

AN ABSTRACT OF THE THESIS OF

Steven M. Wicks for the degree of Master of Science in Human Development and Family Studies presented on September 18, 2012.

Title: Effects of Insecure Attachment on Marital Interactions: Examining the Family Stress Model.

Abstract approved:

Alan C. Acock

This exploratory study posited that being in an insecure marriage would increase marital conflict and perceived relational aggression when the couple is experiencing economic constraints. The cross-sectional design assessed two groups of marriages: secure and insecure. A structural equation model using multiple group comparison tested the effect of each type of marriage, controlling for husband and wife education, number of children, and length of marriage. Results indicated that husbands who identify as insecure experience greater marital conflict and perceive their spouses to be more psychologically aggressive. There was also evidence of a cross-lag effect indicating husbands' perceived marital conflict positively influences wives' perceptions of greater spousal psychological aggression for insecure couples, but not secure couples. This is the first study to use attachment as a moderating variable in the family stress model. Future research should look to include greater measures of attachment, with a focus on longitudinal designs. Implications are also discussed.

© Copyright by Steven M. Wicks
September 18, 2012
All Rights Reserved

Effects of Insecure Attachment on Marital Interactions:
Examining the Family Stress Model

by
Steven M. Wicks

A THESIS

submitted to

Oregon State University

in partial fulfillment of
the requirements for the
degree of

Master of Science

Presented September 18, 2012
Commencement June 2013

Master of Science thesis of Steven M. Wicks presented on September 18, 2012

APPROVED:

Major Professor, representing Human Development and Family Studies

Co-Director of the School of Social and Behavioral Sciences

Dean of the Graduate School

I understand that my thesis will become part of the permanent collection of Oregon State Libraries. My signature below authorizes release of my thesis to any reader upon request.

Steven M. Wicks, Author

ACKNOWLEDGEMENTS

This thesis would not have been possible without the patient guidance of many people. First and foremost, I would like to thank Dr. Alexis Walker for her unwavering support, and critical analysis of my writing. Without her, I would still be lost trying to find my voice. While she was unable to see the final product, her guidance and spirit can be seen throughout this work. Second, I would like to thank Dr. Alan Acock for taking on a much larger role than anticipated. His statistical expertise was most appreciated during this adventure. I would also like to thank Dr. Kate MacTavish and Dr. Lori McGraw, for asking questions that both challenged my knowledge of the material, and also made me think more critically of the work I was doing.

A thank you is in order for my grandfather Ervin Wicklacz. Thank you for believing in me, even if my work was often confusing to explain. Of course, a big thank you is in order to my parents, Michael and Jill, for supporting my decision to leave the comforting confines of Wisconsin, and venture across the country to further my education. You've supported me through the highest of highs, and lowest of lows. I would not be here today if it were not for both of your loving support.

A special thank you is in order for Dr. Kathy Greaves, who not only mentored me, but taught me a thing or two about staying true to your beliefs and convictions.

Finally, a big thank you is in order to the friends and colleagues I have grown close to over the last three years. Life-long friends we shall remain, as we reflect on those crazy years we called graduate school.

CONTRIBUTION OF AUTHORS

As co-authors, Dr. Alexis Walker and Dr. Alan Acock assisted in the design of this study and manuscript. Dr. Alan Acock also provided statistical assistance, design, and interpretation of data. Dr. Randal Da provided data for this study.

TABLE OF CONTENTS

	<u>Page</u>
Chapter 1: General Introductions.....	2
Chapter 2: Effects of Insecure Attachment on Marital Interactions: Examining the Family Stress Model.....	34
Abstract.....	35
Introduction.....	36
Methods.....	41
Results.....	46
Discussion.....	49
Limitations and Future Directions.....	52
Appendix.....	56
References.....	62
Chapter 3: Conclusion and Implications.....	70
Bibliography.....	74

LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
1.1 Family Stress Model.....	20
1.2 Proposed Family Stress Model.....	22
2.1 Structural Equation Model of Secure Couples’ Marital Interactions.....	56
2.2 Structural Equation Model of Insecure Couples’ Marital Interactions	57

LIST OF TABLES

<u>Table</u>	<u>Page</u>
2.1 Correlations and Descriptive Statistics or Path Model Variables and Controls for Married Couples.....	58
2.2 Means and Standard Deviations of Covariates.....	59
2.3 Unstandardized, Standardized, and Significance Levels for Secure Group in Figure 2.1.....	60
2.4 Unstandardized, Standardized, and Significance Levels for Insecure Group in Figure 2.1.....	61

DEDICATION

I dedicate this work to my grandmother Nancy Defaut, whom passed away during my first year of graduate school. Her tireless love and support will always be remembered. I hope I've made her proud.

