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FAMILY DEVELOPMENT AND THE MARITAL RELATIONSHIP AS A  
DEVELOPMENTAL PROCESS

by

J. Scott Crapo

A dissertation submitted in partial fulfillment  
of the requirements for the degree

of

DOCTOR OF PHILOSOPHY

in

Family and Human Development

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UTAH STATE UNIVERSITY  
Logan, Utah

2020

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## ABSTRACT

## Family Development and the Marital Relationship as a Developmental Process

by

J. Scott Crapo, Doctor of Philosophy

Utah State University, 2020

Major Professors: Kay Bradford, Ph.D., and Ryan B. Seedall, Ph.D.  
Department: Human Development and Family Studies

There is a lack of usable theory designed for studying families developmentally, and not much is understood about how relationships such as marriage change and develop over time beyond predictors of mean levels of satisfaction and likelihood of divorce. In Chapter 1, an overview of couple development and the need for a family developmental theory is given. Across the next three chapters, new theory development and empirical investigation of marriages over time are integrated to address these issues. Chapter 2 is a reconceptualization of family development theory, termed multidimensional family development theory, which disaggregates the lines of development contained within the commonly used stages. It posits that these dimensions (personal, vocational, couple, and generative) are interrelated, and their interaction across the family generates roles, stages, and developmental needs. Mechanisms for interaction of dimensions and consideration of cultures are explicated. As an empirical test of one portion of the revised theory, Chapter 3 is a test of measurement invariance for the

measure of marital satisfaction using the data from the Marital Instability across the Life Course dataset. Configural, weak, and strong invariance are first tested by cohort, and are then tested across 20 years longitudinally, for each cohort. The measure of satisfaction did not demonstrate invariance at the configural level across cohort and failed to demonstrate invariance for two of the three cohorts. The measure did demonstrate invariance for the cohort that had been married the least amount of time ( $< 7$  years). Results are interpreted through theory and implications are discussed. Chapter 4 summarizes across both chapters and discusses findings and theory in the context of the entire dissertation. Implications for the entire dissertation are given, and future directions are outlined.

(120 pages)

## PUBLIC ABSTRACT

## Family Development and the Marital Relationship as a Developmental Process

J. Scott Crapo

Despite the commonly held idea that families develop, there is not a theory in common use within the family science field that is developed specifically for the study of the development of the family. Family development theory, developed in the post-World War II era, was used previously, but an inability to be adapted to contemporary families and a lack of scientific utility have kept it from use. Additionally, research on how families develop has not considered how relationships may develop over time.

In this dissertation, I seek to address these holes in the family studies field. I do this over the course of two different chapters. The first of these chapters is theoretical in nature, and is a reconceptualization, or update, to family development theory. The other chapter focuses on the analysis of data to investigate the way that relationships may develop over time, with a focus on healthy marriages. In the empirical study, using a publicly available data set, I tested to see if a measure of marital satisfaction can be used across time and cohort. In other words, I tested to see if the measure captures marital satisfaction the same way for individuals married in different decades, and if it holds across twenty years of marriage.

The findings from the study support the use of the reconceptualization of family development theory and highlight the developmental nature of couple relationships. The influences of the trajectories of relationships are identified, and issues regarding the

measurement of relationships discussed. Benefits are expected to extend beyond the immediate findings as interventions are created or improved as the result of the field of family science approaching the study of couple development in new or novel ways.

## ACKNOWLEDGMENTS

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J. Scott Crapo



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## CHAPTER 1

### INTRODUCTION AND OVERVIEW

Relationships develop over time, and the nature of that development may be key in understanding happy, lifelong relationships. However, in an effort to understand and improve lives and relationships, much of the empirical work in the study of romantic relationships has focused on identifying relatively cross-sectional processes that distinguish healthy and lasting relationships from distressed and unsuccessful relationships (Miller, 2000; Rauer & Volling, 2013). This focus has reduced how much is known about how these relationships change and grow over time. Put differently, the field's attempt to distinguish between couples has led to less understanding of the couple relationship in its own developmental processes. The key term is *developmental*, which encapsulates more than just the consideration of time; it indicates an accumulation of change, of both degree and type—a holistic, overarching view of the relationship. Although considerable work has been done (e.g., Bader & Pearson, 1983; James, 2014; Murstein, 1987), it has been hampered by the lack of a strong, family-oriented, developmental theory with concepts and propositions relative to couples over time. Given the role of theory in directing empirical inquiry in terms of the types of questions asked, the methods used, and the predictions expected (Knapp, 2009), its role in sensitizing scholars to key facets of inquiry, and in helping scholars to classify, explain, and integrate empirical findings (Bengtson, Acock, Allen, Dilworth-Anderson, & Klein, 2005), a developmentally oriented theory that allows the couple relationship to be considered in context of the family and individual is critical to the study of how

relationships change and grow over time. With the aid of a scientifically useful, family-oriented developmental theory, questions surrounding the development of the couple relationship can be unpacked, such as whether couples perceive their relationships differently across time. The purpose of this dissertation is to describe refinements to a family-oriented developmental theory—family development theory—and use that theory to begin answering the question posed above.

### **The Need for a Family Developmental Theory**

There appears to be a commonly held belief, in both the scholarly and lay viewpoints, that families grow and develop over time. Indeed, the most obvious evidence for the development of families lies in the individual development of the members of the family, particularly the children—a family with young children is perceived as being developmentally different than one with adolescents. Although the individual development of various family members is theoretically well-covered under a number of various theories including life course development (Elder, 1998), psychosocial development (Erikson, 1950), and cognitive development (Piaget, 1952), these theories typically focus on the developmental aspects of a single individual, and treat the family as a contextual influence. This approach is different from family theories, in which the family is treated as the unit, and is often considered to be more than simply the sum of its parts (e.g., Becvar & Becvar, 2013; McCubbin & Figley, 1983). Such an approach would be most effective for investigating couple relationships, as the couple relationship consists of the conjoint development of two people. Most family theories, however, do

not consider families developmentally. To effectively study the development of couples and families, there is a need for a theory that uses the family as the object of development generally, and that helps to frame couple-level phenomena over time.

The exception to the statement that family theories do not consider families developmentally is family development theory (FDT). Most of the applications of family development theory center around the stages suggested by Duvall (1957), which reflect both the strength and weakness of the theory. For example, there exists a body of research that investigates the influence of the development of children on the varying aspects of the individual and families, such as how the age of children in a family influences parenting stress, marital quality, or mother's emotional experiences (e.g., Li, Zou, & Duan, 2005; Luthar & Ciciolla, 2016; McClowry et al., 2000), and much of this research has been influenced by the stages outlined by FDT. There is utility to this approach. For example, the work by Martinengo, Jacob, and Hill (2010) revealed important nuances in the interrelation of work and family based on stages grouped by child development. Unfortunately, the use of FDT (and its associated stages) is hampered by the assumption that all families develop the same general way (Laszloffy, 2002), which has led to the field of family science mostly abandoning the use of the theory in current research (cf., Davis & Gentile, 2012; Martinengo et al., 2010). This has left the field without a clear family-oriented theoretical framework to discuss and investigate families developmentally, particularly as an entire family unit. What remains is the tendency for scholars interested in family development to partition how a family develops by the age of the children. This emphasis on stages of child development may obscure

other important and meaningful aspects of the family's development, which were originally included in the stages of FDT (Duvall, 1957). The development of the couple relationship is one aspect of the family's development that is frequently obscured. Although FDT is family-oriented and developmental in nature, its history, use, and criticisms render it as less effective for studying couples developmentally.

### **History and Criticisms of Family Developmental Theory**

Historically, one of the primary methods used to consider the development of the family was FDT. Family development theory emerged as part of efforts to address “family disarray” in the post-World War II years (Duvall, 1988, p. 127), and as such became one of the first theories that specifically focused on families. Family development theory exists as a hybrid of family sociology and human development within family context, and thus its roots extend earlier than the theory itself (Duvall, 1988). Even in the mid-20<sup>th</sup> century, during the active formulation of family development as a theory, its components were not new. For example, family developmental stages were integral early in the 20<sup>th</sup> century to Rowntree's (1906) study of poverty among working families in rural England. Moreover, Duvall's conceptualization of development stemmed from individual patterns and processes of human development. These included key periods of physical development, longitudinal personal development (including biological and environmental aspects), and even personality, psychosocial, cognitive, and moral development (Duvall, 1988). In order to use these concepts to speak to the family, Duvall (and others) formulated family development theory, and focused much of the



theory on the family life cycle and family developmental tasks (Duvall, 1957). The family life cycle is the idea that the family begins with the couple, expands with the addition and growth of children, and then contracts as the children leave home and begin their own families of creations—hence the use of the term family life cycle, rather than family life course (Duvall, 1957). In order to address the needs of families in the post-World War II era, family development theory identified the family developmental tasks associated with the various periods within the family life cycle, and the resources available to families to meet those needs (Duvall 1957, 1988).

The manner in which the theory was formulated to capture the nature of the family life cycle and family developmental tasks has generated important criticisms. Family development theorists parsed the family life cycle into distinct stages. These stages were derived from the “modal intact family” (Hill, 1986, p. 27), and as such represent a minority of current families (Cherlin, 2010). Additionally, the theory has been criticized as being more descriptive than predictive—that is, it lacks scientific utility (White, 1991). Over the years, there have been efforts made to make the theory more flexible and usable. Scholars have attempted to expand and update the possible stages, such as to consider number of children and spacing of children (Davies & Gentile, 2012). White reformulated the theory to address many additional issues, such as clarifying the level of analysis, positing clearer models of process, and deriving testable propositions. Laszloffy (2002) integrated concepts from systems (Becvar & Becvar, 2013) and stress (McCubbin & Figley, 1983) theories—creating a more expansive, flexible, process-based model—to capture a wider array of families. Despite these updates, there is a large dearth

of recent research using FDT. This dearth indicates, at least in part, that the current formation of FDT is not readily accessible or usable by researchers. For example, the model posited by Laszloffy provides potential ways of integrating diverse structural and developmental dimensions in a single family, but also reduces the researcher's ability to operationalize stages, or investigate multiple families at a time. Additional work needs to be done in order to bring FDT into a form that has practical utility for scholars and researchers.

### **Family Developmental Theory and the Couple Relationship**

A particularly notable concern with FDT is that it does not give space to investigate couple relationships as their own important and distinct aspect of family development. In FDT, the marriage context is the childrearing context. That is, while FDT gives the beginning and establishment of marriage a great deal of attention, as soon as children are born the emphasis shifts to following the development of the children, with a primary emphasis on chronological age (Duvall, 1988). However, assuming a stable marriage whose needs are determined by the age of the children undermines the ability of the theory to recognize the role that the marital and couple realm plays in the development of the family, especially for the children. Previous research has identified a number of areas where the marriage setting influences child outcomes. For example, marital instability when the child is young has been found to predict antisocial behavior when the child is in early adolescence (Bor, McGee, & Fagan, 2004), with the dissolution of the marriage resulting in greater likelihood of problem behavior, poor academic

achievement, and the child's own eventual divorce (Amato, 2010). In addition, the quality of the marriage has been associated with child development, with marital happiness predicting child decreased problem behaviors and increased academic achievement (Leavitt, 2002). The link between marital quality and child outcomes appears to have a connection above and beyond the parent-child relationship (Mark & Pike, 2017). In particular, the processes within the marriage play a role, including conflict in the marriage spilling over to impaired parenting (Bradford & Barber, 2005; Stroud, Meyers, Wilson, & Durbin, 2015) and the presence of spousal violence affecting the children above and beyond other forms of family conflict and abuse (McNeal & Amato, 1998). Even this brief summary of empirical findings indicates that the couple context is important in shaping the development of the family. Despite the importance and the influence of the couple context on the development of the family, the actual development of the couple relationship, especially within committed relationships such as marriage, has garnered little attention in the scientific literature. We need a better theoretical understanding of how these couple processes shift over time—that is, develop—and the mechanisms by which the processes and their development exert influence on families, notably children, in immediacy and longitudinally. Part of this lack of theoretical grounding may be due to the limitations of FDT described above. Our thinking about phenomena is influenced by the lens we use to view it, and the majority of the work on the development of the family and marriage has been influenced by FDT (Miller, 2000).

However, this is not to say that marital development has not received attention; rather, the focus has usually been on two points in the relationship—establishment and

dissolution—not the development of the relationship *per se*. Although there has not been theoretical work tying these aspects of the relationship into the development of the family, scholars have put forth models that explain and predict these specific processes. For example, Murstein (1987) proposed the stimulus-values-role model of relationship formation, which posits that potential partners first care about stimulus (e.g., looks), then evaluate compatibility of values, and then of role perceptions. Kelly & Thiabut (1977), drawing on social exchange theory, also posited a model for the development of interpersonal relationships. According to them, individuals undergo a transformation of motivations wherein the couple becomes committed to the relationship—that is, each person becomes willing to accept costs associated with maintaining the relationship because the relationship itself becomes the source of important and powerful rewards. Models related to divorce and dissolution range from identifying components that impel or compel couples to remain together (Stanley & Markman, 1992) to investigating the process by which boundaries are negotiated during the divorce process (Emery & Dillon, 1994) to specifying the elements of a marriage that lead to dissolution (Karney & Bradbury, 1995). As useful as these models may be, and empirical evaluations of the same (e.g., Murstein, 1987; Raley, Sweeney, & Wondra, 2015; Rogge, Bradbury, Hahlweg, Engl, & Thurmaier, 2006), they do not address the fundamental development that happens within the relationship after it has been formed, but before it dissolves (if it dissolves at all).

Almost all research on what happens during that intervening time of the marriage has been empirical, process-focused, and non-developmental in nature and has been

concerned with the distinguishing of what leads to happy couples as opposed to unhappy ones (Rauer & Volling, 2013). In this pursuit, scholars have had a tendency to consider the nature and quality of the marriage as a static outcome, with clear antecedents and consequences, rather than as a dynamic, complex, and evolving developmental experience in of itself (Karney & Bradbury, 1995). If empirical investigations of the nature and quality of marriage were to follow a theoretical base that allows room for couple relationships to be their own developmental domain, a more detailed and intimate understanding of what happens within a marriage may emerge, particularly across time. Just as FDT recognizes that families as a whole shift over time, it is likely that marriages and couple relationships do as well. Approaching the marital relationship as a developmental process requires recognizing that the nature and quality of a relationship can shift not just from positive to negative, but in type across the passage of time. In other words, the processes within the relationship may lead to developmental changes in those or other processes that in turn may lead to a relationship that is fundamentally different from the one that existed in the past. Understanding the couple relationship context in this manner may not only better inform the field's ability to help couples but may also refine our understanding of the role of couple relationships in the whole of family development.

### **The Role of This Dissertation**

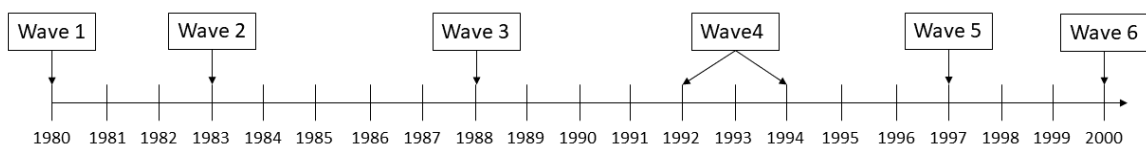
In this dissertation, I sought to address the concerns with studying families developmentally, by first discussing the reconceptualization of a family-oriented

developmental theory and then using that theory to begin answering the question: do couples perceive their relationships differently across time? These goals are achieved across the next two chapters.

The first goal is to provide a theoretical framework for conceptualizing, describing, explaining, and predicting the development of families. To this end, Chapter 2 is a reconceptualization and revitalization of FDT. In this theoretical piece, I (first author Crapo, with co-author Bradford) proposed additional steps in the evolution of FDT, and put forth a finessed iteration of the theory, termed *multidimensional family development theory* (MFDT). The purpose of Chapter 2 is to disentangle the lines of development contained within the stages proposed by Duvall (1957) and add needed concepts and propositions that arise from disjoining the several developmental dimensions. We identified four primary lines of development in the family: the personal, the couple, the vocational, and the generative. Each of these lines of development is encapsulated within its own dimension of development, and mechanisms for development within each dimension are put forth. Additionally, the interrelation of each dimension, within the individual and across the family, is expounded. Roles, stages, and family developmental tasks are redefined so as to allow for the complexity of modern family life to be represented. Processes of role and stage change (Laszloffy, 2002; White, 1991), and their relation to dimensions of development, are explicated. We further posited mechanisms to help explain and predict the success of families in their developmental tasks, and the role and influence of culture within the family experience. In building upon FDT, we sought to provide common language for discussing issues related to family development in areas

as diverse as multi-partner fertility and disability, and vocabulary for the relationship between family structure and developmental process.

The theoretical work outlined by Chapter 2 provides a framework for empirically investigating the dimension of development that has received less theoretical attention than the others, the couple dimension. To this end, Chapter 3 is an empirical study related to the second goal of this dissertation: the investigation of the nature and quality of marriage as a developmental process, through answering the question given above. One primary measure of marital quality has been marital satisfaction, or the subjective evaluation of the relationship (Karney & Bradbury, 1995). As such, Chapter 3 is designed to quantitatively identify if the nature of marital satisfaction may shift across the course of a marriage. The quantitative study used the longitudinal marriage instability across the life course data set (Booth, Amato, Rogers, & Johnson, 2001) to test a measure of marital satisfaction for measurement invariance across 20 years of marriage. Using these data does introduce some bias (such as limited generalizability), as the participants are mostly white, heterosexual, and the first wave was gathered in the year 1980 (see Figure 1-1). However, this data set also used the same measure of satisfaction across all waves, allowing for the investigation of invariance across 20 years. A failure to demonstrate



*Figure 1-1.* Years of data collection for the Marital Instability across the Life Course study. Except for wave 4, each wave was collected in one year. Wave 4 was collected from 1992 to 1994.

invariance implies that the fundamental nature of the construct is changing in some way for the participants of the study.

