demands, corresponding with the conceptual definition of *coping behaviors* in the FAAR model. *Coping behaviors* were measured by responses from business managers who took care of most of the business work because business managers were likely to have more useful knowledge and information about how the family business system copes with business issues through socially responsible behaviors for community betterment. The other part of family capabilities, *resources*, was also measured by responses from business managers for the same reason as *coping behaviors*.

Family capabilities: resources.

Perceived business success as a type of resource in the family business context corresponds with the conceptual definition of *resources* in the FAAR model. *Resources* in the FAAR model conceptually include two characteristics in terms of its relationships with other concepts, especially *family adjustment* and *coping behaviors*, in the context

of family resilience. First, *resources* theoretically contribute to competent *family adjustment* in the face of demands (Patterson, 1988, 2002a, 2002b). Second, *resources* are positively affected by *coping behaviors* and are maintained as the consequence of *coping behaviors* (Patterson, 1988). In the family business context, *perceived business success* as an intangible type of resource conforms to these two conceptual characteristics: (1) a contribution to family adjustment (i.e., *family stability and integrity*) and (2) a positive association with coping behaviors (i.e., *socially responsible behaviors*), according to family business literature (Besser, 1999; Fitzgerald et al., 2010; Miller & Besser, 2000; Niehm, Swinney, & Miller, 2008; Olson et al., 2003). *Resources* in the family business context, therefore, will be measured by *perceived business success* that reflects business managers' subjective assessment of how successful their business has been.

Perceived business success was assessed by two items. First, business managers were asked about the overall level of perceived success of their business to date (Success in Figure 3). They responded to the question on a 1 to 5 Likert scale of "very unsuccessful" (1) to "very successful" (5). Second, business managers were asked about the level of perceived success of their business in achieving the most important goal for the business to date (GSuccess in Figure 3). They also responded to this second question on a 1 to 5 Likert scale of "not at all successful" (1) to "very successful" (5). The Cronbach's Alpha of two items was .60. In family business literature, these two items were used to assess business success perceived by business managers (Besser, 1998; Danes et al., 1999; Niehm et al., 2008; Olson et al., 2003).

Table 3. *Correlations, Means, Standard Deviations, and Ranges for All Study Indicators (n=187)*

Variables [a]	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. BTension	—														
2. HTension	.21**	—													
3. BConflict	.26**	.20**	—												
4. HConflict	.17*	.42**	.39**	—											
5. Contact	.10	.06	.07	.19**	—										
6. Expend	.11	.04	.03	.01	.24**	—									
7. HelpBus	-.00	.04	.01	-.02	.18*	.22**	—								
8. Donation	.05	.03	.17*	.21**	.24**	.24**	.14	—							
9. Success	-.19*	-.08	-.10	.02	.04	-.04	.11	.10	—						
10. GSuccess	-.17*	-.12	-.07	-.05	-.04	.03	.16*	.10	.44**	—					
11. Adaptation	-.11	-.22**	-.09	-.16*	.03	-.03	-.11	.09	-.00	.07	—				
12. Partnership	-.06	-.32**	-.16*	-.29**	.05	-.04	-.07	.00	-.06	-.03	.36**	—			
13. Growth	.02	-.26**	-.05	-.25**	.13	.07	-.14	.02	-.09	-.12	.40**	.40**	—		
14. Affection	-.07	-.17*	-.05	-.26**	.04	.00	-.16*	-.02	-.11	-.06	.41**	.57**	.45**	—	
15. Resolve	-.21**	-.31**	-.19*	-.44**	.01	-.04	-.01	-.01	-.01	-.01	.29**	.57**	.33**	.51**	—
Mean	9.19	10.54	2.69	2.58	3.00	3.80	3.70	3.22	3.93	3.78	4.47	3.99	4.21	4.17	3.88
SD	2.73	3.98	.87	.80	1.17	.76	.97	1.13	.79	.98	.73	.89	.87	.84	.83
Range	7-21	7-28	1-5	1-4	1-5	2-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5

* $p < .05$, ** $p < .01$

[a] Variables**, BTension & HTension**: levels of tension caused by business issues (business & family managers); **BConflict & HConflict**: conflicts of needs between family and business systems (business & family managers); **Contact**: contact with local economic organizations; **Expend**: expend resources to help town; **HelpBus**: help other businesses in community; **Donation**: provide donations to local schools; **Success**: level of perceived business success; **GSuccess**: level of perceived success in achieving the business goal; **Adaptation**: family provides help; **Partnership**: family shares problems; **Growth**: family supports wishes for new activities; **Affection**: family expresses affection; **Resolve**: family shares time together

Preliminary Findings

The correlations, means, standard deviations, and ranges for all study indicators were calculated to obtain the basic preliminary information about observed variables (Table 3). Table 3 shows the intercorrelations among indicators within each set of indicators for each latent variable. Most pairs of indicators within each set of indicators for each latent variable were significantly correlated at the either .05 or .01 level. The intercorrelations among indicators for *subjective difficulty in managing demands* (i.e., *situational meanings of demands*) ranged from .17 to .42 (average $r = .28$). The average intercorrelations among indicators for *subjective difficulty in managing demands* suggest that indicators underlying the latent variable are associated with each other at the medium effect size using Cohen's (1988) guidelines (i.e., small effect size if r=.10, medium effect size if r=.30, large effect size if r=.50). The correlation between two indicators for *resources* was .44 ($p < .01$). The average intercorrelation among indicators for *coping behaviors* was .21, and that for *family adjustment* was .43 ($p < .01$). These three set of indicators (i.e., *resources, coping behaviors, family adjustment*) also showed medium to large correlations according to Cohen's (1988) guidelines. The factor analysis logic used in SEM to address the measurement error attempts to determine which sets of indicators share common correlation characteristics that define latent variables (Schumacker & Lomax, 2004). The correlations results in this study suggest that sets of indicators share common correlation characteristics that define each of four latent variables through showing significant associations among indicators within each indicator set either at the medium or high level. Based on these preliminary

findings, it is expected that latent variables are appropriately defined by the sets of indicators in the measurement model.

Table 3 also shows the intercorrelations across sets of indicators for the latent variables. In the intercorrelations between the sets of indicators for *subjective difficulty in managing demands* and *family adjustment,* 13 of 20 pairs of indicators were significantly correlated at the either .05 or .01 level in the negative direction. Those significant intercorrelations ranged from -.16 to -.44. These correlations imply that a link between *subjective difficulty in managing demands* and *family adjustment* constructs can be supported with a negative relation. The negative relation between the two constructs is represented by the first hypothesis. In the intercorrelations between the sets of indicators for *subjective difficulty in managing demands* and *coping behaviors,* three of 16 pairs of indicators (i.e., r = .17, .19, and .21) were significantly correlated at the either .05 or .01 level. The intercorrelations between the two constructs suggest a weak positive link between *subjective difficulty in managing demands* and *coping behaviors* constructs. The positive relation between the two constructs was hypothesized in the second hypothesis. In the intercorrelations between the sets of indicators for *subjective difficulty in managing demands* and *resources*, two of eight pairs of indicators (i.e., r = -.17 and -.19) were significantly correlated at the .05 level in the negative direction. This result suggests a weak negative link between *subjective difficulty in managing demands* and *resources* constructs as hypothesized in the third hypothesis. Only one of eight pairs of indicators (r = .16) was significantly correlated at the .05 level in the intercorrelations between the sets of indicators for

coping behaviors and *resources*. This result implies that there is a weak or no link between the two constructs, although a positive relationship between the constructs was hypothesized in the fourth hypothesis. Only one of 20 pairs of indicators for *coping behaviors* and *family adjustment* was significantly correlated at the .05 level (r = -.16). In the intercorrelations between the sets of indicators for *coping behaviors* and *family adjustment,* half of the intercorrelation pairs had positive directions and the other half had negative directions. This result implies that there is a weak or no link between the two constructs either with a positive or a negative relation. The positive relation between *coping behaviors* and *family adjustment* was hypothesized in the fifth hypothesis. There were no significant intercorrelations between the sets of indicators for *resources* and *family adjustment* implying that the relationship between these constructs that reflects the sixth hypothesis is likely not to be supported. Most intercorrelation pairs for *resources* and *family adjustment* had negative directions, although a positive relationship between the two constructs was hypothesized in the sixth hypothesis. Based on these preliminary findings about the intercorrelations among each set of indicators for the latent variables, it is expected that there are significant links between the constructs that represent the first, second, and third hypotheses, whereas there are either weak or no significant links between the constructs that represent the fourth, fifth, and sixth hypotheses in the structural equation model (Figure 3). Table 4 shows the correlations among theoretical constructs (latent variables). The LISREL 8.8 (Jöreskog & Sörbom, 1993) was used to generate the correlations among constructs.