I also dedicate this work to my mentors from the University of Wisconsin-Green Bay: Dr. Denise Bartell, Dr. Kris Vespia, and Dr. Jill White. If it were not for having them as mentors and teachers, I would not have even considered possible the idea of pursuing a graduate degree.

Finally, I dedicate this to Deke, my four-legged companion (more affectionately known as "Catdog" to my mother), who I was unable to spend time with during his final days. You were one in a million, and I hope you're enjoying that big field in the sky.

Effects of Insecure Attachment on Marital Interactions:
Examining the Family Stress Model

Effects of Insecure Attachment on Marital Interactions: Examining the Family Stress Model

Chapter 1: General Introduction

The world is slowly pulling out of a recession that has brought the harsh reality of financial insecurity into the living rooms of global families. U.S. families are navigating the uncertainty of unemployment, inflating debt, and decreasing assets. The number of families with at least one unemployed member nearly doubled from 6.3% in 2007 to 12.4% in 2010 (Bureau of Labor Statistics, 2012). Past research has shed light into the difficulties faced by families during times of economic hardship.

Financial instability in families has been associated with physiological and psychological distress (Kinnunen & Feldt, 2004), decreased marital satisfaction (Kwon, Reuter, Lee, Koh, & Ok, 2003; Vinokur, Price & Caplan, 1996), increased marital conflict, increased marital aggression (Falconier & Epstein, 2010; Liker & Elder, 1983), and poor parenting (Conger & Conger, 2002). Further research on the effects of economic strain on marital relationships may guide interventions designed to help individuals in financially constrained marriages and aid those who work with financially distressed couples (i.e., financial counselors, marital therapists).

Recent research on economic stress and families has been guided by the general family stress model. This model posits that accumulated stress may overburden an individual's ability to cope, and also may increase this individual's negative behavior toward his or her partner (Conger et al., 1990; Lazarus & Folkman, 1984; Pearlin, 1989). The family stress model also incorporates concepts from the frustration-aggression hypothesis posited by Berkowitz (1989), stating that frustration derived from negative

affect will contribute to aggression and anger. The model would be improved with additional constructs that better explain the relation between economic stress and problematic outcomes in marriage. The proposed study extends the family stress model by incorporating a potential moderator between economic stress and negative marital outcomes: insecure attachment. Economic stress may be viewed as a threat to the emotional availability of a romantic partner. This lack of availability has the potential to activate an insecure individual's working model of attachment (Mikulincer & Shaver, 2007), leading to conflict between partners.

I anticipate that adult attachment theory will help to explain why only some marital dyads experience conflict and psychological aggression when confronted with economic strain. Adult attachment theory has helped explain conflict in intimate and marital relationships (Mayseless, 1991; Simpson, Rholes, & Phillips, 1996), physical and psychological aggression in intimate relationships (Henderson et al., 2005; Meesters & Muris, 2002; Weston, 2008), hostility (Rholes, Simpson, & Oriña, 1999), and relational/marital quality (Feeney & Noller, 1990; Hollist & Miller, 2005), and thus fits well with outcomes of the family stress model. The connections among economic strain, attachment in adulthood, and marital outcomes is undetermined. Investigating these connections will greatly increase our understanding of a process by which economic strain influences conflict and aggression between marital partners. I expect that individuals in secure adult attachment relationships will be better able than those with attachment anxiety or attachment avoidance to navigate economic strain because they likely possess greater ability to cope with conflict and stress (S.I. Powers et al., 2006).

Whereas secure attachment mitigates the effects of stressful events, attachment anxiety likely will have the opposite effect. I expect, then, that individuals with insecure attachment will perceive more conflict in their marital relationships than securely attached individuals when confronted with economic strain. These insecurely attached individuals also will have an increased likelihood of perceiving relational aggression.