These chapters holistically address a significant gap in our understanding of how and why families develop. Chapter 2, the introduction of MFDT, is designed to address the lack of a viable theoretical framework in which to more fully conceptualize development of the family, particularly in connection with research on more complex and diversified families. The recognition of marriage as a trajectory within the couple dimension creates theoretical grounding to investigate the marriage as its own developmental experience. Chapters 3 then addresses the development of the marriage, giving a greater understanding of how the nature and quality of marriage may change over time. Taken together, the next chapters contained herein not only seek to increase our knowledge of family development but lay the foundation for future research to rigorously pursue the study of family development generally, and the role of the couple dimension of development on the whole of family development specifically.

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## **CHAPTER 2**

### **MULTIDIMENSIONAL FAMILY DEVELOPMENT THEORY: AN EVOLUTION OF FAMILY DEVELOPMENT**

Scientific theory guides empirical inquiry in terms of the types of questions asked, the methods used, and the predictions expected (Knapp, 2009). Ideally, theory sensitizes scholars to key facets of inquiry, and helps scholars to classify, explain, and integrate empirical findings (Bengtson, Acock, Allen, Dilworth-Anderson, & Klein, 2005). However, in the study of families, few theories are well equipped to handle issues of family development, and fewer still focus explicitly on it. The exception is family development theory (Duvall, 1957). However, this theory has received criticism regarding crucial components of its practicality that have severely reduced its use in contemporary family science (Holman & Burr, 1980; Martin, 2018), particularly with regard to its assumption of universality (Laszloffy, 2002). Nevertheless, scholars still address the idea that families change and develop over time (e.g., Davies & Gentile, 2012; Laszloffy, 2002; Martinengo, Jacob, & Hill, 2010). That is, the general concept of family development seems to persist, despite the criticisms of family development theory and the difficulty in applying it to contemporary families—emphasizing the need for a family theory that is equipped with adequate yet flexible structure to facilitate the ability of family scholars and interventionists to discuss, examine, and address family developmental phenomena.

We propose herein several major modifications to family development theory and call it multidimensional family development theory (MFDT). Central to our

reconceptualization is that Duvall's original eight stages (Duvall, 1957) contain four main lines of development, which are actually discrete but interconnected dimensions.

Previous scholars (e.g., Rodgers & White, 1993) had hinted at the individual, dyadic, familial, and societal aspects of family development, but left the amalgamations of family stages intact. Considering family developmental dimensions as separate but reciprocal elements allows for retention of key theoretical components, but also reflects diversity in individual development and family structures and processes. In setting forth these premises, we aim to take further steps in the evolution of family development theory.

These modifications provide greater flexibility to the theory of family development, while retaining useful concepts and propositions established by previous scholars (Hill & Mattessich, 1979). We hope to provide a wider variety of tools to discuss and examine concepts, propositions, and individual development in family context. We aim to give common language for discussing issues related to areas as diverse as multi-partner fertility and disability. We also seek to expand how the theory can be used in clinical and educational settings.

To be of maximum use, family development theory must be infused with flexibility in how families are framed and researched (Laszloffy, 2002) but still capture rich aspects of individual and family development over time. We thus focus on modifications to the theory that we hope will allow better adaptability and specificity in research, generate hypotheses, promote research questions, guide methodology, make predictions, and explain observed phenomenon. We examine the feasibility and utility retaining stages, stage comparison, and family tasks, while still allowing for family

individuality and diversity in matters of development. We call this reconceptualization multidimensional family development theory (MFDT).

### **Background**

Family development theory is built on the idea that families develop in a manner similar to individuals (White, 1991), and that there is a universal nature to the ways in which families develop (Duvall, 1988). In the theory's original conceptualization, family development focused on families' patterned changes over time (Mattessich & Hill, 1987), with the family life cycle—a series of stages that encompassed roles and tasks (Duvall, 1957)—as a central component. The most common parsing of these stages were the eight put forth by Duvall: (1) beginning families (the establishment phase), (2) childbearing families (the transition to parenthood), (3) families with preschool children, (4) families with school children, (5) families with teenagers, (6) families as launching centers, (7) families in the middle years, and (8) aging families. Over time, there have been other attempts to parse out stages of the family life cycle, but most in use today (e.g., Davies & Gentile, 2012) are derivations of the original eight (Duvall, 1957). Martin (2018) provided an in-depth discussion of the origins and development of family development theory, which has guided research in family therapy, work and family life, and the impact of technology on families (Smith & Hamon, 2017). But as early as 1980, scholars noted that family development theory was falling into disuse (Holman & Burr, 1980), and the theory has gleaned additional criticism in an age of increasing family diversity (Coontz, 2015; Laszloffy, 2002).

## Criticisms

There have been three key overarching criticisms aimed at family development theory: an assumption of universality, a focus on a single generation (Laszloffy, 2002), and a lack of scientific utility (White, 1991). To put it succinctly, the theory has been criticized as being a static, outdated description of the mid-20<sup>th</sup> century middle-class, heterosexual, white family.

It is notable that its key scholars theorized at least somewhat about family diversity, examining various longitudinal trajectories of premaritally pregnant intact families, single parent families, and ‘reconstituted’ families (Hill, 1986). From a hermeneutic perspective, family scholars at that time dealt with the realities of families impacted by war (e.g., the stress of a father’s absence or abrupt presence; a mother’s reluctance to give up vocational independence). The challenges of devising a theory adaptable to varying family situations was salient during the theory’s formation. However, the “modal intact family type” (Hill, 1986, p. 27) was the theory’s family structure of reference. This remains the case in the theory’s core conceptualization, resulting in the relatively fixed concepts and propositions of the theory. Despite attempts to adapt family development theory to diverse family structures and processes (i.e., White, 1991), family development has often been viewed from the perspective of family time: that is, in terms of stages that emerge from the physical, psychological, social demands of family members and of society (Hill & Mattessich, 1979). The couple relationship was integral to the stages of family development, with the couple’s relationship largely viewed as composite with childrearing, work, and individual

development, with stages defined by marriage, childbirth and child development, and finally, with vocational adult retirement and individual aging (Duvall, 1957).

It is also important to note that White (1991) made substantial effort to address the issues of scientific utility by encouraging researchers to consider family development as a dynamic process, involving social context and events. He also outlined the methodological needs to make derive meaningful, testable proposition. One change that is particularly important to the evolution put forth in this paper is the concept of transitional events. In short, a transitional event is an event in the family life that leads to a change in roles and responsibilities and marks the entrance into or out of a stage. A key example is that of the birth of the first child, which creates the new role parent, marking the move into a new stage of parenting. In addition to these efforts, Rodgers and White (1993) challenged the invariance of family stages and made revisions to better account for diversity. Despite these improvements, however, family development theory tends to be considered unable to account for modern family life.

### **Systemic Family Development Model**

Most recently, Laszloffy (2002) posited the systemic family development model (SFD) to address the issues of assumption of universality and a single generation focus. In this model, stages were no longer named or used; instead, they were replaced with an emphasis on *how* families as systems develop over time. She borrowed from systems theory (e.g., Pittman, 1987) and from family stress literature (McCubbin & Figley, 1983) to show how individuals in families form complicated systems spanning multiple generations (losing and gaining family members and generations over time), and that



changes in the lives of family members leads to increased stresses. These developmental stresses represent how families change roles and develop over time. More specifically, the loss and gain of members over time and the presence of stressors requires families to change and adapt, and these changes lead to shifts in roles and relationships.

SFD gives family development a model that does exactly what Laszloffy intended it to do—a way to consider the development of families in the context of multiple generations while allowing for idiosyncratic development of each family. However, despite the usefulness of its contribution, SFD is still primarily descriptive in nature and does not provide clear, testable propositions. In addition, SFD adds some limitations. It tends to emphasize process but sacrifice structure somewhat. That is, the processes posited highlight the nature of individual families to the point that between-family considerations become difficult to accomplish; there is no provided means to compare across the idiosyncratic development of families, stunting the ability to consider the development of more than one family at a time.

### **Multidimensional Family Development Theory**

The complexities and variations in human development tend to defy parsimonious theorizing about patterns in family life. However, we posit that family development has concepts and propositions that add value beyond an individual viewpoint (Aldous, 1990) that may facilitate family scholarship and are thus worth preserving. Building on the work of scholars before, we propose an evolution to family development theory designed to provide greater flexibility while retaining useful concepts and propositions established

by previous scholars. We hope the modifications address concerns of scientific usefulness while still allowing for a more comprehensive view of the family and diverse family development.

Ontogenesis drives family development, and social forces shape it. The explicit constructs and mechanisms relative to the role and influence of culture in family development will be explicated later in this paper. Although we believe the overall concepts of family development posited in this evolution are fairly universal, human experience is too broad to fully assume this. We thus acknowledge our own cultural views and the social forces that influence us in the industrialized West, specifically in the U.S. We attempt to take an etic view, theorizing relatively universal components that can later be transported and tested as a first step in cross-cultural work. However, we also recognize that emic work (from various specific cultural perspectives; Berry, Poortinga, Segall, & Dasen, 1992) is warranted for any theoretical endeavor. However, as most research is framed within the culture of the researchers and participants, we feel that this is not a major limitation of the theory, but a reflection of the nature of research. Subsequent empirical work will be needed to identify what, if any, universals there are across cultures.

Central to the evolution of family development depicted by MFDT is the concept of dimensional space. A dimensional space is a theoretical concept derived from the mathematical consideration of how two objects relate to each other in space. In its use in this theory, however, it refers to an abstract space in which developmental progress, time, and other dimensional spaces relate to each other. We first outline what the basic

dimensions of family development are and give a general overview of stages and roles. Viewing development nested in contexts, we then discuss how each dimensional space works singly, then multidimensionally across individuals, and then how they work across the entire family in the family dimensional space. Each discussion of the dimensional spaces is split into two parts. The first covers how the basic dimensions of development function within that dimensional space, and the second part discusses how roles and stages are defined and function within that space.

### **Dimensions**

Integral to Duvall's original eight stages are four main lines of development. In family development theory, these four lines were posited to be composite and relatively universal across time. Separating these developmental elements into discrete but connected dimensions of development allows for retention of these key facets of development while allowing them to covary and thus reflect diversity of family structures and processes, within and between families. We thus propose that there are at least four fundamental *dimensions* of family development: (1) personal, (2) couple, (3) vocational, and (4) generative. We propose that development can occur in each of these dimensions, and that development in any given dimension is not necessarily composite with the other three—although there is reciprocal influence between the dimensions. Further details of each of these are discussed below. These four dimensions are the key components of the previous iterations of the theory, particularly in its original form (Duvall, 1957). However, we do not propose that these four dimensions are of necessity the only dimensions; we leave room for additions and modification, especially across cultures.

### **Single Dimensional Space**

Development is the longitudinal realization of potential, and thus the accumulation of change over time (Elder, 1998; Erikson, 1950). The view of development as an accumulation suggests that the history of development constrains and informs the future of development without determining it. This accumulation is captured in the notion of trajectories, detailed below. In MFDT, we recognize that family development originates from the interdependent nature of the development of its individual members. Thus, to understand how the dimensions of development are connected in family development, it is requisite to first understand how the dimensions of development function within the individual.

Each individual will experience development in all four dimensions (i.e., personal, couple, vocational, and generative), and each dimension has its own theoretical “space” where the direction of development can be traced. This direction of development consists of an idiosyncratic developmental pathway, or trajectory. In this way, a trajectory is conceptually similar to the way that the term is used in life course theory (Elder, 1998). However, in life course theory, a person’s trajectory refers to an overall direction of an individual’s life, whereas in MFDT, trajectories are restricted to the particular dimension of development they describe. A trajectory, then, represents the history and current direction of development within the space of one of the four dimensions.

Trajectories are shaped by developmental events that alter the developmental pathway (Elder, 1998). These events represent life changes that alter how an individual

progresses in that dimension. As such, a developmental event is derived from the transitional events posited by White (1992) and is related to the developmental stresses posited by Laszloffy (2002). A difference that needs to be noted here is that transitional events and stressors tend to be aspects of the family, whereas developmental events relate to a particular dimension of an individual's development. It is important to note that when events shape a person's trajectory, they also alter the possible future shape of that trajectory without committing the individual to a specific path.

It is also important to note that developmental events are not necessarily in a chronological or other fixed order, and that these trajectories will have commonality across individuals while still maintaining uniqueness to each individual. To give an example in the vocational space, many individuals enter the workforce after completing education. However, the education, the job, and the length and effort of attaining each are unique to each person. Additionally, some lose their jobs, others transfer jobs, and others may keep that first job for life.

**Personal development.** The dimension of personal development deals with the growth, maturation, and development of the individual as a person, including biological, psychosocial, and spiritual aspects. It is the primary driver of other developmental dimensions, although the other dimensions have impact. Some of the clearest events are birth and puberty, and other normative markers for growth. Developmental events can include non-normative experiences, including disability and accidents. There already exists in the human development field a large number of theories that organize and predict many aspects of this dimension of development (e.g., Bandura, 1986; Erikson,

1950; Piaget, 1952; etc.), though many of these theories also blend in aspects of the other dimensions of development rather than keeping them separate. While the organization used by these theories could be conceptually useful in considering the personal developmental dimension, we consider life course theory (Elder, 1998) as the most applicable theory of human development. This is largely because life course perspective deals with time (and thus aging), linearity, history, and trajectories. Regardless, the important aspect to remember for MFDT is developmental events shape the trajectory within this dimension.

**Couple development.** We have labeled the dimension of the development of intimacy, romantic relationships, and partners as *couple development*. We recognize that this term carries with it assumptions of Western culture, and that the aspects of development we describe are culturally bound. However, we believe that aspects of couple development are at least somewhat universal, and that these concepts can be extended to other cultures so long as the trajectories mapped are consistent with the time and place of study.

In MFDT, the dimension of couple development subsumes aspects of pairing (or lack thereof), and thus includes any types of partnering, romantic or non-romantic pairing, emotional and sexual intimacy, cohabitation, marriage, and/or eventual break-up (Sassler, 2010). Couple development includes the notion of romantic love as adult attachment (Hazan & Shaver, 1987). In MFDT, coupling can be fluid. It is not fixed to a stage, but rather exists as its own dimension.

The couple dimension subsumes processes of couple development over time,

interdependent with (but not subsequent to or dependent upon) generativity. Most couple scholarship focuses on intra- and interpersonal processes related to couple well-being or distress (e.g., Gottman, 1999), issues of developmental marital competence (Carroll, Badger, & Yang, 2006), or the processes and structures of partnering (Sassler, 2010), rather than developmental trajectories *per se*. The couple dimension does include courtship, coupling, decoupling, recoupling, extracoupling (whether long- or short-term), and markers of formal commitment, such as cohabitation, engagement, marriage and other forms of civil unions. Couple development may possibly include processes such as those posited by Bader and Pearson (1983), including symbiosis (couple identity), practicing (self-definition within the relationship), and mutual interdependence (balanced connection within the relationship). As with other dimensions, couple development exerts reciprocal influence (e.g., on the individual, vocational, and generative dimensions).

**Vocational development.** The vocational dimension consists of learning and using the skills needed to provide for oneself and one's family members, and to contribute to one's society. In the U.S. and other similar cultures, this subsumes education and assuming functional roles, such as entering the work force, as well as associated intra- and interpersonal processes (e.g., identity from one's education and work). In MFDT, vocational development can be fluid; it is not central to the stage of aging and retirement, for example, but rather exists as its own dimension. Events associated with this dimension may include starting school (at each level of schooling), completing degrees, dropping out, overall socioeconomic status, entering the work force, getting promotions, changing jobs, losing jobs, and retirement. In other cultures, it may

involve differing pathways to self-sufficiency and productivity. As with other dimensions, vocational development exerts reciprocal influence (e.g., on the individual, couple, and generative dimensions).

**Generative development.** Historically, in terms of family development theory, generativity and childrearing have been the primary defining feature of family life cycle stages. Most operationalization of stages has used the age of the eldest child (Duvall, 1988). In MFDT, the dimension of generativity includes but extends beyond childbearing, and closely resembles the notion of generativity as put forth by Erikson (1950).

The most commonly studied trajectory of generativity within the family literature is that of childrearing, including events such as the birth of the first child (e.g., Porat-Zyman, Ben-Ari, & Spielman, 2017), adoption (e.g., Foli, South, Lim, & Jarnecke, 2016), and child loss (e.g., Fouts & Silverman, 2015). However, the MFDT conceptualization of generativity moves beyond childrearing to view this dimension more broadly in terms of developmentally shaped elements of care over time (Elder, 1998), in more Eriksonian terms (Erikson, 1950). Included in this set of trajectories are other events commonly associated with family development theory, such as launching children (helping them move out of the home and into a certain level of independence; Duvall, 1957), and having grandchildren. However, generativity can include other events that shape the trajectory within this dimension, such as running foster care, being an aunt or uncle, or being a parent figure. Some individuals and families may focus on other facets, such as civil service, activism, or the inclusion of pets in the family. As with the other dimensions,



generative development is fluid. It exists as its own dimension but exerts reciprocal influence on other developmental dimensions.