Table 4

Correlations among Latent Variables (n=187)

Latent Variables	1	2	3	4
1. Subjective Difficulty in Managing Demands (Situational Meanings of Demands)	—			
2. Coping Behaviors	.31*	—		
3. Resources	-.17	.16	—	
4. Family Adjustment	-.56***	-.01	-.10	—

*p < .05. **p < .01. ***p < .001

Consistent with the first and second hypotheses, both latent variables of coping behaviors (r = .31, p < .05) and family adjustment (r = -.56, p < .001) were significantly correlated with *subjective difficulty in managing demands* (i.e., *situational meanings of demands*) in the expected directions. Other pairs of latent variables that represent the third, fourth, fifth, and sixth hypotheses, however, were not significantly correlated. The preliminary findings about the intercorrelations among indicators and latent variables shown in Table 3 and 4 partly conform to theoretical hypotheses. On the basis of these preliminary findings, the formal tests of the hypothesized model were pursued.

Chapter 4. Results

The hypothesized conceptual model was tested using structural equation modeling (SEM) procedures with the Maximum Likelihood (ML) estimation method to examine the effect of family meanings about demands on family adjustment in business-owning families. Figure 6 shows the standardized maximum-likelihood estimates for the model. To determine the extent to which the hypothesized model fits the sample data, the evaluation of the model fit should derive from diverse sources and be based on several criteria that can assess model fit (Byrne, 1998; Schumacker & Lomax, 2004). This study, therefore, focuses on the following three components to evaluate the extent to which the model fits the data; (a) the parameter estimates, (b) the measurement model, and (c) the structural model (Byrne, 1998). This study used two-step modeling approach for the analysis, proposed by Anderson and Gerbing (1988), that emphasizes the analysis of two distinct models: a measurement model and the structural model (Schumacker & Lomax, 2004). The two-step modeling approach assesses the fit of the structural model independently of assessing the fit of the measurement model through testing the measurement model first before the structural model is tested (Schumacker & Lomax, 2004). This approach makes it easier to precisely locate the source of poor fit (Kline, 2011) than one-step modeling where the measurement and structural components of the model are analyzed simultaneously in a single analysis (Kline, 2011; Schumacker & Lomax, 2004). Prior to assessing the fit of the measurement model, parameter estimates in the model will be assessed first.

Parameter Estimates

The initial step in assessing the fit of a model is to determine the viability of the individual parameter estimates in the model. Any estimates falling outside the admissible range are a clear indication that either the model is wrong or the input matrix lacks sufficient information (Byrne, 1998). Examples of unreasonable parameter estimates are negative variances and covariance or correlation matrices that are non-positive definite, which cause LISREL to issue an error message (Byrne, 1998). The negative variance estimate is commonly known as a Heywood case, where one or more unique variance estimates are non-positive (Byrne, 1998; Gerbing & Anderson, 1987). According to Bentler and Chou (1987), variances that are estimated as negative or zero are not only meaningless, they are also inappropriate within the context of SEM because the Maximum Likelihood (ML) estimation method does not allow negative variances. Correlation coefficients greater than 1.0 in a correlation matrix cause the correlation matrix to be non-positive definite, indicating that parameter estimates cannot be computed (Schumacker & Lomax, 2004). This study's finding, however, did not contain any parameter estimates that represent negative variances, other out of range estimates, or non-positive definite matrices.

Another indicator of the poor model-fit in terms of the individual parameter estimates is the presence of standard errors that are excessively large or small (Byrne, 1998). If a standard error approaches a zero or it is extremely large (approaches 1.0), the test statistic for its related parameter cannot be determined (Byrne, 1998). Although no definitive criterion of small and large standard errors has been established (Byrne,

1998), the standard errors for measurement and structural models shown in Table 5 and Figure 6 (standard errors in parentheses) did not indicate such values that are extremely small or large. The standard errors in the measurement model ranged from .12 to .51 and those in the structural model ranged from .10 to .20.

Another indicator to determine the viability of the individual parameter estimates is the statistical significance of parameter estimates. Statistically non-significant parameters, except for error variances, can be considered unimportant to the model (Byrne, 1998). All coefficients for the measurement model were statistically significant at the level of .05, .01, or .001. Most coefficients for the structural model were also significant at the level of .10, .05, or .001. Only one path coefficient between coping behaviors and resources, however, was not statistically significant. To sum up, the examination of unreasonable parameter estimates, appropriateness of standard errors, and the statistical significance of parameter estimates revealed that parameter estimates in the model of this study were reasonable and viable in assessing the fit of the model.

Measurement Model

The second step in assessing the model-fit is to examine the extent to which the measurement model is adequately represented by the measures (Byrne, 1998). Based on the two-step modeling approach, the structural equation model shown in Figure 3 was respecified as a measurement model for the confirmatory factor analysis and then confirmatory factor analysis was conducted to evaluate the fit of the measurement model to the data (Anderson & Gerbing, 1988; Kline, 2011). To evaluate the fit of the measurement model to the data, this study used the following fit indices; the chi-square

statistic, the Root Mean Square Error of Approximation (RMSEA), the Incremental Fit Index (IFI), Non-Normed Fit Index (NNFI) that is identical to the Tucker-Lewis Index (TLI) (Maruyama, 1998) and the Comparative Fit Index (CFI). The chi-square statistic (χ^2) of 118.35 (df = 84, p-value = 0.0081) indicated a poor overall fit of the model to the data. However, relying on the only chi-square statistic to assess the goodness-of-fit has shortcomings because it tends to be sensitive to sample size. The chi-square statistic is directly related to sample size (Maruyama, 1998). This sensitivity of the chi-square test to sample size can lead to erroneous conclusions regarding analysis outcomes and the use of the χ^2 index provides little guidance in determining the extent to which the model does not fit (Byrne, 1998; Maruyama, 1998; Schumacker & Lomax, 2004). Thus, it is more beneficial to rely on diverse fit indexes such as the RMSEA, CFI, IFI, and NNFI which are less prone to complications due to change in sample size than is the χ^2 index (Byrne, 1998; Maruyama, 1998). The value of Root Mean Square Error of Approximation (RMSEA), 0.048, indicated an overall good fit because RMSEA values less than 0.05 indicate good fit (Hoe, 2008). The values of Comparative Fit Index (CFI) of 0.95, Incremental Fit Index (IFI) of 0.95, and Non-Normed Fit Index (NNFI) of 0.94 also indicated the evidence of a good model fit. The result of the confirmatory factor analysis suggests that the measurement model fits the data and measures employed are reasonable indicators of the respective latent variables. Table 5 shows the standardized coefficients for the measurement model (factor loadings) for each indicator of respective latent variables. As expected, all indicators' standardized coefficients for measurement model were statistically significant at the level of .05, .01, or .001.