To better understand how attachment influences the relationships among economic strain, marital conflict, and perceived psychological aggression, the proposed study will investigate a modified family stress model (Conger et al., 1990). Instead of using the well-established mediational model (Conger et al., 1990) that incorporates psychological variables (i.e., depression, anxiety, warmth, support) into the model, the proposed study will use a measure of attachment insecurity. This measure will act as a proxy for negative affect. The study will investigate whether attachment insecurity moderates the relationship between economic strain and marital conflict, and it will investigate the relationship between marital conflict and perceived psychological aggression. Consistent with the family stress model, the study also will investigate whether direct relationships exist between economic strain and perceived psychological aggression, and whether marital conflict mediates the relationships between economic strain and perceived psychological aggression among married couples.

The proposed study will add to the literature on families facing economic challenges by introducing how attachment styles influence relational processes. The outcomes of this study have the potential to guide mental health professionals to address attachment as a contributor to relationship conflict during times of economic hardship.

Economic Pressure

Economic pressure encapsulates the daily financial difficulties of families most often associated with adverse economic conditions (Conger & Elder, 1994). In early studies of economically deprived families, the primary way to measure economic pressure was income loss (Elder, 1974) and unemployment status (Komarovsky, 1940). These two dimensions provided the groundwork for operationalizing economic pressure in Conger and colleagues' (1990) family stress model. To assess the general economic state of families, two more measures were added: income level and debts to assets. Income level was borrowed from poverty research, whereas debts to assets was included as a measure during the late 1980s. This research demonstrated that family debts to assets increased family economic stress (Conger & Elder, 1994). Together, these four dimensions represented family economic pressure. Subjective measures of economic pressure (i.e., difficulty paying bills and lack of money at the end of the month) also were identified in later models addressing family adaptive strategies to economic pressure (Elder, Robertson & Ardelet, 1994).

The initial model, proposed by Conger and colleagues (1990), measured family economic status relative to the poverty line by placing the subjects in the economic structure of 1987, and by using an income-to-needs equation. The purpose of this measure was to adjust total family income from all combined sources and to divide that by the U.S. Census Bureau's guidelines for family poverty based on family size. The outcome resulted in a number evaluating a family's given income and it provided an assessment of whether a family's income falls below, was at, or was above the basic need level for that family. Including this measure in the model produced a ratio that was a better representation of financial hardship compared to total family income that was

originally used in the family stress model (Conger et al., 1990). In addition to income level, researchers determined that a measure of economic pressure was needed.

Economic pressure was assessed by addressing two dimensions of income change over long-term (1984-1987) and short-term (1986-1987) durations because previous research showed that changes in income level were linked to economic problems (Mayer & Jencks, 1989). Researchers also included a measure of unstable work life in the construct of economic pressure. A measure of unstable work life was defined as having experienced one or more events over the past year (i.e., changed jobs for a worse one, was demoted, experienced cut in wage/salary, laid off).

Building from prior research, Conger and colleagues (1990) identified economic strain as a linking variable between economic hardship, within which economic pressure was contained, and marital functions. Economic strain was conceptualized as an indicator of psychological response to economic pressure. In this conceptualization, scores are determined by objective economic conditions as well as by perceived expectations regarding an expected standard of living. Because of its multidimensionality, three indicators were used to assess reported strain, including problems paying bills, problems making ends meet, and behaviors suggesting recognition of present financial difficulties (Conger et al., 1990). Differences in scales between husbands and wives prompted Conger and colleagues to standardize the items separately, and to sum them to construct a single index of overall family economic strain for husbands and wives.

Given the complexity of Conger and colleagues' (1990) construction of economic hardship and economic strain, the proposed study will follow a recent trend using

simplified subjective economic strain measures. Reducing the information used to describe economic strain provides a straightforward interpretation of what economic strain will be. Recent studies also have reduced the complexity of economic strain and have not included measures of asset-to-debt ratios or income levels (Falconier, 2011; Falconier & Epstein, 2010). The levels of income change used in the original model (Conger et al., 1990) will not be used in the present study because there is incomplete data on husband and wife income over the waves in the Flourishing Families dataset. Whereas past studies have used multiple indicators of economic pressure (i.e., debts-to-assets ratio) and economic strain (i.e., perceptions of inadequate income), the proposed study will use an objective (financial constraints) and a subjective measure of economic strain (financial concerns). Together, these two indicators will be used to create the exogenous variable *economic strain*, a global indicator of economic strain (Voydanoff, 1990).