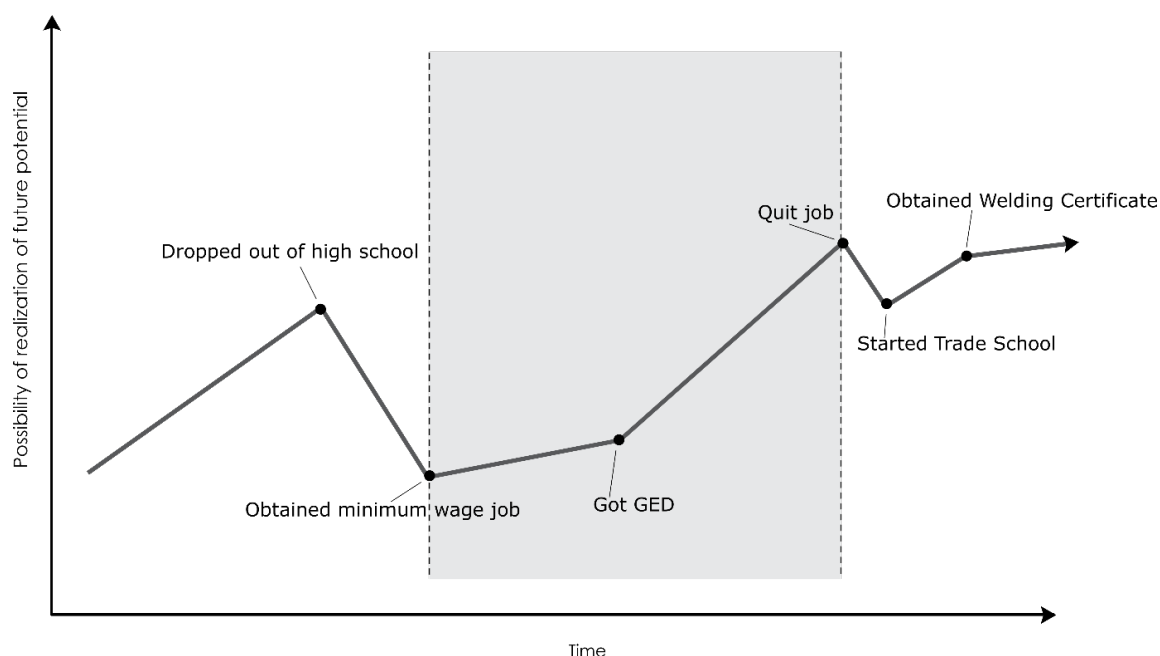
### **Stages and Roles**

In the original form of the theory, stages emerged chiefly from roles (e.g., spouse, parent, employee), which in turn were largely driven by the biological, psychological, and social needs of family members (Hill & Mattessich, 1979). Stages were thus amalgams of coupling, childrearing, vocational elements, and of aging (Duvall, 1957). Later updates to the theory attempted to refine this formulation and make the theory more flexible. For example, White (1991) focused on transitional events, which he considered the markers for stage change. A transitional event was an event that changed the roles of family members, and thus changed the stage the family was in (i.e., the birth of the first child to a couple changed roles from husband and wife to include father and mother; White, 1991). Although White did not create stages himself, he called for an empirical construction of a comprehensive list of stages, based on transitional events. In contrast, Laszloffy (2002) abandoned stages and focused on roles in the context of the process of stress and crises resolution, with the idea that stressors and crises in a family's life lead to changes and adaptations in roles.

In MFDT, stages emerge idiosyncratically from demands and roles relative to dimensions, both within individuals and between family members. Any dimension in any family member may influence family stage. We thus reframe stages as a dynamic interaction of roles as derived from dimensions of development; in so doing, we build on previous conceptualizations by integrating roles, the changing or adjusting of roles, and

the flexibility of process driven development in a manner that allows for structured and comparable stages. A logical way to conceptualize a stage is that it is a time when roles become at least somewhat established and consistent, and the nature of the stage is defined by the nature of the roles being enacted. Conversely, roles reflect the stage because roles are defined, in part, by the responsibilities inherent to a particular stage. Note that this definition of roles and stages does not follow the classical idea of a fixed stage theory. Rather, the use of the term “stage” is closer to the notion of “phase” or “period.” Additionally, it is possible for a person (and for a family) to be in multiple stages at a time. This multiplicity of stages comes as a result of the complex and layered nature of the roles that exist in the course of family development. The idea of roles and stages becomes conceptually clearer as the differing types of roles and stages are clarified, below.

**Single dimensional stages.** At their most basic level, roles and stages emerge from within the single dimensional space. In Figure 2-1, this is depicted by the grey area between the dotted lines. There is temporal time between developmental events within each of the four dimensions (represented by the arrow at the bottom of the figure). During this time, the individual has a role within that dimension. This role is typically derived from the relative stability that comes from being between events. Developmental events in the past shape potential developmental events in the future, and in so doing establish the role, needs, and responsibilities that generate the single dimensional stage in the present. These needs and responsibilities sustain any gains in the current developmental trajectory and help prepare for the next developmental event. A normative event is



*Figure 2-1.* Single dimensional space. This is an example of a small slice of an individual's developmental trajectory in the vocational dimension. The arrow across the bottom represents the passage of time, and each point represents a developmental event. The movement of the top line before and after each developmental event represents changes in the individual's trajectory, with upward movement representing greater possibility of realization of future potential, and downward movement representing a lesser possibility of the same. The grey highlight between the dotted lines is a representation of one period of time in which the individual has a role (and thus a stage)—in this case, the role of employee.

defined by sociohistorical-cultural context (described in more detail below). The role reflects the individual, and the needs and responsibilities themselves comprise the stage.

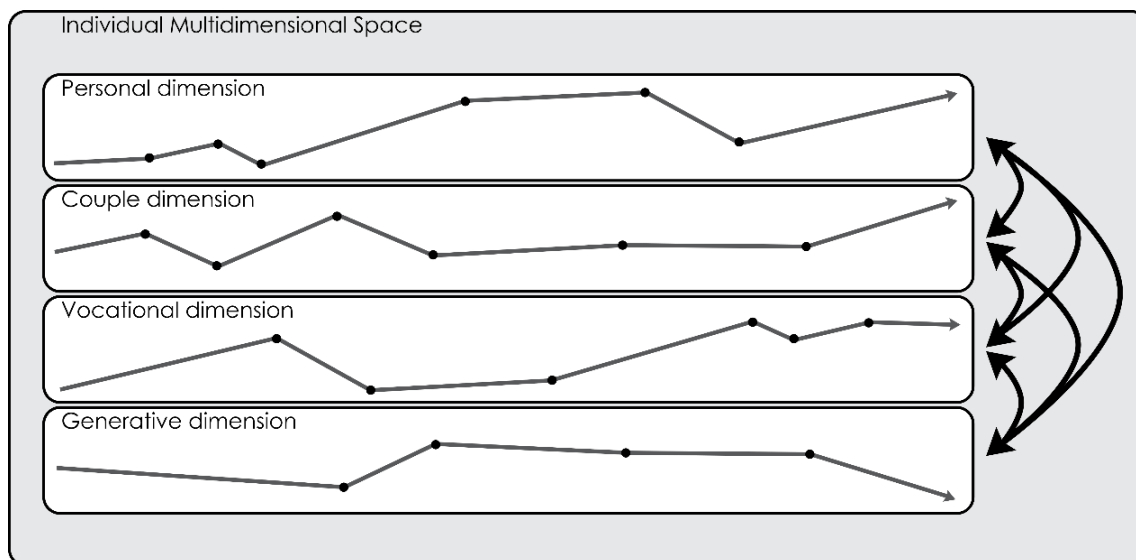
At this low level, roles and stages are functionally interchangeable. For example, in Figure 2-1, the time depicted in the grey area between the dotted lines reflects when the individual has the role of employee. Depending on the drive created by individual, couple, and generative development, the person may have within that role the need to maintain a job, and anticipate promotions, which generates additional responsibilities in that stage. Even at this level, overlapping roles and stages are possible. Figure 2-1 gives

an example of overlap where the individual is working and obtaining a GED at the same time. Such dual roles may generate conflict within the individual with competing needs (e.g., time for self, a partner, or child).

With this richer understanding of the single dimensional space, we can now recursively redefine developmental events as *changes in a person's life that alters the role (and thus the stage) of one or more dimensions of development*.

### **Multidimensional Space**

The four dimensions of development are non-composite. However, the four dimensions do not exist in isolation, but comprise a larger dimensional space that reflects the needed aspects of family development within the individual (see Figure 2-2). Thus, within each individual, these four dimensions of development interact to create a multidimensional space of development. This happens because each dimension of development is partially dependent on the others, and changes in one dimensional trajectory can influence the others. Because all four dimensions exist simultaneously, the influence of each on the others is reciprocal in nature—there is no direct, linear causality among the four dimensions. For example, generative behaviors when an individual is young are likely to be different from when that same individual is older, which shows how the dimensions may be partially dependent on each other. However, the development of generativity at a younger age will influence later development in other dimensions; for example, it influences whether and when that individual couples, which can in turn influence physical health and lifespan expectancy (Su, Stimpson, & Wilson, 2015).



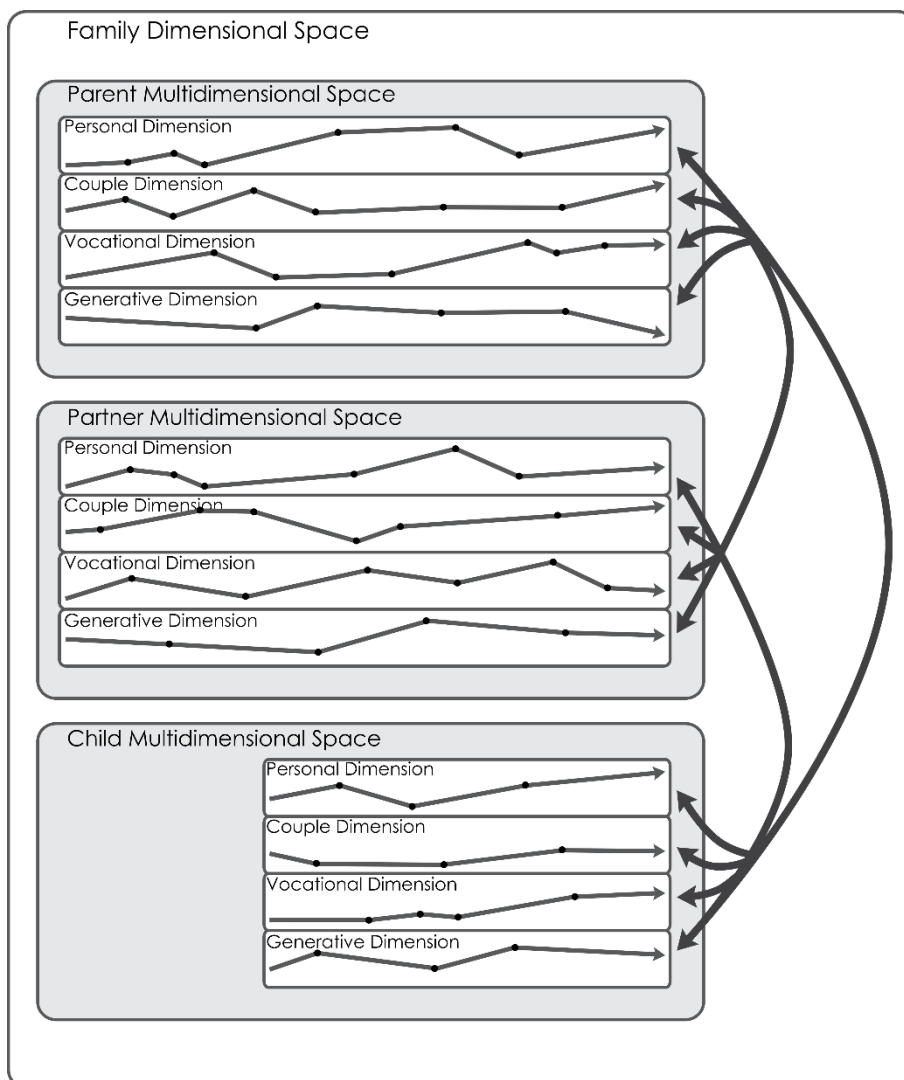
*Figure 2-2.* Multidimensional space. The outer outline represents the idea that all four dimensions co-exist within the multidimensional space. Even though each individual dimension occupies its own space, they interact with, and influence each other, as represented by the black arrows to the side.

**Multidimensional stages.** Just as the single dimensional spaces interact to generate an individual's multidimensional space, the roles in all four dimensions also interact to create a multidimensional stage. The interaction (or reciprocal interplay) of these roles represents the whole of an individual's stage (e.g., adolescent; high school student). The whole of an individual's stage reflects the needs and/or responsibilities that the individual has to progress developmentally across all four dimensions. Sometimes, the needs and responsibilities in one dimension may conflict with those in another dimension of development (e.g., employee; teen parent). However, the individual must still attempt to meet the variety of needs that may exist during any stage. Additionally, the role(s) in one dimension may influence or alter the roles in another dimension. As such, a multidimensional stage incorporates the interdependent and reciprocal nature of the roles that emerges from each dimension.

### **Family Dimensional Space**

As the single dimensional spaces interact to create an individual's multidimensional space, so do the individuals' multidimensional spaces interact with those of other family members to create a multi-multidimensional, or as we refer to it in MFDT, family dimensional space (see Figure 2-3). Similar mechanisms that govern multidimensional space govern the family dimensional space—that is, interdependence and reciprocity. It is in this family dimensional space that the whole of family development is considered. For example, an adolescent's vocational aspirations (e.g., college) often have impact on parents' own vocational and generative dimensions. Likewise, couple development (specifically, positive and negative communication between partners as parents) exerts influence on child developmental outcomes (Rhoades, 2008), and vice-versa (e.g., Buehler & Welsh, 2009). Another way to conceptualize the family dimensional space is to state that the family's development is a result of an increasingly complicated weaving of each family member's dimensions of development. Simply put, each family members' dimensions of development tend to influence those of other family members. MDFT allows the possibility of testing the influence of discrete dimensions within and between family members.

**Family dimensional stages.** Decades of scholarship on family development suggest that family stages are not universal (Rodgers & White, 1993). In the current conceptualization of the theory, family level stages emerge from the interrelated nature of the roles within the family dimensional space. No longer standardized, stages may be fairly common or quite idiosyncratic. A family-level stage is defined by the various roles



*Figure 2-3.* Family dimensional space. Each family member's multidimensional space exists within the family dimensional space. As with previous figures, the lines within the individual spaces represent the trajectories of development within that dimension. The dots represent developmental events that shape the individual trajectories. Because each individual (and multidimensional) space exists within the family developmental space, the developmental events, trajectories, and individual dimensions of development reciprocally influence each other across the family developmental space, as represented by the black arrows to the right.

of the family members (e.g., student, spouse), and roles in the family dimensional family space reflect the responsibilities an individual has in meeting the family developmental tasks (e.g., scholar, lover). Many of these roles are complementary and recursive in

nature, meaning that they define each other (e.g., husband and wife, parent and child). Conversely, a family-level stage comprises the family developmental tasks, and roles are defined by the constraints of the stage.

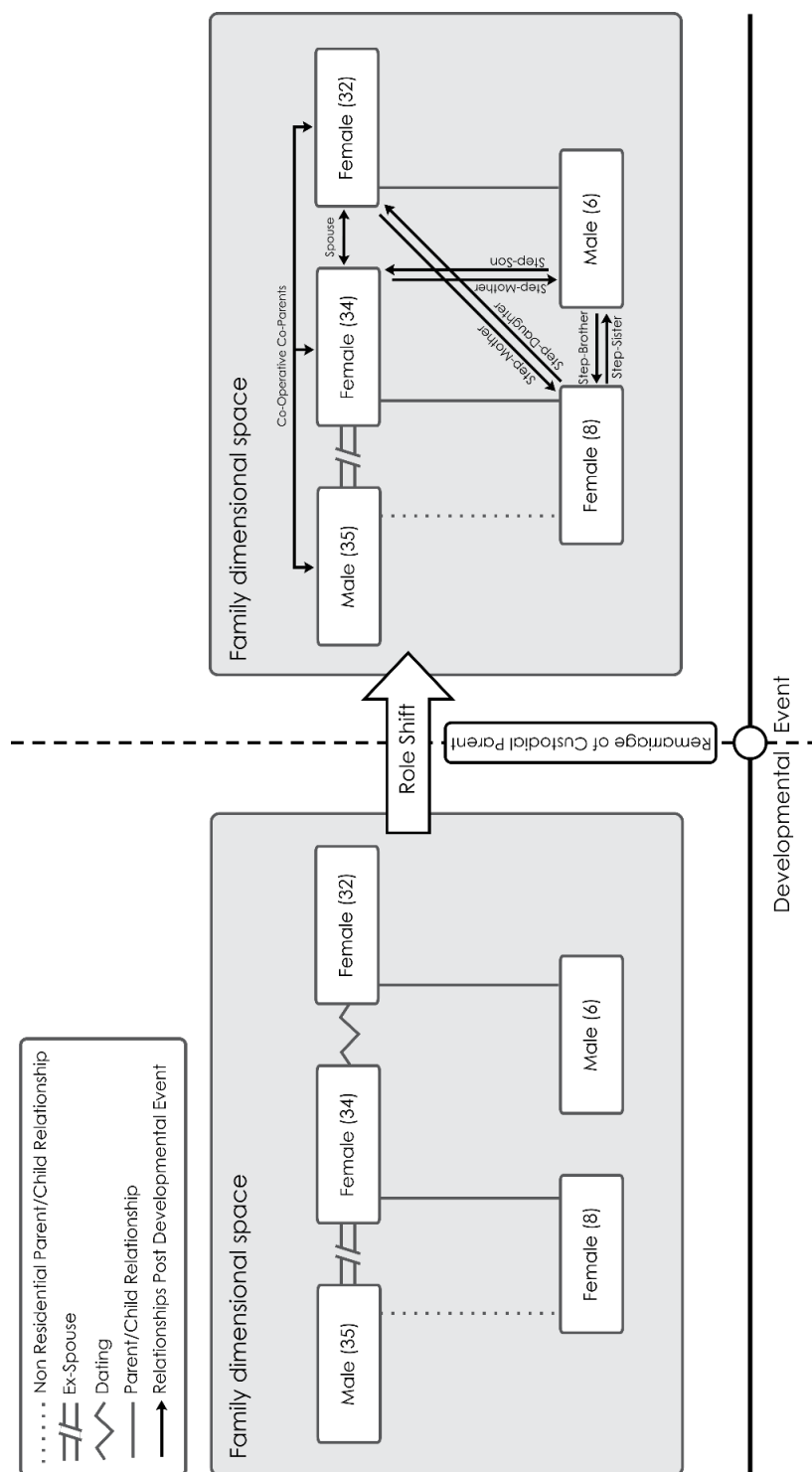
In MDFT, stages are viewed as fluid and non-stepwise, and emerge through interactions of family members' respective roles. Traditional stages from classical family development theory may or may not apply to contemporary families. When they do not apply, non-traditional, descriptive stages may be derived from the collective family roles that emerge from the interactions of family members' developmental dimensions. Moreover, it is possible for families and individuals to be in multiple stages at once. Researchers can and should focus on the stage(s) that most effectively relate to the developmental phenomenon under consideration.