Table 5

Maximum Likelihood Estimates for Measurement Model

Constructs & Indicators [a]	Measurement Coefficients (Factor Loadings)			Measurement Errors	R^2
	Unst.[b]	*SE*	St.[b]	St.[b]	
Subjective Difficulty					
BTension	.44***	.12	.33	.89	.11
HTension	.78***	.14	.57	.67	.33
BConflict	.64***	.13	.47	.78	.22
HConflict	1.00[c]	—	.73	.46	.54
Coping Behaviors					
Contact	1.00[c]	—	.51	.74	.26
Expend	.86**	.27	.44	.80	.20
HelpBus	.64**	.23	.33	.89	.11
Donation	1.04***	.31	.53	.72	.28
Resources					
Success	1.00[c]	—	.62	.61	.39
GSuccess	1.14*	.51	.71	.50	.50
Family Adjustment					
Adaptation	.89***	.17	.50	.75	.25
Partnership	1.36***	.19	.76	.42	.58
Growth	1.00[c]	—	.56	.68	.32
Affection	1.30***	.19	.73	.46	.54
Resolve	1.27***	.19	.71	.49	.51

*p < .05, **p < .01, ***p < .001

[a] Indicators, **BTension & HTension**: levels of tension caused by business issues (business & family managers); **BConflict & HConflict**: conflicts of needs between family and business systems (business & family managers); **Contact**: close contact with local economic organizations; **Expend**: expend resources to help town; **HelpBus**: help other businesses in community; **Donation**: provide donations to local schools or youth programs; **Success**: overall level of perceived business success; **GSuccess**: level of perceived success in achieving the business goal; **Adaptation**: family provides help; **Partnership**: family talks and shares problems; **Growth**: family supports wishes for new activities; **Affection**: family expresses affection; **Resolve**: family shares time together

[b] Unst., unstandardized; St., standardized.
[c] Reference indicator's coefficient fixed to 1.00. Not tested for statistical significance.

The magnitudes of the standardized factor loadings for the four indicators of *subjective difficulty in managing demands* ranged from .33 to .73. The factor loadings of the four indicators of *coping behaviors* ranged from .33 to .53. The two indicators for *resources* had the standardized factor loadings of .62 and .71. The five indicators' factor loadings for *family adjustments* ranged from .50 to .76. A single indicator for each latent variable in the model was defined as a *reference indicator* by setting the variable's coefficient to 1.0 for each latent variable. The observed variable with a coefficient fixed to a number is called *a reference indicator* because all other observed variables for that latent variable are interpreted in relation to its unit of measurement (Schumacker & Lomax, 2004). Coefficients fixed to 1.0 to scale the corresponding factor remain so in the unstandardized solution and are not tested for statistical significance because they have no standard errors as shown in Table 4 (Kline, 2011).

Additional information to assess the measurement model can be obtained from the squared multiple correlation (R^2) reported for each observed variable including endogenous and exogenous variables. The R^2 values for each observed variable serve as indicators of the extent to which each variable adequately measures its respective underlying construct (i.e., how well the indicators serve as measures of the latent variables) and are scaled from 0 to 1 (Bollen, 1989; Byrne, 1998; Schumacker & Lomax, 2004). The R^2 value for the endogenous variable "Contact" ($R^2 = .26$) can be interpreted as indicating that 26 % of its variance can be explained by the latent variable, Coping Behaviors (Byrne, 1998). The examination of the R^2 values reported in the Table 5

shows that each observed variable moderately measures its respective underlying construct. Given the acceptable measurement model, the structural model was assessed.

Structural Model

Model as a whole.

The fit of the structural model as a whole to the data was evaluated. The chi-square statistic (χ^2) of 118.35 (df = 84, p-value = 0.0081) indicated a poor overall fit of the model to the data suggesting that the hypothesized model is not adequate. However, the value of Root Mean Square Error of Approximation (RMSEA), 0.048, indicated an overall good fit. The values of Comparative Fit Index (CFI) of 0.95, Incremental Fit Index (IFI) of 0.95, and Non-Normed Fit Index (NNFI) of 0.94 also indicated the evidence of a good model fit. In addition to the examination of the goodness-of-fit indexes, the standardized residuals were examined to establish the extent to which the hypothesized structural model fits the sample data. The standardized form of the residuals represents estimates of the number of standard deviations of observed residuals from zero residuals that should exist if the causal model fits perfectly (Byrne, 1998; Schreiber, Stage, King, Nora, & Barlow, 2006). The LISREL program provides two types of visual information about the standardized residuals, the Q-plot and the stem-leaf plot.

The Q-plot presents a summary of all standardized residuals bearing on the model. Standardized residuals that follow the dotted line rising at a 45-degree angle are indicative of a well-fitting model (Byrne, 1998). Standardized residuals that depart excessively from the Q-plot line, however, indicate that the model is in some way

misspecified (Schreiber et al., 2006). The Q-plot shown in Figure 4 reveals that standardized residuals follow the dotted line, thereby providing further evidence of a well-fitting model.

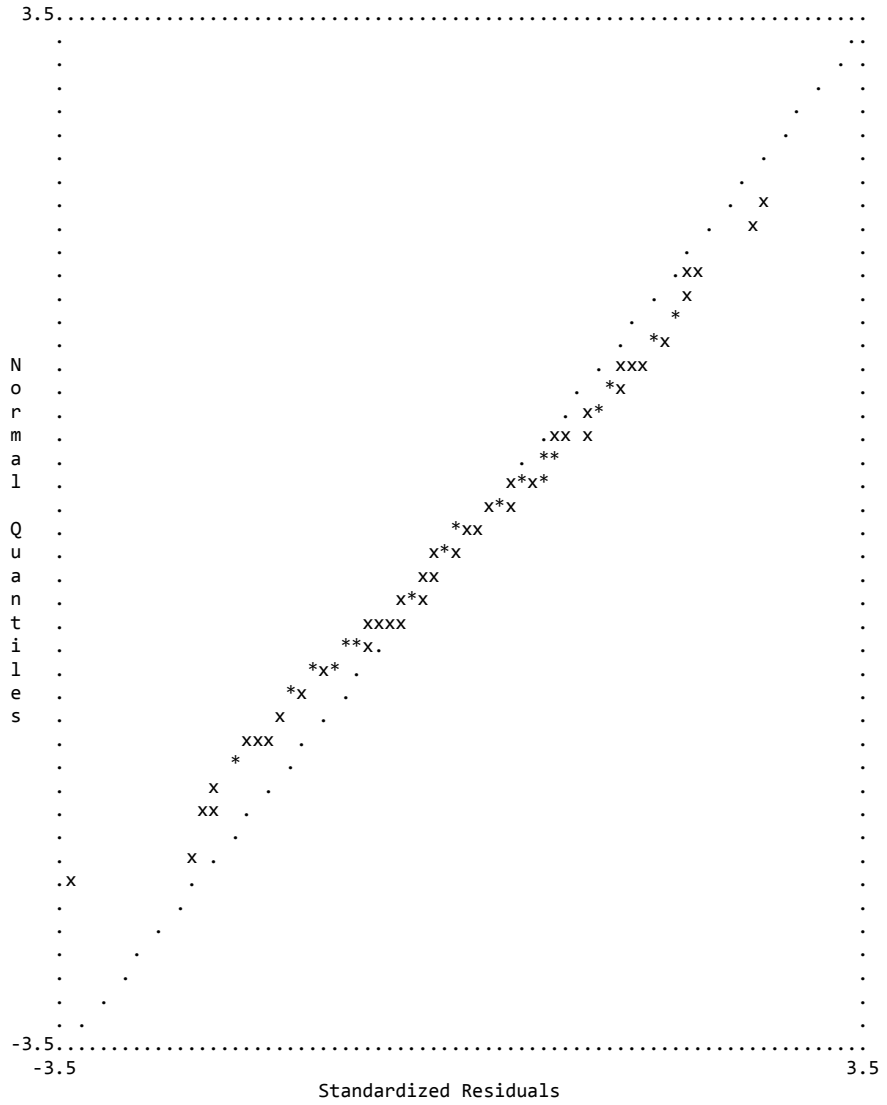

Figure 4. Q-plot of standardized residuals.