Association Between Economic Strain and Marital Conflict

In an analysis of previous research on the influence of economic hardship on marital relations and outcomes, Conger and colleagues (1990) noticed inconsistent results between socioeconomic factors and reports of marital quality. They posited that the inconsistencies may have resulted from a lack of spousal behavioral interaction measures. Support for the inclusion of an interaction measure was suggested by Liker and Elder (1983), who reported a positive association between income loss and marital tension during the Great Depression. Also noted by Liker and Elder (1983) was an increase in the hostile behavior of men under economic strain. In essence, past research suggested that economic hardship negatively influences marital exchanges.

To address the lack of behavioral interaction variables in previous research, Conger and colleagues (1990) included two measures of hostile behavior to create a single index for each spouse. During an observational portion of the Conger study, observers coded behavior as hostile if spousal actions involved criticism, angry gestures, or contempt toward a partner. Observers also coded warm and supportive behavior, following suggestions from previous research (Kessler, Turner, & House, 1988). Previous research had indicated that both negative and positive spousal interactions were influenced indirectly by economic hardship through the economic strain portion of the construct (Conger et al., 1990). Conger and colleagues' (1990) findings supported a direct relation between economic strain and husbands' hostility, but showed no significant relation between economic strain and wives' hostility. Greater husbands' hostility was negatively related to wives' perceived marital quality, and greater hostility by wives also was related to a decrease in perceived marital quality by husbands. Positive reports of husbands' warmth were positively related to greater perceived marital quality by wives, but no significant effect was found from reports of wives' warmth on husbands' perceived marital quality. Taken together, economic strain seemed to have the greatest influence on hostile and supportive behaviors of men (Conger et al., 1990; Liker & Elder, 1983).

A growing volume of literature has supported the hypothesis that economic strain increases emotional arousal and distress (Conger & Conger, 2002; Conger et al., 1992; Conger & Elder, 1994; Conger, Ge, Elder, et al., 1994). Conger, Ge, and Lorenz (1994) also posited that emotional distress potentially mediates marital conflict by building upon Berkowitz's (1989) hypothesis that negative affect derived from stressful events will

foster aggression and anger. Conger, Rueter, and Elder (1999) confirmed that husbands' and wives' emotional distress is significantly related to marital conflict. This study, however, did not find a direct relationship between economic strain and marital conflict, suggesting that psychological variables mediate the relationship between economic strain and marital conflict (Conger & Conger, 2002; Conger et al., 1990, 1992; Conger et al., 1994; Conger, Rueter, & Elder, 1999).

Other studies have confirmed the mediating properties of psychological variables on the relationship between economic strain and negative marital interactions (Falconier, 2011; Falconier & Epstein, 2010; Gudmunson, Beutler, Israelsen, McCoy & Hill, 2007; Kinnunen & Feldt, 2004; Kinnunen & Pulkkin, 1998; Kwon et al., 2003; Vinokur, Price, & Kaplan, 1996). In particular, Gudmunson et al. (2007) found that 33% of the variance in couple disagreement could be explained by emotional distress. A few studies also have found direct links between economic strain and forms of conflict (Gudmunson et al., 2007; Kwon et al., 2003). Gudmunson et al. (2007) discussed that although the direct path between economic strain and couple disagreement was positively associated, the impact of individuals' emotional distress on couple disagreement was reduced with the inclusion of the direct path. This finding suggests that economic stress both directly and indirectly contributes to individual and couple factors and also suggests that individuals may need to do more than keep negative emotions in check if they seek to shield their spouse from the detrimental effects of economic strain.

Direct and indirect links between varying forms of economic strain and marital conflict are fairly represented in past and current literature. Another established finding is the importance of including variables that demonstrate varying psychological factors

such as negative (hostility, social undermining, depression, anxiety) and positive (warmth, support) affect. Other mediating variables have been postulated, including demand/withdraw communication patterns (Falconier, 2011) and aggression (Falconier & Epstein, 2010). As discussed below, the proposed research looks to modify the family stress model by including measures of attachment style, as measured by an insecure attachment.

Attachment in Marital Relationships

The idea that working models of attachment maintain their importance throughout the lifespan has been suggested on numerous occasions (Ainsworth, 1982, 1989; Bowlby, 1979, 1980, 1982), with continuity of attachment behavior having been documented (Bowlby, 1973, 1980). Research on attachment in adulthood has shown that attachment is important for social and emotional adaptation (Bartholomew & Horowitz, 1991), and for strengthening affectional bonds to intimates (Bartholomew, 1990). These concepts hold considerable weight in the realm of romantic and marital relationships.