Laszloffy's (2002) process of role change is also subsumed in family dimensional stages. As stages are defined by roles, the way that a family transitions between roles is also how they transition between stages. The change in one person's developmental trajectory rarely, if ever, has an isolated effect, and as a result, the stressors and crises a family experiences that shape the family level stages are typically one or more developmental events occurring in one or more family members (see Figure 2-4). We therefore consider Laszloffy's developmental stressors within MFDT a more comprehensive expansion of White's (1991) transitional events.

### **Family Developmental Tasks**

Perhaps one of the most defining features of the family dimensional space is that of family developmental tasks. In previous conceptualizations of FDT, tasks were static





*Figure 2-4.* An illustrative example of the process of family-level stage change. This figure shows how a developmental event in one dimension (in this case, the remarriage of the custodial mother to her wife) creates a change in roles across the entire family dimensional space, leading to new a family-level stage.

checklists of accomplishments that the individual or family needed to gain mastery of in order to develop into the next stage successfully (Duvall, 1957). However, the ability to define mastery and the actual role of tasks in stage progression has been brought into question (Rodgers & White, 1993), and the lack of various cultural perspectives embedded in the list of tasks reinforces the assumption of universality (Laszloffy, 2002). We thus take a more dynamic approach. In MFDT, family developmental tasks are defined as *balancing the developmental needs of each dimension of each family member*. In order to develop in healthy and/or culturally acceptable ways, individuals need access to resources, help, and opportunities to have appropriate developmental events shape their trajectories. The need for appropriate developmental events within each dimension is shaped, in part, by the other dimensions within the multidimensional space. It follows naturally that a similar pattern then emerges in the family dimensional space. However, different needs can weigh in at different levels of importance, and it is possible for some needs to not be met as a result. Each family must learn to balance the needs within their own family dimensional space. As an example, it doesn't matter whether it be a young heterosexual couple with young children, a single parent of teenagers, an uncoupled uncle living with family, or an older lesbian couple that chose to never have children: Every member of each family has needs within his or her own spaces of development. The developmental task that faces the family as whole, then, is to balance and meet these (sometimes competing) needs.

### **Alignment and Misalignment**

Alignment is defined as *the ways in which the ordering and interaction of events*

*in the individual dimensions of development increases or decreases a family's ability to meet their family developmental tasks.* Importantly, this means that alignment and misalignment is also shaped, in large part, by social forces and cultural norms. The mechanisms for the interrelation between alignment and culture are outlined in a later section.

Alignment vs. misalignment refers to the timing and interaction of dimensions within an individual's dimensions, as well as interactions within family dimensional spaces. Alignment is theorized to occur to the extent that development in each of the dimensions is relatively congruent. This occurs in reference to the trajectories within each developmental space. Because the multidimensional space consists of how these trajectories depend on and influence each other, developmental dimensions (in an individual or a family) may either create mutual support for the other dimensions (alignment), or the multidimensional space may become misaligned. In other words, relative to one dimension, it is possible that events in a second dimension will occur in chronologically harmonious ways that create positive synergy between dimensions (e.g., an adolescent develops a romantic relationship). Conversely, developmental events may come in ways that induce stress in other developmental dimensions, or that come soon, late, or in some other asynchronous way, and thus conflict with events in a different dimension of development (e.g., a child born to an un-partnered teen). In this example, it is likely the teen would lack symbiosis and interdependence from the couple dimension (Bader & Pearson, 1983), and would be in relatively early vocational development, thus signaling a degree of misalignment which may possibly (but not necessarily) reduce the

adolescent parent's ability to meet his/her own developmental needs and that of the new child. This increased or decreased ability to meet developmental needs is the essence of what constitutes whether there is alignment of misalignment more than chronology, *per se*. Alternatively, a couple in their early thirties with relational interdependence and more established vocational development would be more likely to meet developmental needs, and as such would have alignment on all four dimensions.

The concept of alignment and misalignment carries through to the family dimensional space. Alignment of family members' multidimensional spaces tends to support alignment in the family dimensional space (e.g., parents' vocational, couple, and generative development supports children's individual and vocational development). Conversely, misalignment within one family member's multidimensional space influences the whole of the family dimensional space, as there is a certain level of interference and reciprocity there as well. In the case of the adolescent parent, the misalignment of the adolescent parent's multidimensional space would affect the family dimensional space of his or her larger family context in all directions. The parents of the adolescent would likely be involved in raising the child, which would have impact on their respective individual, couple, vocational, and generative development. Moreover, family dynamics would likely shift among siblings, and, depending on the alignment of dimensions across the larger family dimensional space, the needs of the new baby may or may not be met.

### **Diversity as Development**

A key advantage to MFDT is that it enables scholars to investigate family

diversity as a function of developmental processes. Contemporary families are diverse (Cherlin, 2010), and understanding this diversity is integral to understanding contemporary families. There are two overarching ways to conceptualize family diversity—between and within groups (Coontz, 2015). Although the study of family diversity often consisted of broad comparisons between family types, there has come to be a greater focus on the process of family change rather than of family type *per se* (e.g., Greene, Anderson, Forgatch, DeGarmo, & Hetherington, 2012). With the understanding that various processes lead to different outcomes for diverse families, there has been a call to better understand the diversity that exists *within* each group or family type (Coontz, 2015). In both cases, MFDT can be used to frame research questions and hypothesis, as well as explain findings and direct attention to potential avenues of future research. This is because MFDT makes explicit an underlying aspect of family diversity: the diversity both between and within various family types is a result of the processes their development. This is similar to how family process scholars (e.g., Minuchin, 1974) consider the relationship between structure and process, but rather than discussing a process of communication that leads to a structure of alliances and triangles, we are considering how the process of development leads to a diverse array of contemporary families (e.g., single, married, blended, cohabitating, etc.).

The connection between developmental process and diversity is rooted in Laszloffy's (2002) SFD model; in that model she discussed how the process of overcoming stressors in a systemic model led to the changes in roles that represent the overall development of the family. Put in terms of MFDT, the trajectory changes that

arise from developmental events in one or more family members influence the entire family dimensional space, through the reciprocity reflected in the way that developmental events ripple through the family dimensional space as potential crises and as role changes. These role shifts (and thus stage changes) are the primary mechanisms that account for the connection between development and diversity of families.

As an extended example, MFDT can help articulate developmental differences between a family with a series of higher order marriages, one with serial cohabitation, or one with multipartner fertility. A key difference between these families is the order and timing of events in the parent's couple dimension. Specifically, a family with a series of remarriages will have experienced the events of divorce and marriage between each restructuring of the family, whereas serial cohabitators will have had a series of relationships without the formalized events of marriage and divorce. It is possible that a family that develops through multipartner fertility may not involve courtship much at all, or may involve multiple courtships simultaneously. Clearly, the timing of childbirth (an event in the generative dimension) in the midst of the events in the couple dimension will influence the outcomes of the family involved (e.g., Manning & Cohen, 2012).

Considering the developmental history of each family type is one possible way that MFDT could be used to identify the similarities and differences in process, structure, and outcome for these families. Additionally, a researcher using MFDT would be encouraged to consider the nature of the roles (and thus the stages) that would evolve from the variety of developmental histories. How these role change across time, and as families move through stages, could also be included as predictors of family and individual outcomes.

In a similar vein, understanding family diversity as a result of development can give researchers insight to diversity within any particular family group. In addition to the types of questions in the paragraph above, questions could further be asked about how the developmental history of each parent in other dimensions also influences the experiences of the family across the entire family dimensional space (e.g., how job stability of a current or former partner may influence child-rearing practices or overall family outcomes, a connection between the partner's vocational dimension and the rest of the family dimensional space). Lastly, whether comparing between or within groups, to consider how the history of development influences a family's social location in a landscape of diversity (Few-Demo, 2014) requires that researchers also consider the length of time between events as well as the ordering of events.

Importantly, the dimensions in MFDT and their processes allow scholars to deconstruct the labels and arbitrary lines used to categorize and separate family types. For scholars who prefer to consider families without predefined (or socially prescribed) groupings, changes in roles, developmental events, and individual trajectories can be investigated in idiosyncratic ways; that is, each level in development (i.e., developmental events up through family-level stages) can be investigated as their own processes, and the distinctions between family types may be reduced to their component parts, rather than as family composites or typologies.

### **Consideration of Cultural Contexts**

Culture, ethnicity, and societal forces shape family members' norms and expectations (McGoldrick, Giordano, & Garcia-Preto, 2005), and thus shape roles as well

as alignment and misalignment among dimensions. Relatedly, values and value-orientations of researchers and the families they study also shape the ways in which family life is considered and lived (Dilworth-Anderson & Burton, 1996). Thus, as noted previously, many of the mechanisms in MFDT are shaped by broader social forces. We recognize that scholars differ in their definition and interpretation of the nature and spread of social force, social institutions, what constitutes culture, the influences of each of these, as well as what, if any, boundaries there are between the various conceptualizations (Kağıtçıbaşı, 1996). Space and purpose limit the discussion of cultural impact. Nonetheless, for the purpose of this evolution, we refer to these broader social forces (including shared worldviews, social institutions and their influence, common identity, etc.) as culture, or cultural contexts. Our view is not one of culture as monolithic, but rather, that plurality of cultures is integral to the development experienced by families in general, and immigrant and refugee families in particular (e.g., Betancourt et al., 2015; Chen et al., 2014).

The core conceptualization of how culture influences family development is derived from the idea that individuals (and thus their multidimensional spaces) are embedded within one or more cultural contexts (Kağıtçıbaşı, 1996). These cultural contexts are situated in historical context, though they do not of necessity have to be sweeping macro-level cultures, or even be regionally based (McGoldrick et al., 2005). Cultural context can be operationalized across a wide range of scope, as needed by the researcher. This can include formal and informal contexts such as nerd culture, sport culture, political cultures, LGBTQ culture, White or Black culture, urban or rural



cultures, and so on. These cultures influence development in the multidimensional space through a construct we call *centering*. Put simply, the more centered the multidimensional space is in a context, the more force the context exerts on development.

Broadly, the term *centering* refers to the extent of an individual's acculturation as the mechanism through which culture exerts impact. Previous scholars have eloquently described ways by which contexts and culture exerts influence on processes of individual development in terms of ecology, cognitive development and competence, family and societal norms, and issues of individualism and collectivism (e.g., Bronfenbrenner & Morris, 2006; Kağıtçıbaşı, 1996). To the extent an individual becomes centered within a cultural context, that context is brought into the family dimensional space. It is possible for each person in a family to be centered in multiple cultural contexts, and there can be multiple contexts embedded within the family dimensional space. The more centered one or more individuals are on a culture, the greater the presence of that culture in the family dimensional space, and thus the greater force it exerts on family development. Which contexts exist within the family dimensional space is determined by the centering of individual family members.

There are multiple mechanisms by which the various cultures exert influence on family development, depending on the dimensional space being considered. Many of the following can exert influence across multiple dimensional spaces simultaneously. At the most basic level, the more centered a multidimensional space is in a cultural context, the greater the influence on the trajectories within the developmental spaces—primarily because developmental events are more likely to follow that context's normative

expectation for future events. As such developmental events and trajectories shape roles and stages, cultural contexts determine the existence (or not) of various roles and stages. Additionally, as family developmental tasks are shaped by stages, and those stages are influenced by the events and trajectories in each dimension, cultures which have greater influence will more forcefully determine what is aligned or misaligned across the multi- and family dimensional spaces.

A couple of examples may help to clarify how the influence of cultural contexts may look in real families, particularly in regard to alignment and misalignment. A 16-year-old who gives birth is considered by contemporary U.S. society to be misaligned with the *personal*, *vocational*, and most likely, *couple* dimensions. However, in Europe in the 15<sup>th</sup> century, such would likely not be the case. In countries where monogamy is the norm, if a spouse remarries prior to divorcing the first spouse, there is misalignment between the events of the *coupling* dimension between the three individuals. In polygamous cultures, in contrast, this scenario might present developmental problems of fidelity rather than of chronology. Other mechanisms are also influenced by cultural contexts. As roles can often be defined, or at least influenced, by cultural contexts, the centering of an individual onto or off a cultural context may instigate role crises that lead to stage change. Additionally, certain developmental events within the single dimensional spaces may be associated with the movement into and out of cultural contexts (or at least the intensifying or dampening of cultural influence). It is even possible that some cultural contexts will cause the addition of dimensions of development within individuals and families.

Similar to the notion of alignment, the amount to which family members are centered in different cultural contexts can lead to the phenomena of cultural accordance and discordance. Cultural accordance is when the influence of culture in the family dimensional space is harmonious—trajectories, tasks, and roles agree whether by all family members being centered on the same culture, or by the cultural contexts exerting influence in differing domains of development. Cultural discordance occurs when two or more cultural contexts simultaneously exert influence in conflicting manners. Cultural discordance also includes the extent to which the presence of multiple cultural contexts creates conflicting family developmental tasks because each context involves a different expected trajectory. This disparity in tasks can occur across any level of dimensional space (single, multi- and family). An immigrant family where the parents and grandparents are deeply centered in their collectivist home culture but have children who are centering onto the host country's individualistic culture would likely deal with cultural discordance (Choi, Kim, Pekelnicky, Kim, & Kim, 2017). The presence of both cultural contexts in the family dimensional space will be most noticeable as expected trajectories come into conflict (Betancourt et al., 2015). Additionally, the role of the child at home will differ across contexts, and the developmental needs the parents and grandparents attempt to meet may be different from the needs the children feel are relevant (Chen et al., 2014).

### **Core Assumptions**

Below, we provide an overview of the core assumptions associated with multidimensional family development theory.

*The fundamental nature of family development is the interdependent, interrelated nature of two or more linked people in their own human development stages.* This assumption gives rise to the dimensions of development and the single, multi-, and family dimensional spaces.

*Though driven by ontogenesis, development, including family development, is shaped by social forces, cultural norms, and historical context.* As expounded on above, this carries implications for the developmental events that are available and important, what is considered aligned or not, and other ways that development influences outcomes and future development.

*Current development is, in part, a result of the history of development.* In other words, current development is a result of what developmental pathway events have happened when, and in what order, in relation to other dimensions.

*Because each family's development is unique, each family will be unique; however, similarities and differences in the developmental trajectories of various families allows for comparisons and investigations of the impact of development on both familial and individual outcomes.* This is why we look at process, timing, stages, and diversity. Patterns of similarity and patterns of difference both aid our understanding of families and how they develop.

### **Research Application**

The elements of multidimensional family development may yield a set of mechanisms for family scientists, including the examination of phenomena in an

individual's separate developmental dimensions, alignment/misalignment between dimensions, and their impact on the dimensions of other family members. Empirical inquiry can be quantitative, but MDFT also lends itself to qualitative or mixed methodologies. We encourage the use of MDFT with methods as diverse as intensive case studies and multi-site, nationally representative survey studies.

### **Shifting Lens Approach**

Families are diverse and complex (Cherlin, 2010), and for MDFT to be tenable as a scientific theory, it must be able to enable researchers to incorporate an appropriate level of family diversity and complexity. To accomplish this, we posit a “shifting lens” approach. Not uncommon in theory-guided research, we propose that researchers can use those elements of the theory that are important to the developmental phenomenon under investigation, whether theoretically, empirically, or rationally derived. This means that the whole of the theory is unlikely to be used in a single study. Indeed, we argue that it is impossible (and potentially meaningless) to entirely capture aspects of the lives of family members under consideration. It is also as impossible to feasibly consider every person who could possibly be considered part of the family. As such, the shifting lens approach applies to the generational (up and down the family tree—grandparents, parents, children, great-grandchildren, etc.) and the expansive (branches across the family tree—siblings, cousins, etc.) aspects of families.

**Propositions, hypotheses, and operationalization.** In practice, the shifting lens approach can be effectively implemented through consideration of multiple dimensions, their relationships, and their recursive influence. In other words, using propositions

outlined in MFDT, researchers can identify which dimensions should theoretically or empirically be most likely to influence the aspect of development they are studying, and focus on deriving hypotheses and operationalizations related to those dimensions. This means that hypotheses derived using MFDT do not need to address every single tenant of the theory; rather, as has been stated, researchers can focus on those aspects of development that are most salient to their research questions. For example, hypotheses and research questions could be put forth regarding alignment and misalignment and resultant family tasks. These propositions of MFDT might sensitize scholars and help them classify, explain, and integrate empirical findings (Bengtson et al., 2005). To give more specific examples, is the negative influence of premarital children on marital relationships (Manning & Cohen, 2012; Tach & Halpern-Meekin, 2009) attributable to the resulting conflict (or misalignment) of family developmental tasks between nurturing the couple relationship and loyalty to the needs of the children (who may have come before the relationship)? How much does current vocational trajectories influence families' ability to balance these needs, and in what manner? The shifting lens approach also allows researchers to operationalize the tenants of the theory to the level of detail that is most congruent with the question being asked. For one researcher, considering the level of educational attainment of the various family members may be appropriate. If a researcher is concerned with job stability (or marketability), and its impact on family development, level of education would be an insufficient operationalization. In sum, conceptualizing family development as having multiple dimensions with recursive influence may allow the researcher greater flexibility to better respond to family diversity

and focus on that which is of greatest importance to the phenomena under investigation.