The stem-leaf plot provides a visual display of the distribution of the residuals. Jöreskog (1993) indicated that a well-fitting model is characterized by standardized

residuals that are symmetrically clustered around the zero point, with most being in the middle of the distribution and only a few in the tails (Byrne, 1998). The stem-leaf plot of standardized residuals shown in Figure 5 suggests that the hypothesized model is reasonably well-fitting because standardized residuals are symmetrically clustered around the zero point. In reading the stem-leaf display, the stem represents the whole number in a standard deviation value. For example, the value at the bottom of the stem-leaf plot in Figure 5 represents 2.56 standard deviations. This is the value reported for the largest standardized residual. Values of standardized residuals more than 2.58 are usually considered to be large (Byrne, 1998). Therefore, in examining any values > 2.58, there are no values indicative of possible misfit in the model.

```
- 3|4
- 2|
- 2|33210
- 1|988766555
- 1|4443321100
- 0|9988866666555
- 0|433333332221111000000000000000000
  0|1112334
  0|55555677777788999
  1|0111122334444
  1|56678999
  2|01
  2|56
```

Figure 5. Stem-leaf plot of standardized residuals.

The structural equation model shown in Figure 3 was not sought for the modification to achieve a better data-to-model fit because the values of indexes for overall model fit such as the CFI, IFI, NNFI, and RMSEA indicated the evidence of an overall good fit. Additionally, standardized residuals represented by the Q-plot and the

stem-leaf plot provided further evidence of a well-fitting model. This information pooled from various indexes of overall model fit led to conclude that any further incorporation of parameters into the initial model for the modification would result in an overfitted model (Byrne, 1998). As MacCallum, Roznowski, and Necowitz (1992) pointed out in their article about the model modification, "when an initial model fits well, it is probably unwise to modify it to achieve even better fit because modifications may simply be fitting small idiosyncratic characteristics of the sample" (p.501). Adhering to MacCallum et al.'s (1992) caution, it is concluded that the hypothesized model shown in Figure 3 represents an adequate description of the structure of the effect of subjective difficulty in managing demands on family adjustment in business-owning families.

Hypothesized paths in structural model.

Figure 6 shows the standardized maximum-likelihood estimates for the structural model. Hypothesis 1 proposed that *subjective difficulty in managing demands* would be negatively associated with *family adjustment.* The finding supported this hypothesis by indicating that *subjective difficulty in managing demands* was significantly associated with *family adjustment* in a negative way at the level of .001. The standardized coefficient ($\beta = -.68$, $p < .001$) of the pathway between *subjective difficulty in managing demands* and *family adjustment* indicated that subjectively perceived difficulties in the face of demands were negatively related to family adjustment.

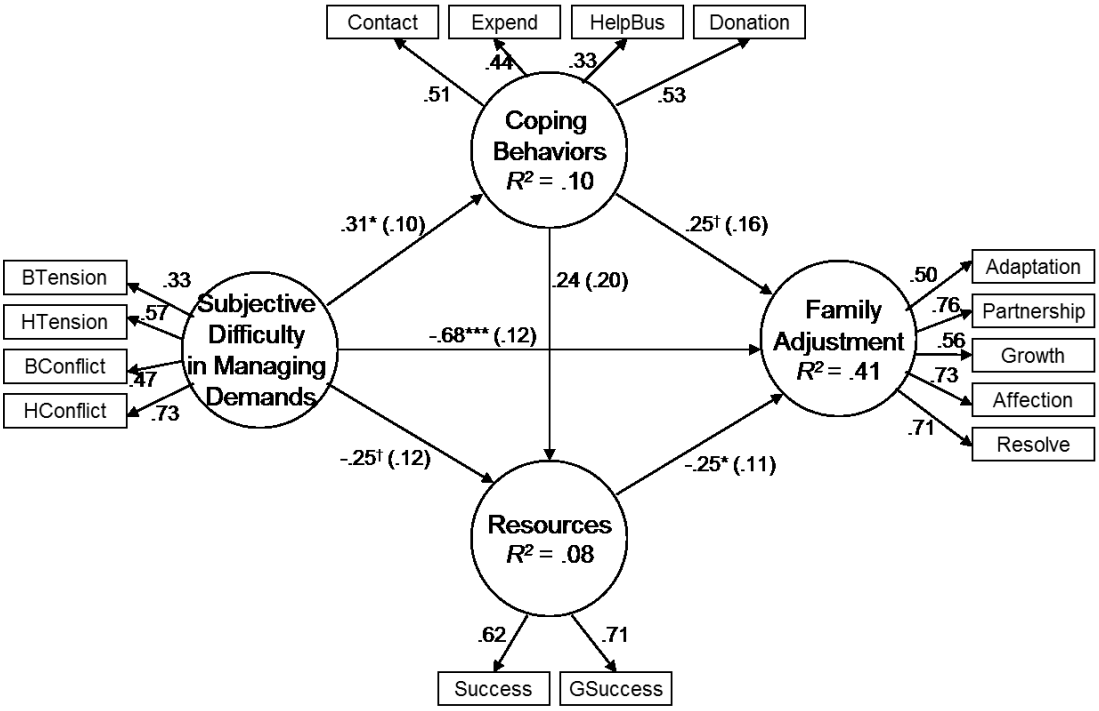

Figure 6. Standardized maximum-likelihood estimates for measurement and structural model.

Note. Model fit: $\chi^2 = 118.35$ (*df* = 84, *p* = .0081), Comparative Fit Index (CFI) = .95, Incremental Fit Index (IFI) = .95, Non-Normed Fit Index (NNFI) = .94, Root Mean Square Error of Approximation (RMSEA) = .048, Standard Errors in parentheses, (See Table 4 for detailed estimates for Measurement Model)
†p < .10, *p < .05, **p < .01, ***p < .001

Hypothesis 2 proposed that *subjective difficulty in managing demands* would be positively associated with *coping behaviors*. The second hypothesis was also supported by the result. *Subjective difficulty in managing demands* was significantly related to *coping behaviors* in a positive direction. The coefficient (β = .31, *p* < .05) of the

pathway between *subjective difficulty in managing demands* and *coping behaviors* was significant at the level of .05.

Hypothesis 3 proposed that *subjective difficulty in managing demands* would be negatively associated with *resources*. The third hypothesis was weakly supported by the result where *subjective difficulty in managing demands* was negatively associated with the family *resources* at the significance level of .10. The pathway's standardized coefficient ($\beta = -.25$, $p < .10$) indicated that *subjective difficulty in managing demands* was weakly related to *family resources* in a negative way.

Hypothesis 4 proposed that *coping behaviors* would be positively associated with *resources*. The findings did not support this fourth hypothesis. The coefficient ($\beta = .24$, ns) of the pathway between coping behaviors and resources indicated that the coping behaviors (socially responsible behaviors) were not associated with resources (perceived business success).

Hypothesis 5 proposed that *coping behaviors* would be positively associated with *family adjustment*. The fifth hypothesis was weakly supported by the result, thus coping behaviors were positively associated with family adjustment at the significance level of .10. The coefficient ($\beta = .25$, $p < .10$) of the pathway between coping behaviors and family adjustment indicated that coping behaviors were weakly associated with family adjustment in a positive direction.

Hypothesis 6 proposed that *resources* would be positively associated with *family adjustment*. The finding was not consistent with this hypothesis. Although the result indicated that there was a significant association between resources and family

adjustment, the standardized coefficient (β = -.25, $p < .05$) of the pathway showed a negative relationship between resources and family adjustment, not positive one proposed by the sixth hypothesis. The finding, thus, indicated that resources were negatively associated with family adjustment.

Figure 6 shows squared multiple correlations (R^2) for each structural equation. These values that are scaled from 0 and 1 serve as an indication of the strength of the structural relationships (Schumacker & Lomax, 2004). Based on the values of the squared multiple correlations for structural equations, the model for this study accounted for 10 % of the variance in coping behaviors, 8 % of the variance in family resources, and 41 % of the variance in family adjustment.