Hazan and Shaver (1987) were the first to explain romantic love in adult relationships through the use of attachment theory. They posited that adult romantic relationships would mirror the three styles of attachment identified by childhood attachment research (Ainsworth et al., 1978), including secure, anxious/ambivalent, and avoidant styles. Secure attachment in childhood occurs when a child actively seeks contact with a caregiver, using the caregiver as a secure base for exploration. The child also is easily comforted after separation from a caregiver. Anxious/ambivalent attachment is characterized by clingy child behavior and a failure to explore the environment in the presence of a caregiver. The child also exhibits anger, resistance, and

trouble being soothed when reunited with a caregiver. Often times, the child will exhibit confused and contradictory behaviors when interacting with the caregiver. Avoidant attachment is recognized by unresponsiveness in the presence of a caregiver, little to no distress during separation, and slow reactions and failure to cling when reunited with a caregiver. Unique to adult attachment is the motivation to become attached or not attached to others. A lack of adult attachment to a romantic partner could stem from a fear of or a lack of a desire for intimacy. Based on this assumption, Bartholomew (1991) broke avoidance into two categories (dismissing and fearful) to expand the original three category system of Hazan and Shaver (1987). Doing so allowed for a greater distinction between those who avoid intimacy out of fear because of past relationship rejection and those who do not see the benefit of intimacy and actively avoid it.

Attachment behavior is typically invisible until the system is activated, usually in times of stress. In classical attachment terms, stressors in marital relationships, such as divorce or periods of conflict may activate an individual's attachment system, revealing the processes that govern the individual's approach to conflict resolution and serving to potentially escalate physical or psychological aggression (Mayseless, 1991). Secure individuals approach conflict constructively through active problem solving, insecure individuals are less likely to disclose their true feelings to their partners and they are less likely to compromise. Avoidant individuals tend to withdraw from conflict (Feeney, 2004), and they are more likely to distrust their partner (Mikulincer & Shaver, 2007; Simpson et al., 1999). Bowlby (1973) hypothesized that adult attachment patterns remained stable over long periods of time, as compared to attachment patterns in childhood. However, he also posited that changes in personal, familial, and social

contexts can reduce the availability, responsiveness and sensitivity of primary attachment figures. Comparing the stability of childhood attachment to adult attachment, Fraley (2002) concluded that adult attachment remains more stable than those patterns observed in childhood. A reduction in the availability, responsiveness, and sensitivity of an attachment figure (e.g. romantic partner), though, could affect the quality of interactions between the adult and the attachment figure, and it could prompt an updating of the working model within the adult (Mikulincer & Shaver, 2007). Still, evidence suggests that attachment models are quite stable over time. For example, Klohen and Bera (1998) examined the stability of attachment in a group of women for over 25 years. Test-retest correlations at 27 years were found to be relatively stable at .55. A meta-analysis of more than 30 published studies of attachment stability revealed test-retest ranges between 44% and 90%. For a review of these studies, see Mikulincer & Shaver (2007).

Studying attachment in adulthood has many implications for understanding relational processes. Attachment has been used to study relationship quality and duration (Feeney, 1995; Hazan & Shaver, 1994), relationship satisfaction (Feeney, 1994; Kirkpatrick & Hazan, 1994), perceived partner support (S. Cohen & McKay, 1984), and conflict negotiation (S.I. Powers et al., 2006) among others. Appraisals of negative events and conflict negotiation in particular are relevant to the family stress model proposed by Conger and colleagues (1990). Whereas numerous studies have examined the family stress model, none have considered using attachment as a way to address the indirect relationship between economic strain and marital outcomes, such as instability or conflict. Previous research on attachment in adult relationships has focused on young adults in dating relationships. The proposed study will use a middle-aged married sample

to investigate how attachment styles influence marital processes such as marital conflict and perceived relational aggression within the context of the family stress model.

Insecure Attachment and Conflict

Past evaluations of the family stress model have demonstrated that economic strain indirectly influences marital conflict through increased negative affect, such as depression and anxiety (Conger et al., 1990; Conger & Conger, 2002; Conger & Elder, 1994; Falconier, 2011; Falconier & Epstein, 2010; Gudmunson et al., 2007; Kinnunen & Feldt, 2004; Kwon et al., 2003). Economic strain can be viewed as an apparent threat to a relationship; this “apparent threat” is often described as an activating condition of the attachment system (Bowlby, 1984). Depression, a psychological variable commonly used to access negative affect in the family stress model, has been linked to insecure attachment styles (Hazan & Shaver, 1990). Along the same line, anxiety, another common variable found in family stress models, has been reported to contribute to conflict behavior among married couples (Feeney, 2004). Investigating adult attachment styles may provide insight into how couples engage in and negotiate conflict.