**Stage construction.** We believe that to understand family development requires investigating not just individual members of the family, but how the family as a whole changes over time, and thus researchers using MFDT are encouraged to consider the whole family as the unit of analysis. Although there are many ways this could be conceptualized, one key possibility is the use of family-level stages. As with the operationalization of other core concepts, stage construction is also done through the shifting lens approach. In MDFT, stages are not proposed *a priori*. Rather, stage construction is handled pragmatically (e.g., by the researcher or interventionist). Stages are derived from the roles of family members, and thus stage construction is built around the roles salient to the research question. In addition, a thorough development of stages will consider the stressors, or developmental events behind the stressors, that led to said roles as part of the stage definition. For example, a researcher investigating stepfamily formation may define a stage of reconstitution, based on the events of remarriage (i.e., reflecting the couple dimension) and bringing the whole family under one roof (reflecting each member's individual development). The stage of 'reconstitution' would be defined by the roles assigned across the entire family, such as step-parent, step-child, new spouse, etc., examining reciprocal impacts of each family members' developmental dimensions and their respective alignment. Using this stage definition, the whole of the family can be studied in a variety of research settings, according as more specific needs require. Additionally, families in that stage could be compared for within group comparison, and families in other stages could be compared to that stage for between group comparison,

as needed. Stages can be considered sequentially as well, such as families that lose a spouse to death, and then remarry. Several stages could be delineated as meeting the developmental aspects under consideration, and the movement through the identified multiple stages can be an integral part of the research question.

If the family dimensional space is considered to be a universal address, then stage construction allows researchers to focus on what part of the address is needed to make sense of a study. If a researcher is dealing with homes within a particular neighborhood, then only the street addresses are needed. Comparing across state lines would require state information, but perhaps not home numbers. An intensive study on a single family may use all address information available to locate where a family is developmentally.

***Within and between studies.*** We re-emphasize that stages should be derived from the theory, and the derivation process should be included in the study's narrative. This transparency allows other researchers to use similar stage construction, or, if they believe stages need to be constructed differently, it is clear where and why the stages differ. Results, and discussion of the results, can then be meaningfully compared and contrasted. While differing stage construction forbears the direct comparison of means, it does allow authors and readers insight as to why results may be the same or different, thus fueling further research.

One of the end goals is to provide space for empirically crafted commonalities that can exist, such as identifying the common tenants of a particular stage, and what impact they have on the family or individual. In addition, it can clarify what differences are important to consider in a family's stage, and what aspects of development have



greater weight for particular outcomes. Thus, we believe that the flexibility of the researcher constructing the stage (and the wide variety of stages that could be constructed) is a strength that will generate dialogue and frame our understanding of a phenomenon.

### **Beyond Research**

Though most of this chapter has focused on how multidimensional family development theory serves as research tool, its application is not limited to research. The theory carries applied uses as well; it can be used to help individuals and families think through their own life situation and course, and can serve as a framework for education.

### **Therapy**

With refined concepts and propositions, MFDT can build upon the fruitful use family development theory has found in family therapy (Smith & Hamon, 2017), and be used in individual counseling as well. Fundamentally, the use of dimensions might help therapists and clients organize clinical work and see reciprocal impact between domains over time. A clear advantage to doing so is the focus on positive, healthy development (Fincham & Beach, 2010). For example, in family therapy, therapists and clients could view presenting problems in terms of family developmental tasks, such as balancing the child(ren)'s individual developmental needs, vocational requirements, and needed couple development. These can be discussed in terms of impact on the child(ren) in terms of healthy processes or interparental conflict (Grych & Fincham, 2011), and impact on the couple in terms of building attachment (Johnson, 2004), and balancing individual well-

being and healthy differentiation with connectedness in the relationship (Bader & Pearson, 1983).

In individual therapy, presenting problems (such as depression) could be framed within dimensions, strategizing about how growth may be achieved by building strengths within each dimension, with attention to positive reciprocity between dimensions (e.g., growth in the vocational dimension may be used to generate positive cognitions in the individual dimension, thus helping to alleviate depression; Beck, 1967). Counseling regarding healthy life choices can also be framed using MFDT. For example, for a student who is considering leaving high school to help support his or her family, dimensions of development could show how previous choices have influenced the student's current situation. Reciprocal influence of dimensions and their (mis)alignment could be used to illustrate and discuss how current choices facilitate or constrain future choices. The family dimensional space could be diagrammed and discussed, and the student could see how choices s/he makes will influence not just the here and now, but the development of both the family of origin and future family of creation. Thus, the choice to drop out of school or not is put into a full family context. In this way, the therapist could help the student think through the choice in a more thoughtful, complex, and comprehensive manner.

## **Education**

Multidimensional family development theory can also be used as a framework for education, including family education and higher education. For family education, MFDT could serve as a basis of curriculum for parenting (generative dimension), relationships

(couple dimension), and financial literacy (vocational dimension). It could help families understand the needs that are being balanced in their family unit, and how alignment and misalignment influences their ability to meet those needs. In addition, it can help them understand how crises impact the roles they have and carry. Couples could gain greater understanding about how job stresses, childrearing, and their own personal growth all impact their relationship.

Multidimensional family development could also be used in an undergraduate course to help students frame how they think about families. As students learn about various aspects of the family, they can organize what is being learned according to the tenants of MFDT; for example, issues regarding couple relationships and parenting can be interpreted through their respective dimensions, and issues surrounding family structure and related processes can be understood through roles and stages. Students can learn to identify the most salient tasks facing the family, and what the family (and they as professionals in the field) could do to encourage resilience and alignment. As most of the SFD model has been incorporated into MFDT, the strategies and techniques Lazsloffly (2002) outlined would also still be effectual. We refer interested readers to her article. Multidimensional family development theory simply offers more tools that the students could use to analyze and compare families, as well as to account for cultural influences.

### **Conclusion**

We submit to the family science community an evolution of family development theory: multidimensional family development theory. In it, we have attempted to address

many of the weakness and flaws in previous versions, while still maintaining the integrity of the original theory. It is our hope that this new version of the theory increases both the quantity and quality of the theory's tools, including enriched mechanisms to generate hypotheses, guide methodology, and explain observed phenomenon. The shifting lens approach may allow flexibility in how families are viewed and researched; such an approach retains the utility of stages, stage comparison, and family tasks—while still allowing for idiosyncratic family development. MFDT builds on decades of rigorous theoretical work, and while we do not believe it will replace other theories, or should be used universally, we hope that the evolution of this theory will advance the study of families in a developmental context, and expedite our understanding of what influences, and is influenced by, family development.

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### **CHAPTER 3**

#### **THE MEASUREMENT INVARIANCE OF MARITAL SATISFACTION ACROSS TWENTY YEARS: DOES ITS MEANING CHANGE?**

One of the primary goals of relationship science is to identify why some couples have happy relationships over time, and others do not (Miller, 2000). Marital satisfaction is a key variable in the scientific investigation of happy couple relationships; it can be considered a “cornerstone for our understanding of how relationships and marriages work” (Funk & Rogge, 2007, p. 572). One way in which marital satisfaction is a cornerstone is that it can distinguish between distressed and non-distressed couples (Funk & Rogge, 2007). Put another way, the distinguishing power of marital satisfaction plays a critical role in identifying why some couple relationships succeed over time and others fail. However, almost all previous quantitative attempts to understand how marriage changes over time have assumed that the construct of marital satisfaction is stable and consistent across groups and time (e.g., James, 2014; Twenge, Campbell, & Foster, 2003), an assumption not validated in the literature. Indeed, scholars have noted the possibility that the meaning of marital satisfaction may not be the same over time and have called for an empirical evaluation of the same (Dyer, 2015; Graham, Diebels, & Barnow, 2011). Measurement invariance serves as one way to empirically test whether a measure functions the same way across time or between groups (Dyer, 2015). When conducted in a structural equation modeling framework, each aspect of a measure is systematically compared between groups, and a test of statistical significance is given (Dyer, 2015). As such, tests of measurement invariance serve as an important piece of

evidence in understanding if a construct is consistent in its meaning and function.

The capacity of measurement invariance to provide evidence about the meaning and function of a construct across time relates to marital satisfaction. Most of the previous research investigating changes in satisfaction over time have tried to identify the possible trajectories that satisfaction takes over the course of the marriage, with some identifying a curvilinear trajectory (Miller, 2000), some a general declining trajectory (e.g., James, 2014; Kurdek, 1999), and some indicating the presence of multiple latent trajectories, suggesting a plurality of potential trajectories in a population (e.g., Anderson, Van Ryzin, & Doherty, 2010). Each of the types of trajectories were identified by approaching the question of marriage over time through different study and statistical methodologies. Before the conflicting findings generated by the use of differing methodologies can be resolved, however, the question of whether marital satisfaction has the same meaning across time must first be addressed, as it is integral to the assumptions made by all of the methodologies. As such, the application of measurement invariance to marital satisfaction becomes a central issue. Specifically, if satisfaction is not the same over time, it implies that the inquiry for research is less of how *much* it changes, but first, *how* it changes.

Investigating whether something changes over time, by degree or by type, is fundamentally a developmental question (White, 1991). As such, the study of the change in marital satisfaction over time calls for a developmental theory. To be able to effectively answer the empirical question of whether the meaning of marital satisfaction changes over time, this study is framed in the reconceptualization of family development

theory presented in Chapter 2: multidimensional family development theory (MFDT). Multidimensional family development is particularly useful for (a) tracing the life of the marriage, and (b) identifying aspects of family and social life that may be related to any possible changes within the marriage, including the meaning of satisfaction; this is because, unlike classical family development theory (Duvall, 1957; White, 1991), MFDT disaggregates the couple relationship from childrearing. In addition, MFDT provides additional mechanisms on the family and individual level that help to explain change over time within multiple aspects of family development, including the couple relationship.

### **Theoretical Orientation: Multidimensional Family Development Theory**

In MFDT, the components of family development theory are parsed into four primary dimensions of development: the personal dimension (including biopsychosocial-spiritual), the vocational dimension (including work and education), the couple dimension (including partnering and dissolution), and the generative dimension (which includes childrearing). Each of these dimensions is distinct yet interrelated. In other words, development in one dimension (i.e., childbirth in the generative dimension) is not necessarily dependent on development in another dimension (i.e., marriage in the couple dimension), although they are likely to influence each other (Brown, 2010; Manning & Cohen, 2012). Development assumes change over time, and MFDT thus assumes change in each dimension over time. This is a nontrivial assumption, particularly regarding understanding whether the meaning of marital satisfaction changes over time. Because

historical use of classic family development theory tended to aggregate marriage with childrearing, there has been relatively little theorizing surrounding the changes that happen within the couple dimension (cf., Bader & Pearson, 1983; Sassler, 2010). In MFDT, however, the assumption that there is development within the couple dimension highlights the importance of understanding what changes, and how, in relationships.

Multidimensional family development theory posits that within each dimension, including the couple dimension, individuals develop along trajectories, which are shaped by events and experiences in the individual's life. As such, marriage relationships in MFDT can be conceptualized as a trajectory within the couple dimension. Events and experiences within the couple dimension may then shape that trajectory, and thereby meaningfully change the nature of the relationship. For example, events relating to disclosure and relationship work (Jensen & Rauer, 2014, 2015), conflict resolution (Gottman & Silver, 1999; Huston, Caughlin, Houts, Smith, & George, 2001), and commitment (Stanley & Markman, 1992) have been shown to shape the relationship. Experiences with positive processes (Fincham, Stanley, & Beach, 2007), such as gratitude (Gordon, Impett, Kogan, Oveis, & Keltner, 2012) and sacrifice (Impett, Gere, Kogan, Gordon, & Keltner, 2014) have also been shown to shape the trajectory of a relationship.

In addition to events within the couple dimension, the marital relationship as a trajectory is influenced by two other primary sources: cultural contexts and other dimensions of development. Individuals and families are influenced by the culture(s) in which they reside and in which they participate. In MFDT, they are thus conceptualized

to center, or align in and with, cultural contexts. Phrased differently, individuals and families are culturally centered to the extent that they are influenced by and participate in cultural contexts. The more centered an individual is in a context, the greater influence it will have on future events and trajectories across multiple dimensions of development. Because the other three dimensions of development (i.e., personal, vocational, and generative) are interrelated with the couple dimension, each one exerts some level of influence on the trajectory, and thus the nature, of the marriage. Framing marriage in this theory thus allows for the identification of potential sources of change on marital satisfaction, which include potential cultural influences and family dimensional influences.

## **Marital Satisfaction**

### **A Subjective, Global Evaluation of the Marriage**

There are many aspects of a healthy relationship, including positive processes generally (Fincham & Beach, 2010b), marital virtues (Fowers, 2001), and aspects of marital competence (Carroll, Badger, & Yang, 2006). Developmentally, changes toward health is considered the essence of a successful marriage, and relationship satisfaction frequently serves as a barometer when investigating relationships over time. This is because relationship satisfaction is generally conceptualized as a global evaluation of relationship quality. Although there may be many aspects of the relationship that constitute its well-being—such as being happy in the marriage, the activities couples do together, the absence of serious behavioral problems, and low severity and frequency in

disagreements (Johnson, White, Edwards, & Booth, 1986; Spanier, 1979; Zhang, Xu, & Tsang, 2013)—this approach to the quality of marriage has generated criticism. Some scholars argue many of these facets are conflated with predictors of quality (e.g., the relation between conflict and quality); these scholars have advocated that the quality of the marriage be assessed through a global evaluation of the relationship (Fincham & Bradbury, 1987). In other words, rather than assessing the facets outlined above (i.e., activities, disagreements) as had been done previously (e.g., Spanier, 1979), they suggest asking couples questions about the relationship in general (e.g., “Please indicate the degree of happiness, all things considered, of your relationship;” Funk & Rogge, 2007, p. 582). This may be particularly important since measures that attempt to address the many facets of the relationship also tend to have questions that are similar to many of the hypothesized predictors (such as communication; Spanier, 1979).

Fundamentally, the satisfaction of a marriage is a subjective conclusion, and as such can be influenced by many factors, including both personal and social sources (Fincham & Beach, 2010b). One of the first family scholars to acknowledge the subjective nature of marital satisfaction was Bernard (1972), when she identified his and her marriages, or the phenomenon that a man and a woman frequently had different evaluations of the same marriage. This reflected both personal (the lived experiences of each spouse) and social forces (the gender-based role expectations within a marriage). Indeed, individuals in each couple often focus on different aspects of their relationship (Rauer & Volling, 2013). Additionally, the use of MFDT suggests that the other dimensions of development will also play a role in the evaluation of a relationship: Life

factors such as education and financial distress (Cherlin, 2010; Conger, Conger, & Martin, 2010), depression (Epps, Heiman, & Epps, 1995), and childrearing (Twenge et al., 2003) are also theorized to influence the course of couple development.

### **Marriage Over Time**

Much of the empirical work on marriages from a developmental perspective has considered the trajectories of marital satisfaction across time (Miller, 2000). Beginning in 1970 and through the 1980s, the idea of a U-shaped curve was common (e.g., a decline in marital satisfaction with the birth of children that improves after children leave home), but since that time many findings on the trajectory of marital satisfaction reflect the idea of a universal decline (James, 2014; Kurdek, 1999; Twenge et al., 2003). However, some recent studies suggest the existence of heterogeneity in marital satisfaction trajectories (Anderson et al., 2010; Birditt, Hope, Brown, & Orbuch, 2012). In particular, the work by Anderson et al. indicates that there could be at least five main trajectories: two highly satisfied and stable, one curvilinear, one declining across the marriage, and one stably low in satisfaction. The authors also compared the trajectories against other indicators of marital quality, such as time spent in shared activities and marital conflict, but there remains a great deal that is not understood about how or why these trajectories emerge for some couples but not for others. Beyond the association and prediction of covariates, there is still the more fundamental question of the extent to which these various trajectories even represent marriages that are comparable in how they are conceived and evaluated. From that perspective, it is critical to note that all of the above studies have compared mean values of marital satisfaction. To compare mean values across time in

such a manner assumes that the underlying construct of marital satisfaction is the same across time or group—an assumption for which there is not empirical validation in the literature (Dyer, 2015; Fincham & Beach, 2010a; Graham et al., 2011). This study addresses this concern by empirically evaluating whether the underlying assumption of unchanged meaning is supported or not.

Indeed, MFDT highlights three critical ways in which the meaning of marital satisfaction may differ, both over time and across groups. As detailed further in Chapter 2 of this dissertation, potential events and trajectories are deeply influenced by the cultural contexts present in the family developmental space. First, the cultural attitudes and values surrounding the institution of marriage at the time of marriage may be an important context that exerts influence on the perceptions and developmental needs of the marriage. As such, couples in various places or historical timepoints may have differing meanings associated with the marriage and its evaluation. There is extant evidence that broad social contexts influence the evaluation of a marriage. For example, one study found that older couples evaluated whether the relationship was good based on expected spousal roles; these also varied by gender (Boerner, Jopp, Carr, Sosinsky, & Kim, 2014). Potential different meanings may create a cohort effect, suggesting the need to examine the meaning of marital satisfaction across differing cohorts.