Effect decomposition.

For a given model, the relationships between variables can be decomposed into *causal effects (*or *total effects*) and *non-causal relationships* by using the logic of path analysis (Maruyama, 1998). This study focuses on the *causal effects (*or *total effects*) among latent variables in the model. The *causal effects* or *total effects* consist of *direct effects* that refer to effects that go directly from one variable to another variable and *indirect effects* that refer to effects between two variables that are mediated by one or more intervening variables (Maruyama, 1998). Indirect effects can be described as *mediator effects* because indirect effects involve one or more intervening, or mediator variables, to transmit some of the causal effects of prior variables onto subsequent variables (Kline, 2011).

Table 6

Decompositions for Effects of Exogenous Variable (Subjective Difficulty in Managing Demands) on Endogenous Variables for Structural Model

	Subjective Difficulty in Managing Demands		
Endogenous variables	Unstandardized	*SE*	Standardized
Coping Behaviors			
Direct	.22*	.10	.31
Total indirect	—	—	—
Total	.22*	.10	.31
Resources			
Direct	-.21†	.12	-.25
Total indirect	.06	.05	.08
Total	-.14	.10	-.17
Family Adjustment			
Direct	-.52***	.12	-.68
Total indirect	.09	.06	.12
Total	-.43***	.10	-.56

†p < .10, *p < .05, **p < .01, ***p < .001

Table 6 shows the decompositions for effects (i.e., direct, indirect, and total effects) of exogenous latent variable on endogenous latent variables for the structural model. *Direct effects* are estimated as the coefficients of paths in the model. For example, the standardized direct effect of *subjective difficulty in managing demands* on *family adjustment* is the standardized coefficient of the path, -.68 (Kline, 2011). The standardized direct effects in Table 5 correspond with the standardized path coefficients in Figure 6. *Indirect effects* are estimated as the product of direct effects that comprise them (Kline, 2011). For example, the standardized indirect effect of *subjective difficulty in managing demands* on *family adjustment* through the mediating latent

variable, *coping behaviors*, can be estimated as the product of the standardized coefficients for the direct effects that comprise the path, which is .31 x .25, or .08. This estimation was derived from the following rationale for the indirect effect: *Subjective difficulty in managing demands* has a certain direct effect on *coping behaviors* (.31), but only part of this effect, .25 of it, is transmitted to *family adjustment* (Kline, 2011). This estimation (i.e., the product of the standardized coefficients for the direct effects) also represents the effect size of the indirect effect or the mediator effect (MacKinnon, Fairchild, & Fritz, 2007; Shrout & Bolger, 2002).

Table 6 shows *total indirect effects*, not individual *indirect effects. Total indirect effects* refer to the sum of all indirect effects between two variables (Kline, 2011). The standardized *total indirect effect* of exogenous variable (i.e., *Subjective Difficulty in Managing Demands*) on endogenous variable (i.e., *Family Adjustment*) through family capabilities (i.e., *coping behaviors* and *resources*) was .12, indicating a small effect size based on Cohen's (1988) guidelines. This standardized estimate for the total indirect effect failed to exhibit a significant indirect relationship between the two variables. Based on the estimates of the decompositions for effects, the effect size of the indirect or mediator effect between *subjective difficulty in managing demands* and *family adjustment* was small, whereas the effect size of the direct effect of *subjective difficulty in managing demands* on *family adjustment* was significantly large (-.68). Examining the indirect relationship between endogenous constructs, *coping behaviors* did not exhibit a significant indirect association with *family adjustment* through *resources*.

Chapter 5. Discussion

The purpose of this study was to clarify the role of the family meanings regarding demands in the resilience process of business-owning families by examining potential pathways of family meanings' effect on family adjustment. Guided by the Family Adjustment and Adaptation Response (FAAR) theory (Patterson, 2002a, 2002b; Patterson & Garwick, 1994), a conceptual model of the resilience of business-owning families was hypothesized based on the conceptual relationships among the four main constructs of resilience: *situational meanings of demands* (i.e., *subjective difficulty in managing demands*), *coping behaviors, resources*, and *family adjustment*. The hypothesized conceptual model (Figure 2) can be described as the following hypothesized statements: *Subjective difficulty in managing demands* (i.e., *situational meanings of demands*) will be negatively associated with *family adjustment* (Hypothesis 1); *Subjective difficulty in managing demands* will be positively associated with *coping behaviors* (Hypothesis 2); *Subjective difficulty in managing demands* will be negatively associated with *resources* (Hypothesis 3); *Coping behaviors* will be positively associated with *resources* (Hypothesis 4); *Coping behaviors* will be positively associated with *family adjustment* (Hypothesis 5); *Resources* will be positively associated with *family adjustment* (Hypothesis 6). The hypothesized conceptual model for the relationships among the constructs was tested empirically using structural equation modeling (SEM) procedures. Based on the hypothesized pathways, the empirical results of the present study will be discussed in the next section, validating or expanding on earlier literature.

Discussion of Results

Of the hypothesized pathways in the model, the direct pathway between *subjective difficulty in managing demands* and *family adjustment* (i.e., the first hypothesis) exhibited the strongest significant relationship compared to the other indirect pathways between the two constructs. According to this finding, business-owning families' subjective difficulty in managing demands appeared to directly affect their family adjustment negatively rather than indirectly affecting adjustment through the mediating role of the families' protective capabilities (i.e., *coping behaviors* or *resources*). This negative association between the *situational meanings of demands* and *family adjustment* within the family business context is supported by a previous study of farm business-owing couples. Danes and Lee (2004) found that decreased tension (i.e., *situational meanings of demands*) for both spouses in farm business-owing couples was associated with a high level of family functional integrity (i.e., *family adjustment*). The important role of family meanings in managing demands indicated by this study's finding was also emphasized by FAAR model's (2002a) assumption that some sources of stress exist only by virtue of a family's subjective meanings, such as their expectations or interpretations regarding demands.

This study's results suggest that business-owning families' subjective difficulties in managing demands may not indirectly influence their adjustment through associations with family capabilities (i.e., *coping behaviors* or *resources*). The findings, however, showed that there were direct associations: (1) between *subjective difficulties in managing demands* and family capabilities (i.e., *coping behaviors* and *resources*; see

hypotheses 2 and 3) and (2) between family capabilities and *family adjustment* (see hypotheses 5 and 6). These direct associations (see hypotheses 2, 3, 5, and 6) constitute the two potential indirect pathways from *subjective difficulty in managing demands* to *family adjustment*.

The first indirect pathway between *subjective difficulty in managing demands* to *family adjustment* consists of two direct pathways that represent hypotheses 2 and 5 (i.e., hypothesis 2. *Subjective difficulty in managing demands* will be positively associated with *coping behaviors*; hypothesis 5. *Coping behaviors* will be positively associated with *family adjustment*). Hypothesis 2 was supported by the finding. *Subjective difficulty in managing demands* was positively associated with *coping behaviors* characterized by socially responsible behaviors in the family business context. This finding is consistent with Patterson and Garwick's (1994) assumption that family meanings of a stressor influence behavioral responses to that event. As hypothesized, when a business-owning family subjectively perceives higher strain or tension, it appears to lead the family to engage in more socially responsible behaviors that contribute to community improvement, which, in turn, creates commitment to the family business from members of the community. This finding tends to be consistent with family business scholars' assumption that the meanings and values of owning families create the predisposition toward social responsibility to the community (Fitzgerald et al., 2010). Hypothesis 5 was weakly supported by the result; thus, *coping behaviors* characterized by socially responsible behaviors in the family business context were positively but weakly associated with *family adjustment*. As Fitzgerald et al.

(2010) and Steier (2001) pointed out, in times of change or high demands, a business-owning family's socially responsible behaviors appear to establish a network of supportive relationships between the family and the community that give the family a clearer sense of community norms and expectations regarding family behaviors and roles under demands (McCubbin, 1979). The owning family members' clear and realistic sense of their behaviors and roles appears to lead to less role strain and the predictable and stable patterns of family interaction that reflect the family's adjustment condition (Patterson, 1988).

The second indirect pathway from *subjective difficulty in managing demands* to *family adjustment* consists of another two direct pathways that represent hypotheses 3 and 6 (i.e., hypothesis 3. *Subjective difficulty in managing demands* will be negatively associated with *resources*; hypothesis 6. *Resources* will be positively associated with *family adjustment*). Hypothesis 3 was weakly supported by the finding that *subjective difficulty in managing demands* was negatively but weakly associated with *resources* characterized by perceived business success. This finding is consistent with previous family business studies. According to Danes et al. (1999), tension associated with business issues was a significant predictor of the level of perceived success in achieving the most important business goal for business managers. The higher the level of tension was identified, the less success was perceived in business goals. Olson et al. (2003) also indicated that, as the tension level in a family business system increased, perceived business success decreased.

Regarding the relationship between *subjective meanings of demands* (i.e., *difficulty in managing demands*) and protective capabilities (i.e., *coping behaviors* and *resources*), the subjective meanings appeared to positively affect socially responsible behaviors as *coping behaviors* but negatively affect perceived business success as *resources*. Patterson (2002a) indicated that a family's subjective difficulty in managing demands could cumulatively lead to the inability to build a repertoire of family protective capabilities and perhaps create a high risk status, whereas a family's sense of confidence in managing demands can build protective capabilities, increasing the likelihood of resilience when the family is exposed to a significant risk (Patterson, 2002a). Her assumption about the negative relationship between *subjective meanings of demands* and protective capabilities was supported by this study's finding of a negative association between subjective meanings and perceived business success as *resources*. However, the other result of the positive relationship between *subjective meanings of demands* and socially responsible behaviors as *coping behaviors* did not support Patterson's (2002a) assumption. It seemed that the direction of the relationship between *subjective meanings of demands* and protective capabilities can be determined by the type of the capabilities (i.e., whether they are coping behaviors or resources). However, it should not be assumed that all types of *resources* have a negative relationship with *subjective meanings of demands* and that all types of *coping behaviors* have a positive relationship with the subjective meanings of demands because this study focused on only a particular type of resources (i.e., perceived business success) and coping

behaviors (i.e., socially responsible behaviors). Further study is needed to examine the relationship between the constructs using other types of resources and coping behaviors.

Hypothesis 6 (i.e., *Resources* will be positively associated with *family adjustment*) was not supported by the finding. Although a positive association between the two constructs was hypothesized, the result indicated that *resources* characterized by perceived business success were significantly but negatively associated with *family adjustment*. The positive association was hypothesized because it seemed reasonable that business success perceived by business managers could reflect perceived stability in the business system and that business stability could positively contribute to the family stability and integrity, which reflects adjustment in the family business context. In other words, business managers who perceive higher business success may have less concern about financing or economic instability and spend more time and energy on family stability and integrity. The finding, however, did not support this hypothesis, indicating a negative association between the two constructs. A rationale for this negative relationship between the constructs will be discussed based on previous family business literature.

Perceived business success, an intangible *resource*, is a characteristic of the business system, while family stability and integrity, *family adjustment*, are characteristics of the family system. This relationship between *resources* and *family adjustment* in this study, thus, partly reflects the relationship between the business system and the family system, especially the impact of business system's characteristic (i.e., perceived business success) upon the family system's outcome characteristic (i.e.,

family stability and integrity). Several family business studies have investigated the impact of business system characteristics (e.g., total assets, number of hours worked per week) upon a family system's outcome variables, particularly family stability and integrity. According to the previous literature, family stability and integrity were negatively affected by total assets, the number of non-family employees (Duncan & Stafford, 2000), the number of hours worked per week in the business by the business manager (Heck & Stafford, 1999), and business cash flow problems (Olson et al., 2003). Taken together, the more likely it is that the business manager has more working hours, non-family employees, and cash flow problems, the less stable the family system will be. It appears that, if a characteristic in the business system (e.g., the business manager's working hours, number of non-family employees, or business cash flow problems) corresponds with values that are task-oriented and focused externally on the consumer or non-family employees (Boverie, 1991; Rodriguez et al., 1999), the characteristic tends to be negatively associated with family stability and integrity. For example, it is assumed that a business manager who is more interested in business tasks than in people and focuses more extensively on finances or profits than family members or employs more non-family members may be less interested in and focused on the family and that the family has less stable relationships. The negative relationship between the business system's characteristics and the family system's characteristics (i.e., family stability and integrity) shown by previous literature appears to reflect a unique feature of family business system: the fact that it consists of two subsystems with opposite natures (i.e., task-oriented vs. people-oriented) and competing needs and

resources. In line with the logic described above, it seems reasonable that business success perceived by business managers corresponding with values embraced in the business system was negatively associated with family stability and integrity, corresponding with the values embraced in the family system in this study.

This study's finding, however, failed to support the fourth hypothesis that *coping behaviors* characterized by socially responsible behaviors would be positively associated with *resources* characterized by perceived business success. The fourth hypothesis was formulated based on family business scholars' assumption that family businesses that commit to their community through socially responsible behaviors are more likely to benefit from community support, customer loyalty, and a positive public image for the business, leading to business managers' subjective perception of business success (Besser, 1998; Fitzgerald et al., 2010; Niehm et al., 2008). This study's finding, however, did not support this hypothesis. Previous empirical studies' findings are also inconsistent with this study's result. Miller and Besser (2000) indicated that small business managers with a higher sense of community social values were more likely to report perceived business success than firms with low values, and Besser (1999) also indicated that business managers' support and commitment to their community were associated with perceived business success. In contrast to these previous studies' findings, this study's result, however, did not indicate a significant association between the two constructs. These different findings across studies may be partly caused by the use of different measures for socially responsible behaviors as *coping behaviors* or different measures for perceived business success as *resources*, or different sample

characteristics in each study. Further study is needed to clarify these inconsistent findings across studies.

Limitations of the Study

This study has several limitations. A major limitation stems from the drawbacks of using secondary data. This study's sample was drawn from the National Family Business Panel (NFBP) data. Because secondary data are not collected for a specific research question, hypotheses, and variables for a study, the measurement process for the study may often call for modifying operational definitions based on the available data (Hofferth, 2005; Sullivan, 2001). Accordingly, the validity of the measures is called into question in secondary data research (Sullivan, 2001). Due to this drawback of using secondary data, the validity of the measures used in this secondary data study should be carefully evaluated. The limitation of the available data in this study led to the following two specific validity issues in the measures.

First, the *resources* construct was measured by only two indicators (two items). According to Anderson and Gerbing (1984), the occurrence of improper solutions was found to depend primarily upon sample size and the number of indicators per latent variable. The use of a sufficient sample size ($n > 150$) and three or more indicators per latent variable has been recommended to produce reasonable and stable parameter estimates (Anderson & Gerbing, 1984; Schumacker & Lomax, 2004). The use of only two indicators per latent variable can raise questions related to measurement validity and lead to improper solutions and unstable parameter estimates (Anderson & Gerbing, 1984; Schumacker & Lomax, 2004). Although this study had a sample size of more

than 150 and used four or more indicators for the other three constructs, the use of only two indicators for the *resources* construct can raise issues of measurement validity and improper solutions. Second, the three constructs of *family adjustment, coping behaviors,* and *resources* were measured by responses from either family managers or business managers, that is, only one family member within a household. *Family adjustment* was measured by responses from family managers, and both *coping behaviors* and *resources* were measured by responses from business managers. Although either the business manager or family manager may have more knowledge and information about the business system or family system than the other manager, if the three constructs (i.e., *family adjustment, coping behaviors,* and *resources*) could be measured by responses from both managers or from multiple family members, the validity of the measures would be further strengthened. To address the validity issues of the measures used in this study, scholars collecting their own data in future studies need to develop three or more indicators per latent variable based on a sufficient sample size ($n > 150$) and develop measures with responses from multiple family members rather than one family member within a household.