Second, shifting values surrounding marriage over time may afford couples the opportunity to become centered in a marital culture that is different from the one in which they were married, such as the difference between a roles-based or fulfillment-based view of marriage (Cherlin, 2010). The presence of competing cultures, or the decentering



from the original, may both yield changes over time that result in differing meanings associated with marital satisfaction. As such, there exists the possibility that the nature of marital satisfaction may change over time to reflect changes in, and the meaning of, marriage.

The third avenue of influence suggested by MFDT is the influence of other dimensions on the couple dimensions. This interaction of dimensions provides personal and family-driven mechanisms that may help explain why and how marital satisfaction may change across the development of the couple relationship (e.g., becoming a dual-earner couple, having children, suffering illness or disability). In short, each dimension of development generates roles for an individual as that individual seeks to meet certain developmental tasks. These roles interact with the roles of other family members to generate family-level roles and stages. As the various members of the family develop in their own dimensions of development (e.g., provider, spouse, parent), roles and stages shift and change, as the passage of time brings differing needs and developmental tasks (see Chapter 2 for a more detailed discussion). As a result, the development in other dimensions (i.e., personal, vocational, and generative) affect the development in the couple dimension—creating more or less salience for differing aspects of the relationship and thus influencing the individual's subjective evaluation of the marriage.

### **Invariance Testing**

Given the key role of marital satisfaction in couple development, the lack of empirical validation of the assumption of stability across group and time, and the potential impact of culture and time on the meaning of marital satisfaction, it becomes

imperative to test how marital satisfaction functions across time and group. As such, measurement invariance is an important statistical tool. In the following discussion of measurement invariance, I use the process and labels put forth by Meredith (1993) and Dyer (2015). Invariance testing is an empirical method to determine the consistency of a measured construct. It is of particular importance when directly comparing a construct across groups or time, especially when the construct may not be the same for both groups. According to Dyer, measurement invariance is a statistical test that allows researchers to examine if a measure is accessing the same construct across groups (including within-person across time), and if not, where in the construct differences may lie. For example, mother and father engagement may be perceived differently by a child (Dyer, Day, & Harper, 2013), or perceptions of time may vary as individuals age (Carstensen, Isaacowitz, & Charles, 1999), and such constructs should be tested for invariance before being compared.

In the case of marital satisfaction, measurement invariance can be used to test how similarly individuals think about marital satisfaction across cohort and the life of the marriage. Invariance testing systematically compares a series of statistical models, with each model revealing additional information about how similarly the construct is viewed. The first model tests for what is called *configural invariance*. This means that the same items on the measure go together with the same construct, or in more technical terms, the underlying factor structure is the same between groups (Dyer, 2015). If the measure demonstrates configural invariance, then *weak invariance* is tested. Weak invariance indicates that the factor loadings are not statistically different between groups. In other

words, the same item contributes the same amount to the construct for each group. If weak invariance is not found, it means that the participants of one group interpret how the items relate to the construct differently than the other group (Dyer, 2015). After weak invariance is *strong invariance*. For continuous variables, this means that the same items between groups have the same starting levels, or intercepts. If the test of strong invariance is failed, it is generally interpreted that there is some sort of systematic bias that is inflating the scores of some (or all) of the items for one of the groups (Dyer, 2015). For categorical variables, thresholds are constrained in this step; thresholds are the probability of selecting one option compared to another (Pendergast, von der Embse, Kilgus, & Eklund, 2017). Following strong invariance is *strict invariance*, which tests for similarity in residual variance, or if the measure is equally reliable between the two groups. Because strict invariance relates more to measurement than the underlying construct, is not usually considered necessary to determine if a construct is the same between two group or over two time periods (Dyer, 2015).

If the measure fails to demonstrate invariance at any of the above steps, then the further steps are not run (e.g., if there is not weak invariance, strong and strict invariance will not be tested). The later steps are not run because earlier steps each represent a more basic level of similarity. In the case of marital satisfaction, invariance testing can reveal if a measure of satisfaction is the same across time, and how it may differ. Like any other measure, if it fails to show at least strong invariance, then the comparison of mean levels of satisfaction using that measure is inappropriate, as the measure is capturing different constructs between the groups (Dyer, 2015). As such, measurement invariance testing,

when used with a measure of marital satisfaction, can provided evidence if the assumption that marital satisfaction is consistent across time and group is justified.

### **Current Study**

Almost all previous quantitative attempts to understand how marriage changes over time have assumed that the construct of marital satisfaction is stable and consistent across groups and time, an assumption not validated in the literature. Measurement invariance testing, when used with a measure of marital satisfaction, can provided evidence if the assumption that marital satisfaction is consistent across time and group is justified. In the current study I seek to elucidate an aspect of the fundamental nature of marital development by assessing the invariance of marital satisfaction using the Marital Instability over the Life Course Study (MILC; Booth, Amato, Rogers, & Johnson, 2001). Although this study cannot disentangle all of the potential sources of change in meaning in marital satisfaction, it serves two purposes: examine the possibility of marital satisfaction having differing meaning across cultural contexts and development, and point to future research directions toward disentangling potential sources of change by including both cross-sectional and longitudinal invariance testing. The research questions and hypotheses guiding this study are given below:

**RQ1.** Are there differences in how individuals who were married in different cohorts view marital satisfaction?

**H1.** Marital satisfaction will vary between groups based on length of marriage. Because of the influence of the cultural context surrounding marriage in the cohort in which participants were married, I further hypothesize that invariance will fail to be

supported as early in the testing process as configural invariance. Failed invariance indicates a difference in in how marital satisfaction is viewed across cohort.

**RQ2.** Do perceptions of marital satisfaction change across time for married individuals?

**H2.** Marital satisfaction will vary across time. Groups of couples who have been married for shorter periods will fail invariance at a later level (e.g., strong rather than weak) than those who were married longer at wave one, because they will have had less time to center into a different cultural context. Failed invariance indicates a difference in how marital satisfaction is viewed across time.

## **Method**

### **Procedures**

This study uses data primarily from the first and sixth waves (years 1980 and 2000, although all waves were utilized for identifying the used subsample, details below) of the MILC (Booth et al., 2001). In 1980, random digit dialing was used to obtain a sample of 2,033 married individuals living in the U.S., 55 years old or younger, on a variety of variables related to marital satisfaction, instability and employment. For the sixth wave, attempts were made to follow up with the original panel through phone interviews. If participants did not respond to the phone interview, a written form of the survey was sent out. To get as many participants to return the survey as possible, a short form was sent out to those who still had not responded. Wave six had a retention of 47% and differed from the original with fewer retained of the oldest and youngest respondents,

African Americans, males, renters, those with less educational attainment, southern residents and those residing in metropolitan areas. Most differences were less than 4% (Booth et al., 2001). The presence of these differences means that the invariance of satisfaction may be different from those who did not participate in later waves.

### **Participants**

In general, the sixth wave of the MILC data ( $n = 962$ ) consists of Whites (96.2%, African American 2.7%, and other 1%), females (63.5%), and those who have at least a high school degree (93.5%). For this study, I specifically targeted those that were in their first marriage, did not report getting a divorce or being widowed during the duration of the study, and reported the length of their marriage ( $n = 649$ ). While this may reduce the generalizability of this study, this sample was chosen as remarriages may be influenced by different factors versus first time marriages (Mirecki, Chou, Elliott, & Schneider, 2013), and thus interpreted differently.

For those included in the analyses, the majority were female (61.7%) and identified as White and non-Hispanic (94.0%, 2.8% White and Hispanic, 2.3% African American, and 1% other). Mean age was 55.3 years ( $SD = 8.8$ ) at wave 6, and the mean years of education was 14.6 ( $SD = 2.9$ ). Missing data in this sample was low (8% or less on any given variable) and handled using full information maximum likelihood (FIML). As detailed below, the sample was grouped based on length of marriage, with those married seven or fewer years ( $n = 192$ ) in one group, those married between eight and 19 years in another ( $n = 259$ ), and those married 20 or more years in a third ( $n = 198$ ). See Table 3-1 for more demographic information by group.

Table 3-1

*Demographic Variables, by Group*

Variables	Young couples ( <i>N</i> = 192)				Middle couples ( <i>N</i> = 259)				Older couples ( <i>N</i> = 198)			
	<i>M</i>	<i>SD</i>	<i>n</i>	%	<i>M</i>	<i>SD</i>	<i>n</i>	%	<i>M</i>	<i>SD</i>	<i>n</i>	%
Age	46.23	3.89			53.95	4.42			65.79	4.37		
Years of education	15.27	3.29			14.62	2.69			13.83	2.73		
Years married	3.61	2.34			12.65	3.31			24.74	3.54		
Gender												
Male			76	39.58			96	37.07			77	38.89
Female			116	60.42			163	62.93			121	61.11
Race/ethnicity												
White/non-Hispanic			175	91.15			247	95.37			188	94.95
White/Hispanic			10	5.21			4	1.54			4	2.02
African American			5	2.60			4	1.54			6	3.03
Other			2	1.04			4	1.54			0	0.00

*Note.* Data represents sample used in analyses.

**Measures**

**Marital satisfaction.** Marital satisfaction was measured using the marital happiness scale created for the MILC study. It consists of 11 items. Ten items are on a scale of 1 (*Very happy*) to 3 (*Not too happy*), and touch on aspects of global and specific elements of the relationship (e.g., “How happy are you with the amount of understanding you receive from your spouse?,” “With the extent to which you and your spouse agree about things?,” “With your sexual relationship?,” and “Taking all things together, how would you describe your marriage?”). These items were treated as ordinal items for the analyses. One item was on a scale of 1 (*Extremely strong*) to 5 (*Not strong at all*) and asked about the strength of feeling of love for the participant’s spouse. All items were reverse coded so higher scores represent greater marital happiness. The use of this scale

to represent marital satisfaction as a global evaluation of the relationship is consistent with previous research, and this measure has been shown to correlate with other variables as expected (e.g., Anderson et al., 2010; Kamp Dush & Taylor, 2012). Internal consistency was high; coefficient alpha for wave 1 was .84 and for wave 6 was .91. Additionally, as detailed below, preliminary CFAs demonstrated excellent fit, providing evidence of the validity of the measure.

**Grouping variable.** The participants were classified into one of three groups based on reported length of their marriage at wave 1. The cut offs were chosen based on expected interactions of dimensions (i.e., couple and generative, generative and vocational) suggested by the norms of 1980 (when the first wave was collected). Participants were placed into the young couple category (the term young is defined by the length of the marriage, not the age of the participant) if they were married for seven or fewer year years at wave 1, representing the interaction of the establishment of the marital trajectory in the couple dimension with the likelihood of childbearing in the generative dimension. Participants were placed into the middle couple category if they were married longer than seven, but less than 20, years at wave 1. This group would be expected to be in the developing stage of family development, through development in the vocational dimension, generative dimension, and their interaction with each other and the couple dimension. The third group, older couples, consisted of those participants who had been married 20 years or longer at wave 1. These participants would be expected to be in the contracting stage of family development, representing the potential shift in trajectory in the generative dimension (i.e., children leaving home) and the continued



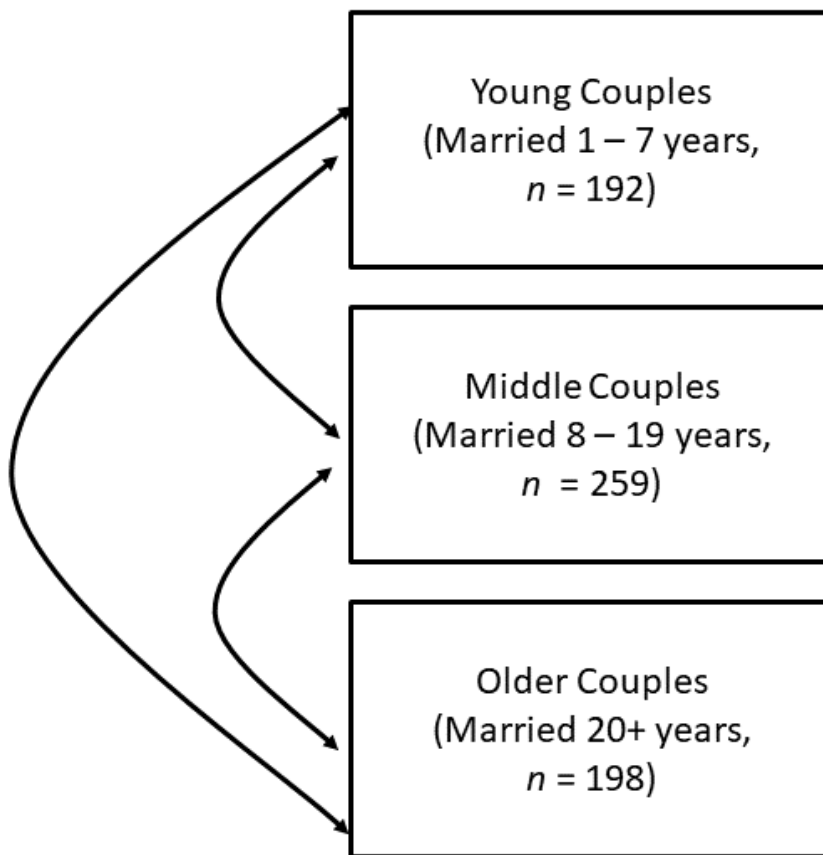
interaction of vocational and couple dimensions.

### **Analytic Strategy**

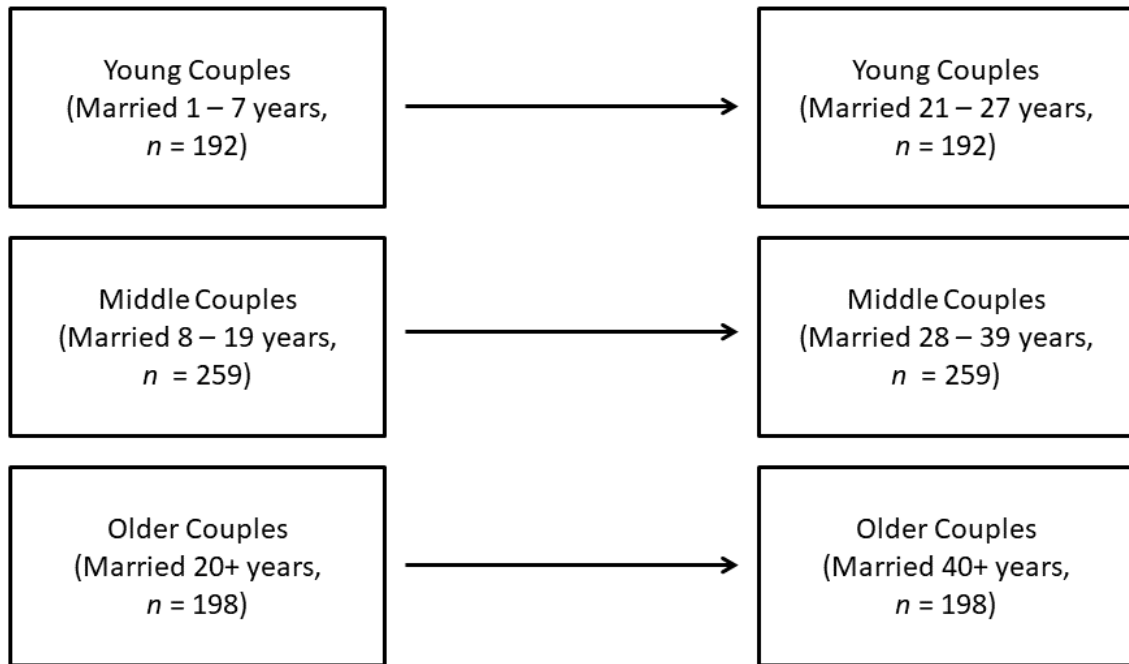
Invariance testing requires discreet groups. Using the length of marriage (as described in the measures section) can help give insight to potential sources of change because this strategy groups by cohort at time of marriage and organizes by general family development. That is, it groups couples by the average expectation of the family expanding, developing, or contracting. As such, using length of marriage as a grouping variable can highlight within and between group differences (i.e., across cohort and across time). Additionally, as invariance testing uses discreet groups, I used the first and sixth waves of the MILC (1980 and 2000) to track the development of marital satisfaction over the course of 20 years. There are many events that could potentially shape an individual's perception of marriage, and over time the trajectory their development takes in the coupling dimension may lead to testable differences in perceptions of satisfaction. This is also one of the first studies to empirically validate the possibility of the construct of marital satisfaction changing over time (as opposed to only changes in mean levels), and as such I only used the end points in the MILC data set to assess for differences. Because strict invariance is not needed to answer if a construct is the same across time or group (Dyer, 2015), I did not test for it.

Data cleaning, data prep, and preliminary analyses were done using R 3.6.1 (R Core Team, 2019), including the *lavaan* package (Rosseel, 2012), and then transferred using the *MplusAutomation* package (Hallquist & Wiley, 2018) to MPlus (8.0) for analyses. Hypothesis 1 was tested by performing measurement invariance across the three

groups at time 1 (see Figure 3-1), as detailed below. To test hypothesis 2, measurement invariance was assessed longitudinally, that is, for each group across 20 years from wave 1 to wave 6. If hypothesis 1 was not supported (i.e., if marital satisfaction did not vary between groups based on cohort of marriage), all three groups would be treated as one group when testing hypothesis 2. If hypothesis 1 was supported, three different sets of measurement invariance testing would be run, one for each group (see Figure 3-2), as detailed below.



*Figure 3-1.* Cross-sectional measurement invariance of marital happiness at wave 1. Each box represents a subsample based on length of marriage at wave 1. Subsample names are based on age of the marriage, not the age of the participant.