Another limitation of this study is related to the risk of generalizing the findings. The couples subsampled for this study were business-owning couples with an average of over 25 years of experience in managing a family business. Most couples were married with average ages of 50.2 (business managers) and 47.9 (family managers), and they were primarily White (97.3 %). Therefore, generalizing the findings of this study is limited to other groups of couples because the targeted couples have the unique

characteristics described above. To generalize the present study's findings to other groups of couples, the hypothesized model requires cross-validation with business-owning couples who have managed a family business for a short period or who start a family business. Moreover, the present study needs to be replicated with business-owning couples of younger ages or other ethnic backgrounds both within and outside the United States to confirm the findings across different types of couples.

In addition, the findings of this study should be carefully interpreted because of the issue of role and gender raised by the characteristics of the sample. It was assumed that this study's findings were based on the dynamics between the roles of the business manager and the family manager in the family business context. In the subsampled couples, however, most of the business managers were male (96.8 %) and most of family managers were female (96.3 %). Thus, it is possible that the findings of this study may reflect the dynamic between different genders due to the characteristics of the sample. In order to control the effect of gender on the findings, the present study needs to be replicated with a different type of family business sample where each role of the business manager or the family manager is represented by both genders with balanced numbers for each gender rather than predominantly represented by a particular gender.

Contributions and Implications

Although there are limitations, this empirical study contributes to understanding the effect of families' subjective meanings or difficulty with demands on their adjustment in the resilience process. Scholars thus far have tended to pay little attention

to empirical testing of the issue, although they have emphasized the important role of family meanings with respect to resilience conceptually or theoretically as well as the role of protective capabilities in family resilience both conceptually and empirically. The result of this study implies that, when business-owning families face demands, their situational meanings or subjective difficulties with the demands may have independent importance in successfully adjusting to them, although their protective capabilities also contribute to their adjustment. The theoretical and practical implications and contributions of the present study will be further discussed in the following two sections.

Theoretical implications.

This study contributes to understanding the role of family meanings of demands within the family business context through empirically testing theoretical assumptions about resilience. This empirical study within the new context of business-owning families provides support for some of the FAAR theory's (Patterson, 2002a, 2002b) assumptions. The present study's primary finding that business-owning families' subjective difficulties and tension about business issues negatively affect family adjustment tends to be consistent with the FAAR theory's assumption that a certain levels of tension, strain, or subjective difficulty (i.e., *situational meanings of demands*) threatens the family's existing homeostatic and stable functioning (i.e., *family adjustment*) (Patterson, 1988). The finding also tends to be consistent with Hill's (1949) family stress model (ABCX model), which posits that the degree of family crisis (*X* factor) depends on the family's definition or meaning of a stressor (*C* factor) as well as the adequacy of the family's resources (*B* factor) to meet the demands of the change

associated with the stressor (Hill, 1949; McKenry & Price, 1994). Hill (1949) indicated that the family's definition or meaning of a stressor is the determining factor in deciding whether or not a demanding situation is a crisis, pointing out that, if a family feels that it is having difficulty, no matter how easy the situation might seem to others, that family tends to act in a disorganized manner (Hill, 1949). The finding of this study, however, is inconsistent with Burr's (1982) theoretical assumption in his family stress model, a reformulation of Hill's (1949) ABCX model. Burr (1982) assumed that a family's subjective definition of the severity of demands (Hill's *C* factor) influences the amount of crisis (Hill's *X* factor) indirectly by influencing the family's vulnerability to stress rather than through direct influence. This study's result, however, suggests that business-owning families' subjective difficulties in managing demands may not indirectly influence the families' adjustment through associations with family capabilities (i.e., *coping behaviors* or *resources*).

In terms of the conceptual contribution, this study provides the family business field with greater conceptual clarity and specification of the constructs related to family meanings. Scholars in the family business field have widely used the term "family values" as a construct that is conceptually similar to "family meanings." "Family meanings," the interpretations and views constructed by family members (Patterson & Garwick, 1994), include the three dimensions of family identity, family worldview, and situational meanings of demands. Family values are conceptualized in the family business literature as deeply held principles, standards, moral or ethical goals, and behavioral norms that arise from basic beliefs about human nature or the mission of

business in society (Koiranen, 2002). Although this definition of family values corresponds with "family worldview," which refers to the core values and existential beliefs comprising an orientation to life (Patterson & Garwick, 1994), the family business literature has pointed out that other characteristics of family values correspond with family identity and the situational meanings of demands. The conceptual characteristic of family identity is reflected in the statements of family values made by business-owing families. These statements in business-owing families include the rules and norms of relationships that guide family members in how they relate to each other (Aronoff & Ward, 2011; Patterson, 2002a; Patterson & Garwick, 1994), reflecting the conceptual definition of family identity. Situational meanings of demands that are more immediately available in the family's consciousness than family worldview and family identity are conceptually reflected by an owning family's immediate response to business issues shaped by the owning family's meanings of what is important in the family business context (Aronoff & Ward, 2011). The term "family values" in the family business literature, thus, tends to embrace the conceptual characteristics of the *situational meanings of demands*, corresponding with the constructs of both family identity and family worldview. Accordingly, the term "family values" can be further specified and reconceptualized in the family business context as a construct that embraces a concrete level of beliefs representing an owning family's immediate response to demands (i.e., situational meanings of demands) and basic beliefs about the family itself (i.e., family identity) as well as the system outside of the family (i.e., family worldview). This specified construct of family values embraces multiple

dimensions of beliefs within the family business context that have more conceptual preciseness and specification. Future studies will benefit from conceptually more precise constructs.

Additionally, this study suggests family resilience scholars to clearly define and distinctly use the terms that represent a family's positive capabilities and qualities, such as family resiliency, family strengths, family assets, family resources, and family protective factors. These terms are often confused with *family resilience* because some researchers conceptualize *family resilience* as family capabilities and qualities that help families to be resistant to demands (Orthner et al., 2004; Vandsburger & Biggerstaff, 2004), whereas others conceptualize *family resilience* as dynamic processes that encompass positive adaptation in the face of demands (Conger & Conger, 2002; Conger, Rueter, & Elder, 1999). A major source of the conceptual confusion surrounding *family resilience* lies in the term's use as both a capacity as well as a process (Patterson, 2002a). In this study, family *resilience* was defined as the dynamic process by which families are able to adjust and function competently in the face of family demands. It is suggested that family *resiliency* can be used as a term to describe the capacity and qualities of a family system to manage their demands successfully (Lavee, McCubbin, & Olsen, 1987; McCubbin & McCubbin, 1988; Patterson, 2002a) to distinguish between family *resilience* and family *resiliency*. This study also suggests that *family strengths* or *family assets* can be used to describe families' positive qualities that are helpful in managing their stressful circumstances successfully, regardless of their exposure to substantial demands. Therefore, the condition of exposure to demands can

be considered a distinctive factor for clearly differentiating between family *strengths* (or family *assets*) and family *resiliency*. *Protective factors* can be used to describe one set of family capabilities within the dynamic process of family *resilience*. In the resilience process, family *resources* can be used to describe one component of family capabilities that consist of coping behaviors and resources as Patterson (2002a) proposed. These distinct definitions of the concepts with similar characteristics will conceptually contribute to future study about family resilience.

Practical implications.

When business-owning families face demands due to business issues (e.g., confusion among family members over who does what in the business, confusion over decision authority, unfair compensation for family members, or competition for resources between family and business), they may seek to consult with family business consultants to successfully manage their demands and adjust to a new demanding situation. Traditionally, family business consultants have been trained in the organizational development or business management field. Due to their disciplinary background, family business consultants tend to focus on task-oriented work for the business system such as the resolution of role conflicts, improvement of organizational functioning, and fair distribution of financial rewards or resources within the family firm to facilitate owning families' successful adjustment (Lee & Danes, 2012; McClendon & Kadis, 1991). Within the family business context, however, financial rewards or role conflicts take on added meanings due to the complicated and intermingled nature of the family firm system, which is composed of two different

systems: a people-oriented family system based on permanent emotional relationships and a task-oriented business system based on temporary relationships (Bork, Jaffe, Lane, Dashew, & Heisler, 1996; Hilburt-Davis & Dyer, 2003; Lee & Danes, 2012; Rodriguez et al., 1999). In other words, business issues such as financial rewards or role conflicts may acquire new meanings by being intermingled with the people-oriented characteristics of a family firm system, such as emotional relationships or conflicts among family members, the functional status of family structure, and the healthiness of family interactions. Due to this intermingled nature of the family firm system, although many owning families may experience common types of business demands, such as unclear ownership, unfair compensation, or unfair workloads among family members, each owning family may have unique subjective meanings or difficulty in managing the business demands. Consequently, depending on the nature of the owning families' emotional relationships or conflicts among family members or the healthiness of family interactions, their subjective difficulties with business issues may add extra weight. This extra weight on families' subjective difficulties with demands may reflect significant information to which family firm consultants need to pay attention in working with them. This study's result implies that family firm consultants need to pay attention to how business-owning families emotionally and cognitively perceive or interpret their difficulties with demands in their consulting process to facilitate the better adjustment of a business-owning family with business demands. In line with this practical implication, family firm consultants could ask the following questions to assess an owning family's subjective meaning of demands in the assessment phase:

What is the most urgent business demand in your family business that causes the highest tension in your family? How are business demands a problem in your business or family system? How does each owning family member feel about the demanding situation in your business? What elements in your family do you think make you feel tension about the demanding situation in your business? How do owning family members appraise the conflicts of needs between the family and business systems?

These questions can be asked to assess the people-oriented aspects of family firm systems beyond the task-oriented aspects on which family firm consultants have traditionally focused. In the assessment phase of family firm consultation, organizational consultants tend to focus on five areas for problem assessment: role conflicts (i.e., a system conflict that occurs when each person has several roles in a family firm system), financial rewards and management (i.e., issues related to the distribution of business income or compensation within a family business), business management effectiveness, business management tasks and processes, and family or non-family employee management (Bork et al., 1996; Lee & Danes, 2012; McClendon & Kadis, 1991). However, some problem areas in the family business context, such as financial rewards or compensation issues, take on added meanings due to emotional relationships and conflicts among family members (Bork et al., 1996). Role conflicts are also often evoked by emotional and relational issues that are inherent in business-owning families (McClendon & Kadis, 1991). If family firm consultants, therefore, focus only on these business issues for the problem assessment, such as role conflicts or financial rewards, they may overlook important information about people-oriented

issues such as emotional relationships and conflicts among family members that influence business issues. Furthermore, if family firm consultants focus only on what business issues or demands exist within a family business system in the assessment phase, it may cause them to overlook how the owning family members perceive or interpret their difficulties with demands.

In an empirical study (Lee & Danes, 2012) that investigated the difference in the consulting approaches of family firm consultants, authors indicated that consultants with training in family therapy tended to focus on emotional and relational conflicts among family members and family structure including boundaries and hierarchy as well as role conflicts and financial rewards in their assessment of problems within family firms, whereas consultants without training in family therapy considered role conflicts, leadership style, and business management effectiveness to be important for the problem assessment (Lee & Danes, 2012). According to Lee and Danes (2012), consultants with training in family therapy also emphasized the intervention strategies for resolution of relational conflicts and family members' emotional welfare, whereas consultants without training in family therapy emphasized the intervention strategies for role conflict resolution and improved organizational functioning. The findings of Lee and Danes'(2012) study imply that family therapy-trained consultants' relational perspective and expertise in resolving emotional or relational conflicts might be helpful to interdisciplinary collaboration in a consulting team. This is because they can address the people-oriented issues of a family business system and complement the organizational functioning expertise of other disciplines' consultants (Lee & Danes,

2012). The interdisciplinary consulting team that can successfully integrate a variety of perspectives contained in a family firm might be able to help the firm achieve its goal (Astrachan & Astrachan, 2002). Family therapists' people-oriented expertise might lessen the extra weight added to owning families' subjective difficulties with business issues in a family business system, minimizing the negative effect of their subjective difficulties with demands on family adjustment.

Additionally, in terms of intervention strategies for family firm consultation, this study's findings imply that family firm consultants need to help owning families keep a more positive and hopeful outlook regarding their demands to minimize the negative effect of family meanings on family adjustment. For example, a family firm consultant can help an owning couple or family faced with demands keep a more positive and hopeful outlook through exploring the family's prior experience when its family members could deal with their demands successfully, how they could address the demands successfully, and what family resources were helpful in their successful adjustment. A family firm consultant also can provide them with a sense of hope and relief from their emotional distress by focusing on couple or family relationships strengths and asking the following questions (Jacobson & Christensen, 1996): What was the couple or family relationship like before the problems began? How is the couple or family relationship different now on days when you are getting along? How would the couple or family relationship be different if the problems that currently exist were no longer present? These questions are helpful in getting information about the areas of strengths in the owning couple or family relationships that are often involved with the

sources of current conflicts and the areas for future treatment sessions (Jacobson & Christensen, 1996). Reinforcing the family's meanings that give the family a more acceptable outlook on the demands can lead the family to build a cognitive framework for successful family adjustment and help it to overcome the conflicts inherent to the family business system. For example, when a family subsystem and business subsystem within a family business system have competing needs and start to pull apart at a demanding time, consultants will be able to help the owning family find a compelling rationale or shared goal to bring family members together within the family business system. Family firm consultants also can reframe the demands as inevitable and helpful to the family's achievement of the shared goal to place the family's adjustment in a more meaningful and acceptable light (Aronoff & Ward, 2011).

Implications for future research.

It is important for family resilience researchers to examine family meanings with their resilience research to further understand the resilience process. In line with the importance of family meaning study, two kinds of topics for future research are suggested in this section. In the present study, a particular type of *resources* (i.e., perceived business success) and *coping behaviors* (i.e., socially responsible behaviors) in the family business context were selected to conceptually represent *resources* and *coping behaviors* identified in the FAAR theory. This study's findings represented the relationship between those particular types of family capabilities (i.e., *resources* and *coping behaviors*) and family meanings regarding demands. However, there are diverse types of *resources* and *coping behaviors* in addition to perceived business success and

socially responsible behaviors that were focused in this study. *Resources* in the family business context include physical capital resources (plant, raw materials, cash) and human capital resources (skills, knowledge, relationships) (Habbershon & Williams, 1999). Examples of *coping behaviors* include developing collaborative relationships with professionals and developing communication competence (Patterson, 1991; Patterson, 2002a). Thus, in future research, scholars need to examine different types of *resources* and *coping behaviors* to examine whether *situational meanings of demands* have the same relationships with different types of *resources* and *coping behaviors* as this study's finding showed and whether the *situational meanings of demands* indirectly affect *family adjustment* through the different types of *resources* or *coping behaviors*. In future research, the different types of *resources* and *coping behaviors* should correspond with the conceptual definitions in the FAAR theory, reflecting what a family does (i.e., *coping behaviors*), what the family has (i.e., *resources*) in times of demands, as well as how they are conceptually interrelated with each other as family capabilities.

The present study focused on a type of family meanings, *situational meanings of demands*. However, in the FAAR model, there are underlying basic beliefs (i.e., family worldview and family identity) that affect families' *situational meanings of demands* (Patterson & Garwick, 1994). The model based on the relationship between underlying basic beliefs and *situational meanings of demands*, therefore, provides a framework for understanding the whole picture of the family belief system, which plays an important role in family resilience. Scholars for future study may attempt to empirically test the family belief structure that is theoretically guided by the FAAR model, especially

focusing on the relationship between the underlying basic family beliefs (i.e., family worldview and family identity) and families' *situational meanings of demands*.

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