*Figure 3-2.* Longitudinal measurement invariance of marital happiness. Subsample names are based on age of the marriage, not the age of the participant. Marital happiness will be tested for invariance across 20 years (waves 1 and 6), separately for each subsample. Subsample groups are subject to change based on the results from the multi-group invariance tests represented in Figure 3-1.

**Ordinal measurement invariance testing.** Following recommendations by Pendergast et al. (2017), I used the weighted least squares mean and variance adjusted (WLSMV) estimator to account for polychoric correlations and covariances when using ordinal and categorical items, and to account for sparseness of data in some item responses. Model fit cutoffs were set a priori to  $CFI \geq .90$  and  $RMSEA \leq .08$  (Hu & Bentler, 1995). Because the normal  $\chi^2$  difference test does not work with the WLSMV estimator, the Satorra-Bentler  $\chi^2$  (SB- $\chi^2$ ) was used, which better approximates non-normal data (Pendergast et al., 2017). When testing hypothesis 1, recommended cutoffs given by Chen (2007) for changes in goodness-of-fit criteria were used. Specifically, a

decrease in CFI greater than .01 and increase in RMSEA greater than .015, taken in consideration with the  $\Delta\text{SB-}\chi^2$ , were considered to indicate non-invariance. However, due to reduced changes in goodness-of-fit criteria that comes from splitting the sample into three groups, when testing hypothesis 2, a decrease in CFI greater than .005 and increase in RMSEA greater than .010 were used, per recommendation for a sample of this size (Chen, 2007). To assure model identification in measurement invariance testing, one item factor loading per latent construct were constrained to be equal (Dyer, 2015).

Additionally, when testing measurement invariance with ordinal items, one threshold per item, and two thresholds on one item, must also be constrained (Pendergast et al., 2017).

When testing the cross-sectional data in hypothesis 1, the GROUPS command in MPlus was used, as per standard practice (Pendergast et al., 2017). However, when testing longitudinally in hypothesis 2, using the GROUPS command does not account for dependence of data due to sampling from the same person at each time point. Instead, to account for dependence of data, I kept the data in wide form (i.e., one line per individual, with both time points on the same line) and included both time points with correlation between time 1 and time 2 items and factors in the same model, as recommended by Claxton, Deluca, and Van Dulmen (2015).

A series of four preliminary analyses were run. Due to sparsity of responses (i.e., a lack of even distribution across response options), three items (satisfaction with faithfulness, overall marital happiness, and quality of marriage compared to three years ago) were reduced from three response options to two by collapsing two response categories into one, for the cross-sectional model. For the younger couples group, quality

of marriage compared to 3 years ago was changed to a binary variable (with the lowest option combined into the middle option). The middle couples and the older couples also had items modified in the same manner (overall marital happiness and satisfaction with faithfulness, respectively). Before running the configural model (which uses the grouping variable), it is recommended that a preliminary model is tested where the entire sample is included as one group (Pendergast et al., 2017). For each of the proposed analyses, a measurement model was run with combined groups. In other words, a cross-sectional model was run with all three groups combined (hypothesis 1), and then three more models (one for each group) with time points combined (hypothesis 2).

Configural invariance was assessed by testing a model with marital happiness as a latent variable with each of the 11 items as an indicator (Figure 3-3 and Figure 3-4), across groups or time. In this model, there are no additional constraints imposed (Pendergast et al., 2017). If the proposed model fails to obtain a satisfactory model fit, it indicates configural non-invariance. Weak and strong invariance were tested through a series of additional models, each one constraining additional parameters. Each new model was compared against the previous one using the  $\Delta SB-\chi^2$  difference tests as well as goodness-of-fit indices, as indicated above (Dyer, 2015). Weak invariance was assessed by comparing a model with factor loadings constrained against the configural invariance model (where the factor loadings are freely estimated), and strong invariance was assessed by comparing a model with thresholds/intercepts constrained to be equal against the weak invariance model (where the thresholds/intercepts are freely estimated).

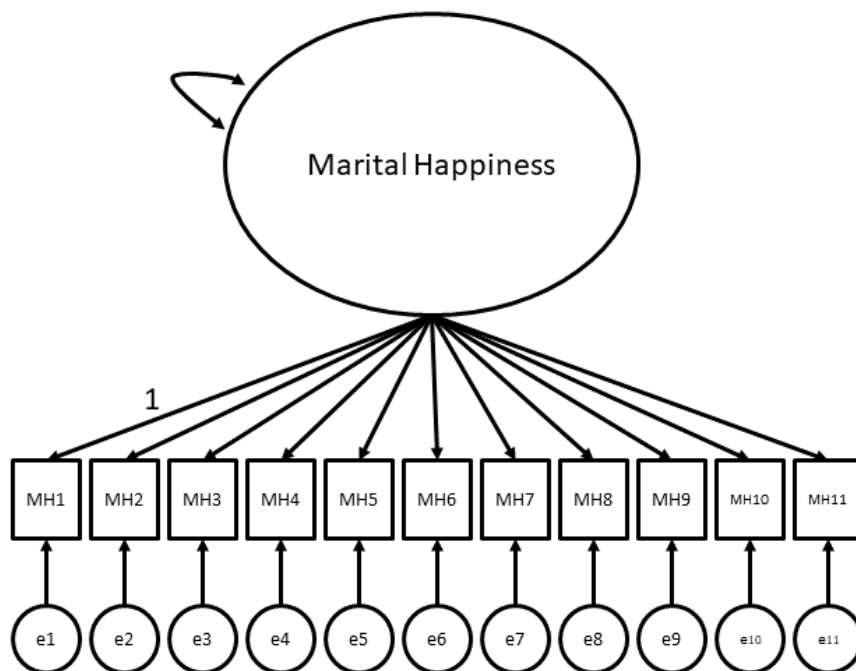


Figure 3-3. Hypothesized measurement model for marital happiness. MH1 – MH10 are ordinal variables with two to three levels, while MH11 is treated as continuous. First group factor mean was fixed to 0, and both factor variances were freely estimated.

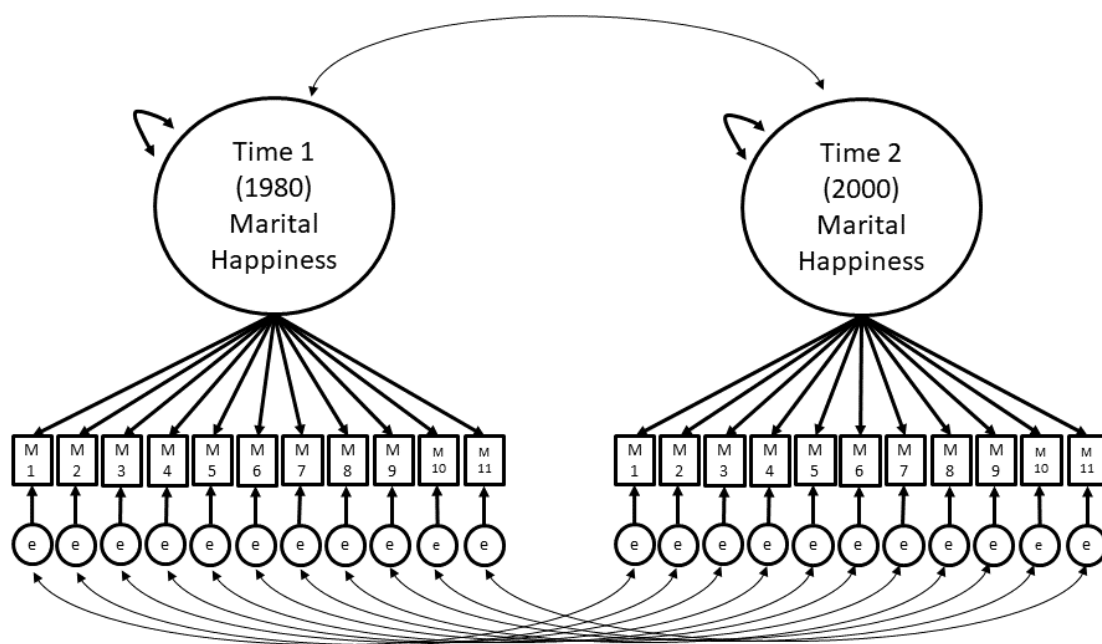


Figure 3-4. Hypothesized measurement model for longitudinal testing. Time 1 and time 2 indicators were allowed to covary with each other, and the latent factors are allowed to covary, to account for dependence of data. This model was run for each group.

## Results

### Preliminary Analysis

Each of the preliminary models had satisfactory fit. Although each model had a chi-square significant at the  $p < .05$  level, sample size suggested consideration of goodness-of-fit criteria, of which the lowest CFI and TLI were .98 and the largest RMSEA was  $< .06$ , indicating acceptable model fit. As such, the measurement model with the 10 categorical items and one continuous variable was used in all further testing.

### Primary analyses

**Cross sectional.** The configural model did not have acceptable model fit (e.g., significant SB- $\chi^2$ , CFI  $< .90$  and RMSEA  $> .08$ ). To improve model fit, related items were allowed to covary. Specifically, strength of feelings of love was correlated with overall marital quality, marital quality comparisons, and satisfaction with faithfulness; satisfaction with amount of love and affection received was correlated with satisfaction with understanding and satisfaction with the sexual relationship; finally, satisfaction with extent of agreement was correlated with satisfaction with spouse's efforts to take care of things around the house. Even with these items correlated, model fit was not quite in the acceptable range, SB- $\chi^2(112) = 386.67$ ,  $p < .001$ , CFI = .94, RMSEA = .11. As such, the groups are considered to have failed to demonstrate configural invariance, and thus hypothesis 1 was supported, indicating that the three cohorts did not rely on the same items to measure the construct. However, given the interpretive nature of goodness-of-fit criteria, and that some researchers consider strict adherence to recommended cutoffs of

acceptable fit to be problematic (Marsh, Hau, & Wen, 2004), further tests of invariance were also conducted. Weak invariance (or equal factor loadings) was supported. Constraining factor loadings resulted in overall improved fit ( $CFI = .95$   $RMSEA = .08$ ), a non-significant chi-square difference,  $\Delta SB-\chi^2(20) = 22.79$ ,  $p = .299$ , and an increased CFI of .017 with a decreased RMSEA of .022. Strong invariance (equal intercepts/thresholds) was not supported. Constraining the thresholds of the categorical variables and the intercept of the continuous variable yielded a  $\Delta SB-\chi^2(35) = 177.46$ ,  $p < .001$ , and a  $\Delta CFI$  of -.026. Although the  $\Delta RMSEA$  of .009 did not exceed the cutoff, the large  $\Delta CFI$  and significant  $\Delta SB-\chi^2$  together indicated non-invariance, providing partial support for hypothesis 1. A summary of findings is given in Table 3-2.

Table 3-2

*Demonstration of Invariance for Each Sample for Each Step of Testing*

Cross-sectional sample	Model fit	Invariant
Configural invariance	No	No
Young couples (across 20 years)		
Configural invariance	Yes	Yes
Weak invariance	Yes	Yes
Strong invariance	Yes	Yes
Middle couples (across 20 years)		
Configural invariance	NA	No
Older couples (across 20 years)		
Configural invariance	Yes	Yes
Weak invariance	Yes	Yes
Strong invariance	Yes	No

*Note.* Model fit column indicates if the model met *a priori* fit criteria. Invariant column indicates if the model was retained after comparison to the previous model



**Longitudinal invariance.** Given the noninvariance demonstrated across the three groups at time 1, three separate sets of invariance analyses were run, one for each group. For the younger couples, the configural model demonstrated acceptable fit without additional correlation between items,  $SB-\chi^2(198) = 382.026, p < .001, CFI = .96, RMSEA = .07$ . The weak invariance model demonstrated acceptable fit,  $SB-\chi^2(208) = 393.541, p < .001, CFI = .96, RMSEA = .07$ , and comparison to the configural model supported weak invariance,  $\Delta SB-\chi^2(10) = 20.525, p = .025, \Delta CFI < .001, \Delta RMSEA = .002$ . Strong invariance demonstrated acceptable fit,  $SB-\chi^2(217) = 413.923, p < .001, CFI = .96, RMSEA = .07$ , and comparison with the weak invariance model also supported strong invariance,  $\Delta SB-\chi^2(9) = 32.803, p < .001, \Delta CFI = .003, \Delta RMSEA = .001$ , failing to provide support for hypothesis 2. This indicates that the measure functions the same for the young couple group across the 20 years of couple development.

For the middle couples, the model for configural invariance failed to converge. One potential reason for failure to converge could be that the measure does not demonstrate configural invariance across 20 years for this group. Exploratory post-hoc tests were run to investigate the factor structure. The *psych* package (Revelle, 2018) in R (R Core Team, 2019) was used to run a parallel plot analysis on each time point. Findings suggested a four-factor solution for time 1 and a one-factor solution (as modeled) for time 2. This analysis further supports the idea that configural invariance was not met for this group. A lack of configural invariance suggests that the underlying structure of the measure is not the same across time.

For the older couples, the configural model demonstrated acceptable fit without

additional correlation between items,  $SB-\chi^2(198) = 381.230, p < .001, CFI = .95, RMSEA = .07$ . The weak invariance model also demonstrated acceptable fit,  $SB-\chi^2(208) = 387.657, p < .001, CFI = .95, RMSEA = .07$ , and comparison to the configural model supported weak invariance,  $\Delta SB-\chi^2(10) = 16.126, p = .096, \Delta CFI = .00, \Delta RMSEA = .002$ . The strong invariance model had acceptable fit,  $SB-\chi^2(217) = 425.189, p < .001, CFI = .94, RMSEA = .07$ . However, strong invariance was not supported,  $\Delta SB-\chi^2(9) = 65.300, p < .001, \Delta CFI = .007, \Delta RMSEA = .004$ , providing partial support for hypothesis 2. This indicates that there is some form of systematic influence that causes the probability of choosing one response option over another to change across the 20 years.

## Discussion

Multidimensional family theory posits that development occurs in the couple dimension over time, implying change in the couple relationship. Previous attempts to empirically trace the trajectory of marital satisfaction have largely assumed that the construct does not change (e.g., Anderson et al., 2010; James, 2014; Miller, 2000). The purpose of this study was to elucidate an aspect of the fundamental nature of the dimension of couple development by assessing the invariance of marital satisfaction (or if the measure functions the same way), across cohort and across time. Cross-sectional testing failed to demonstrate invariance (meaning the measure differed between groups) at the configural level, supporting hypothesis 1, which was that there would not be invariance across cohort. This implies differences in what items should be included in the measure between groups. However, because invariance was tested using extant data, the

measure could not be additionally refined and tested on a new sample.

Hypothesis 2 was that all of the groups would fail to demonstrate invariance longitudinally. Longitudinal findings were not consistent across groups, providing partial support for hypothesis 2. The younger couple group demonstrated invariance across 20 year for this measure of marital happiness (indicating that the measure functioned the same across time), whereas the other two groups did not. Indeed, the middle couples failed to demonstrate invariance at the configural level, and older couples failed to demonstrate invariance at the strong level. For the middle couples, this means that the items on the measure did not all align to the same underlying factors. In less technical terms, this implies that at time 1, the participants considered the items to be related to multiple constructs, but at time 2, they were only related to one construct. For the older couples, failing at the strong level means that the thresholds were not the same between groups. In other words, the probability of choosing one response category over another for an item was not the same across time. This renders mean comparisons across time as inappropriate for both groups because of systematic inflation of one option over another. Non-invariant thresholds also imply a fundamental shift in how participants respond to an item across time.

Taken together, these findings highlight an important potential source of change suggested by MFDT. The fact that the cross-sectional model failed configural invariance implies the presence of a cohort effect, potentially through the influence of differing cultural contexts. Cherlin (2004), in discussing the deinstitutionalization of marriage, emphasized a distinct change in marriage that occurred beginning in the 1960s and was in

force by the 1980s. Specifically, Cherlin notes this as the transition to individualized marriage, where marital satisfaction is derived less from role enactment and more toward personal fulfillment. Per Cherlin's assertions, the current finding about timing suggests that those who were in the older couples group would have married in a context that focused on roles and family building, those in the younger couples group would have married in a context that emphasizes self-fulfillment, and the middle couples would have married during the transition. These differing expectations of marriage may explain, in part, why configural invariance was not supported for the cross-sectional analysis.

For two of the three groups, the measure failed to demonstrate invariance across 20 years. This finding indicates that in certain situations, there exists the presence of longitudinal differences as well, supporting the assumption of MFDT that development happens in the couple dimension. The current study cannot disentangle all the potential sources of change, but MFDT posits particular avenues that merit further consideration. One of these avenues is that although a couple may marry in a particular context, over time one or both of the partners may center into a new marital context. Indeed, it is possible that greater temporal distance from their original marital context is why the measure did not demonstrate invariance for middle and older couples as it did the younger couples. Not only did the meaning of marriage evolve from 1960 to 1980 (Cherlin, 2004), but Coontz (2015) identified additional ways in which it continued to change through the next 20 years. Labor divisions, including household and paid, gender expectations, acceptance of various family forms, and birth rate and family size are some of the factors of family life that she identified as continuing to change (Coontz, 2015).

The continued shift in social context of family life both continued to provide opportunity for centering on new contexts as well as creates a larger divide between the context of the 1960s and the 2000s, and both may be potential sources of the measurement non-invariance found.

Additionally, not only does context change over time, but couples who have been married longer have more time to experience their own trajectories in the couple dimension and feel the force and influence of events and trajectories in the other dimensions. Scholars have already identified a number of events and trajectories within the couple dimension, and between other dimensions, that influence the mean level of marital satisfaction. A few examples of the work of scholars that relate to the events and trajectories within the couple dimension includes disclosure and relationship work (Jensen & Rauer, 2014, 2015), positive processes (Fincham et al., 2007; Gordon et al., 2012; Impett et al., 2014), conflict resolution (Gottman & Silver, 1999; Huston et al., 2001), and commitment (Stanley & Markman, 1992). Relative to the other dimensions and their influence on marital satisfaction, a few brief examples include finances and financial distress (in the vocational dimension; Conger et al., 2010), childrearing (in the generative dimension; Kiff, Lengua, & Zalewski, 2011; Twenge et al., 2003), and aging (in the personal dimension; Carstensen et al., 1999; Jensen & Rauer, 2015). It is possible that the resultant change in mean levels of satisfaction that has been demonstrated in the body of literature cited above may actually reflect a change in the participants' underlying perception of marital satisfaction. If this is the case, it implies that mean levels of comparison across time are not warranted (Dyer, 2015), and that researchers need to

consider how and why participants may view marital satisfaction differently across time. Additional research is necessary to tease apart changes in meaning from changes in the mean.

### **Limitations and Future Directions**

As this study is somewhat exploratory in nature, due to it being among the first to examine potential changes in meaning of marital satisfaction across time, the limitations expressed herein should be considered as pointing toward future research. A key limitation of this study was the inclusion of only one measure of marital satisfaction. Although this measure has been used by researchers (e.g., Anderson et al., 2010) the inclusion of other, more established measures (such as the CSI; Funk & Rogge, 2007), would be an important step for future research. However, it is important to note that this measure has data on repeated measures over 20 years with the same participants, a strength that may not be replicated with other measures. Other facets of development in the couple dimension, beyond satisfaction, could also be investigated. The use of a CFA framework for measurement invariance is well established, but future work should include other methods of testing invariance, such as through item response theory (IRT). Another limitation of this study was the chosen cut-off values. The values used in this study were based on recommendations from the literature according to the data used, but other recommendations and perspectives on cut-off exist. Generalizability was limited as well, as most of the sample was White, and only included heterosexual continuously married individuals. It is possible that the relation to context and time differs for more diverse couples as well as for couples who do not remain in a relationship. Future

research should investigate both diverse couples and couples who do not remain in a relationship. Although the couples were followed over an unusually long amount of time (thus allowing the detection of change over time), the most recent wave was collected 20 years ago, and results may not reflect contemporary views or experiences. This study provides an important first look at the role of cohort and time, but future work should more directly attempt to disentangle the potential various sources of change and stability in the meanings associated with marital satisfaction.

## **Conclusion**

To this author's knowledge, this study was the first quantitative empirical examination of the invariance of a measure of marital satisfaction across cohort and time, and findings support the notion that marital satisfaction may change. Findings from this study also emphasize the need for measures of satisfaction to be tested for invariance and should not be assumed. Additionally, my findings highlight the need to identify how and why marital satisfaction may change, and under what circumstances. Although most tests indicated non-invariance, the younger cohort demonstrated invariance across 20 years of marriage. Understanding potential qualitative shifts in marital satisfaction may be a key element to understanding how marriages succeed and implementing more effective intervention.

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## **CHAPTER 4**

### **SUMMARY AND GENERAL DISCUSSION**

The purpose of this dissertation was to generate greater understanding of the couple relationship in its own developmental process through the lens of a refined family-oriented developmental theory, and use that theory to begin answering the question: do couples perceive their relationship satisfaction differently across time?

I realized the above purpose across the preceding chapters. In Chapter 2, I presented a refined version of family development theory, a theory which was designed to study the family developmentally. Building on family development theory, I established a new reconceptualization called multidimensional family development theory (MFDT). Among other updates and changes, in MFDT the couple relationship is disaggregated from childrearing, allowing for consideration of the couple relationship in its own developmental process. The theoretical framework given in Chapter 2 was then used to guide and frame Chapter 3.

Multidimensional family development theory posits change in the couple relationship; as such, the purpose of Chapter 3 was to test for a change in a key variable used in the study of relationships (Funk & Rogge, 2007). In Chapter 3, a measure of a marital satisfaction was tested for invariance, both across cohort and across 20 years. Results indicated that the measure of satisfaction was not invariant. Specifically, the measure functioned differently across cohort, and for two of the three cohorts, the measure functioned differently across 20 years. The rest of the current chapter discusses these two chapters together, and is organized around the following questions: (1) how do

the combined results speak to the purpose of this dissertation? (2) what are the implications that follow? and (3) what are the future directions for research regarding the development of the couple relationship?

### **How do the Combined Results Speak to the Purpose of this Dissertation?**

First and foremost, the results of the empirical study confirms specific tenants of MDFT (see Chapter 2) in that they expand our understanding of the development of the couple relationship by revealing both the potential for internal change across time and the importance of external forces. The potential for internal change was demonstrated in Chapter 3 when two of the three cohorts failed to demonstrate invariance longitudinally across 20 years. Noninvariance of a measure indicates that either how the participants interact with the measure, or the construct itself, has changed (Dyer, 2015), either of which supports the possibility of internal change regarding marital satisfaction. The importance of external forces was also supported in Chapter 3. The measure of satisfaction failed to demonstrate invariance across the three cohorts, indicating a likely cohort effect. Cultural contexts surrounding marriage (Cherlin, 2010; Coontz, 2015) may be one key factor contributing to the presence of a cohort effect. Such cultural contexts are the result of external social forces.

Second, the combined results support the use of MFDT as a family-oriented developmental theory that can be used to study not just family development, but the development of the couple relationship specifically. At its most basic level, the use of

MFDT provided language with which to discuss the concepts related to couple development in an integrated, connected way. Factors that were internal and external to the relationship were framed within the constructs of dimensions. Terms and expression from the theory, such as conceptualizing the direction of the relationship over time as a trajectory, served to clarify the expected nature of the relationship between dimensions. All this terminology served to help distinguish what was being discussed and why. The use of MFDT gives a vocabulary to discuss the couple relationship developmentally, and it also serves to shape and direct the research questions, the approach and methodology of the study, and the interpretation of the results. Suggested future directions were also informed by the theory. This is in line with what scholars suggest is the role and purpose of a scientific theory (Bengtson, Acock, Allen, Dilworth-Anderson, & Klein, 2005; Knapp, 2009).

### **What are the Implications?**

Several key implications emerge from the findings of this dissertation. Perhaps the most relevant is that how we as relationship scholars approach the study of marriages could be improved by considering couple development in its own process. That is, in addition to documenting processes that distinguish healthy versus unhealthy processes among couples, a greater focus should also be placed on understanding the nature and course of healthy relationships over time. There may be additional knowledge to be gleaned by moving away from a comparison of “good” and “bad” relationships (Fincham & Beach, 2010). Instead, important scholarship may emerge in allowing each to exist as

their own trajectories, over time. Different relationship trajectories may be fundamentally different from each other, suggesting a need to try and understand each in its own right.

Another key implication is that the use of relationship satisfaction as a general barometer of relationship health may not be the most useful approach—and may even be statistically incorrect if invariance is not tested. This is not to diminish the role satisfaction has played in relationship research thus far; many important findings regarding relationships have come from using this variable (e.g., Fincham & Beach, 2010; Funk & Rogge, 2007). However, a focus on satisfaction is a reductionistic, univariate approach, and as such may obscure important facets of the relationship that contribute to, and define, the trajectory of that relationship. Additionally, an overreliance on satisfaction as the primary outcome variable renders researchers only able to speak to the shape of satisfaction, not of the relationship itself. And where invariance is not supported, mean levels of satisfaction should not be used to trace the development of the relationship.

The findings from this dissertation confirm that the dimensions of development have reciprocal impact (e.g., the generative and couple dimension affect each other) – and thus the findings imply that a better understanding of the influence of other dimensions on the couple dimension is needed. More specifically, there exists in the literature the understanding that external factors are important, particularly racial and cultural differences (Fincham & Beach, 2010), economic hardship (Dew, Bitt, & Huston, 2012), and the presence of children (Twenge, Campbell, & Foster, 2003). Most of the research in this area, however, focuses on the relationship between one aspect of external factors



and one aspect of the relationship at a time (usually mean levels of satisfaction or dissolution of the relationship). This is not to say that all the previous research has relied on satisfaction and dissolution. There is some work that looks at how other dimensions influence couple processes. Examples include economic hardship on conflict in the relationship (Bae & Kogan, 2020) and work-family conflict (Martinengo, Jacob, & Hill, 2010). Additionally, a great deal of work has been done that examines how couple processes influence the other dimensions (e.g., the spillover effect from couple dimension to the generative dimension; Bradford & Barber, 2005). The above literature is a good start, but how the couple processes are influenced over time, how work-family conflict changes the relationship, and how childrearing influences the behavior of the parents in the couple dimension are all ways that the work of previous scholars could be expanded to look at couple trajectories. In other words, what the findings from this dissertation imply is that a more holistic approach is needed, with an emphasis on how external forces influence the trajectory of the relationship.

A final implication that bears mentioning is the potential for shaping trajectories as an intervention. Once a better understanding of what shapes trajectories exists, additional interventions could be developed that focus less on skills (Carroll, Badger, & Yang, 2006; Markman & Rhoades, 2012), and more on helping couples change the trajectory of their relationship. This may include some skill training, but it would be framed in a larger perspective in which additional approaches (e.g., creating meaning, marital virtues, or the role of finances) would be included (Fowers, 2001; Gottman & Silver, 1999; Shapiro, 2007). In connection with existing interventions, this could provide

educators and therapists with additional tools to help couples succeed.

### **What are the Future Directions?**

A key and critical next step is to move to a broader consideration of change in the relationship than is afforded by quantitative methodologies; a qualitative study is needed to capture other important, possible aspects of change that could merit further investigation. I am in the midst of one such study, where MFDT is used to examine the trajectories of happy marriages, and the relation of development of the meaning of happiness in the marriage. I expect that additional insight to the nature of couple development and the utility of MFDT across methodology will emerge.

Multidimensional family development theory suggests that families—and specific to this dissertation, that couples—change over time. But relatively few studies over the years have focused on the phenomenon of change in couple relationships over time. Thus, my primary topic of future investigation is: in what ways do relationships change over time? The findings from this dissertation suggest that the question to be asked is not only how much do relationships change, but in what manner. A clear step in my future research is to examine why it is that invariance was not met across cohort in Chapter 3, as well as identify the cause of change in perceptions of the measure across the 20 years for each of the two cohorts that failed to demonstrate invariance. Integral to this will be my efforts to also understand why invariance held for one group, but not the others. A core component of my research across my career will be to attempt to answer the more complicated question of can trajectories in the couple dimension be generalized, or are

they idiosyncratic? From there, the next steps are to identify what is most salient in shaping those trajectories. Once the most salient factors have been identified, my future work can examine if the salience varies by trajectory type and shape.

In the process of doing the research outlined in the paragraph above, MFDT (see Chapter 2) will continue to be used and refined. As demonstrated in this dissertation, MFDT is useful in framing the study of couple development. Additionally, the mechanisms of MFDT can be used to help answer the questions surrounding couple development. Although not used in this dissertation, stages, roles, and the process of stage change can be used to operationalize the influence of events within and between dimensions on the trajectory of the couple development. Using stages in this manner has the advantage of considering multiple family members and multiple dimension in the family dimensional space simultaneously. The theoretical concepts of alignment and misalignment can also be used to empirically explore why some events may have a greater influence on the trajectory of the relationship. Cultural context, accordance, and discordance can also be used by researchers to investigate the role and influence of family members', spouse's, and the individual's interaction with culture and social forces, and the impact of that on the trajectory of relationships (Crapo & Bradford, in press). Continued use of MFDT to investigate couple development will give a unifying approach to the field and help to disentangle the many factors that may be playing a part in shaping relationships over time.

Additionally, the form of MFDT presented here has only been used in the research completed in this dissertation. There is still considerable room for additional

refinement (including improved figures), and as such, an important future direction is the continued development of MFDT. This will happen through theoretical considerations, empirical validation (and invalidation), and dialogue with other family scholars. As MFDT is accepted and used by the family studies community, the opportunities for it to be more refined, and thus more useful, will continue to grow.

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## PUBLICATIONS

**Crapo, J. S.**, Miller, J. A., Rhodes, M. R., Bradford, K., & Higginbotham, B. J. (2020). Couple-level patterns of disclosure process beliefs and their association with marital satisfaction. *Marriage and Family Review*. Advanced online publication. doi: 10.1080/01494929.2020.1737621

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## PUBLICATIONS UNDER REVIEW

Kopystynska, O., **Crapo, J. S.**, Bradford, K., & Higginbotham, B. (Under review). Reciprocal influences of self-reported and perceived socioemotional behaviors in higher-order marriages. *Journal of Social and Personal Relationships*.

**Crapo, J. S.**, Kopystynska, O., Turner, J., Bradford, K., & Higginbotham, B. J. (Revise and resubmit). Financial stress and perceptions of spousal behavior over time in remarriages. *Journal of Family and Economic Issues*.

**Crapo, J. S.**, Barrett, T. S., Bradford, K., Miller, J. A., & Higginbotham, B. J. (Revise and resubmit). CRE Outcomes Predicted by Family Life Stage and Traditionality. *Contemporary Family Therapy*.

**Crapo, J. S.**, Miller, J. A., Bradford, K., & Higginbotham, B. J. (Under Review). Mothering and fathering, or just parenting: Measurement invariance of parental beliefs. *Journal of Family Issues*.

### PUBLICATIONS IN PROGRESS

**Crapo, J. S.** & Bradford, K. (In preparation). Multidimensional family development theory: A reconceptualization of family development. *Journal of Family Theory and Review*.

Seedall, R., **Crapo, J. S.**, & Novak, J. R. (In preparation). Development of a new scale for assessing supportive behaviors in relationships: The couple support behavior questionnaire.

Novak, J. R. & **Crapo, J. S.** (In preparation). Helping or hurting: Couples' provision of health support and control in context.

Novak, J. R. & **Crapo, J. S.** (In preparation). A common fate model of the associations between health support, relationship satisfaction, and couple coping.

Novak, J. R. & **Crapo, J. S.** (In preparation). An investigation of couple agreement on decisions about nutrition and food.

**Crapo, J. S.**, Kopystynska, O., Sphuler, B., Bradford, K., & Higginbotham, B. J. (In preparation). Perceived need for change and its predictive utility for couple relationship education outcomes.

**Crapo, J. S.**, Turner, J., Bradford, K., & Higginbotham, B. J. (In preparation). The impacts of cohabitation and relationship duration on marital outcomes in higher-order marriages.

**Crapo, J. S.**, Turner, J., Bradford, K., & Higginbotham, B. J. (In preparation). Family systems theory and parenting difficulties in stepfamilies: An actor-partner interdependence model

### INVITED CHAPTERS

**Crapo, J. S.** & Bradford, K. (Revise & Resubmit). Multidimensional family development theory: Application and extension of FDT. In K. Adamsons, A. Few-Demo, C. Proulx, & K. Roy (Eds.), *Sourcebook of family theories and methodology*.

## INVITED PRESENTATIONS

**Crapo, J. S.** (2017, 2018, 2019, September). Introduction and discussion of multidimensional family development theory. Presentation given to the HDFS 6070: Family Theories graduate course at Utah State University.

Bradford, K., Kopystynska, O., **Crapo, J. S.**, & Turner, J. (2019, September). Research: The pain and the gain. Presentation given at the Healthy Relationships Utah 2019 conference.

## PRESENTATIONS

Kopystynska, O., Bradford, K., Higginbotham, B. J., & **Crapo, J. S.** (2019, November). Reciprocal influences of self-reported and perceived socioemotional behaviors in higher-order marriages. Poster presented at the National Council on Family Relations Annual Conference, Fort Worth, TX.

**Crapo, J. S.**, Miller, J. A., Bradford, K., & Higginbotham, B. (2018, November). A latent class analysis of relationship education participants at different venues: Implications for programming. Poster symposium presented at the National Council on Family Relations Annual Conference, San Diego, CA.

**Crapo, J. S.**, Barrett, T. S., Bradford, K., Higginbotham, B. J. (2017, November). Family life stage and relationship education efficacy. Paper presented at the annual meeting of the National Council on Family Relations, Orlando, FL.

**Crapo, J. S.** & Bradford, K. (2017, November). Multidimensional family development theory: An evolution of family development. Paper presented at the Theory Construction and Research Methodology workshop of the National Council on Family Relations, Orlando, FL.

**Crapo, J. S.**, Bradford, K., & Higginbotham, B. J. (2017, March). The gendered impact of family life stage on relationship education. Poster presented at the annual meeting of the Utah Council on Family Relations, Salt Lake City, UT.

Rhodes, M. R., **Crapo, J. S.**, Miller, J. A., Bradford, K., & Higginbotham, B. J. (2016, November). Need for change, satisfaction, and disclosure: A latent class analysis. Poster presented at the annual meeting of the National Council on Family Relations, Minneapolis, MN.

## GRANTS

**Research Assistant, Fresh AIRE: Analytic Innovations in Relationship Education**, Office of Planning, Research & Evaluation (OPRE), U.S. Administration for Children and Families. Bradford, K (PI), Higginbotham, B. J. (\$150,000 FY 2019-2021).



*Under review.*

Role: Write and design potential research studies section of proposal. Feedback and editing regarding grant proposal. Execute said research studies and design and carry out additional studies using federal extant data, upon awarding of grant.

**Principal Investigator**, *Qualitative Changes in Marital Satisfaction Over Time*, Utah State University Graduate Research and Creative Opportunities (GRCO) award. Crapo, J. S. (PI), Bradford, K. (\$1,000 FY 2018-19). *Not funded*.

### TEACHING EXPERIENCE

#### **Instructor of Record (100% Responsibility)**

HDFS 1500: Human Development Across the Lifespan, Online  
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