Individuals who identify as being securely attached to their partner recognize that conflict poses challenges rather than threats to the relationship. They believe that conflict can be negotiated effectively. In addition, secure individuals engage in effective emotion regulation, helping them to facilitate open communication and collaboration during conflict resolution (Pietromonaco, Greenwood, & Barrett, 2004). To those with an insecure attachment style, conflict is appraised as a threat that hampers their access to approval, support, and security from their partner. Conflict essentially engages attachment seeking behavior that includes an intensification of emotions. These intense

emotions negatively affect one's ability to negotiate conflict constructively by decreasing open communication and compromise (Mikulincer & Shaver, 2007). Insecurely attached men and women also tend to use less empathy, express less affection, and engage in more demand-withdrawal communication patterns that contribute to the experience of more post-conflict distress (Mikulincer & Shaver, 2007). Men and women who rate as high in insecurity report more distress post-discussion about recent conflict events (Simpson, Rholes, & Phillips, 1996). This finding was also confirmed by Gallo and Smith (2001). Insecure men and women also experience more negative emotions and difficulty coping with negative arguments (Creasy & Hesson-McInni, 2001).

Researchers have shown generalized patterns of conflict tactics across samples of married women (Carnelly, Pietromonaco, & Jaffe, 1994) and married couples (Feeney, 1994). Conflict is a regular occurrence in most close relationships (Brehm, Miller, Perlman, & Campbell, 2002). Dealing with conflict may facilitate development and maintenance of intimacy and satisfaction in a relationship (Fincham & Beach, 1999; Gottman & Notarius, 2000). Yet, conflict may act as a stressor to the relationship that activates individual attachment systems (Simpson, Rholes & Phillips, 1996). Conflict may also challenge a partner's ability to regulate emotions and behaviors (Koback & Duemmler, 1994). Individuals who evidence attachment insecurities report using less constructive strategies for navigating conflict (Carnelly, Pietromonaco, & Jaffe, 1994; Creasy & Hesson-McInnis, 2001; Creasy, Kershaw & Boston, 1999; Feeney, 1994).

Evaluating an individual's attachment style in the context of a romantic relationship may lend evidence to why certain individuals experience conflict as a threat to the relationship, hold more global negative views toward their partner (Collins & Reid,

1990; Hazan & Shaver, 1987), but also tend to idealize their partner when experiencing conflict (Feeney & Noller, 1991). Focusing directly on anxious attachment may provide evidence for why individuals engage in more conflict because anxious individuals tend to view conflict as a precursor to abandonment, activating attachment seeking goals (Pietromonaco et al., 2004). The proposed study will investigate whether insecure attachment modifies the experience of conflict between husbands and wives.

Relational Aggression in Marital Relationships

Aggression in marital relationships can be experienced either physically or psychologically. Conger et al. (1990) did not measure aggression directly in the family stress model. Rather, qualities that have often been defined as aggressive behavior, such as hostility, were measured. Building on Liker and Elder's (1983) observation of increased hostility among men encountering sustained economic strain, Conger and colleagues also measured spousal hostility in the family stress model. Measuring spousal hostility adds a psychologically negative component that is conceptually opposite of warmth and supportive behavior to the model. More recent studies have employed relational aggression as an outcome of the family stress model (Falconier, 2011). In Falconier's (2011) study, increases in women's anxiety lead not only to increases in their own psychological aggression, but also to increases in their partners' psychological aggression. For husbands, depression related positively to their own psychological aggression, as well as to that of their wives.

Conger and colleagues (1990) and Falconier (2011) both included measures of negative psychological affect in their respective models. Karney and Bradbury (1995) have noted in longitudinal findings that overt conflict patterns account for a relatively

small amount of the variance in marital outcomes. Marital aggression has been almost exclusively studied as overt, physical aggression (Carroll et al., 2010). Archer and Coyne (2005) noted that in recent years, there has been an increase in the prevalence of covert forms of aggression found in the social interactions of children, teens, as well as adults. An inclusion of a psychological measure of relational aggression may help us to key in on unobservable forms of aggression, as past studies of marital conflict all too often focus on physical aggression, potentially underestimating the presence of psychological aggression (Carroll et al., 2010).

The proposed study aims to modify the family stress model by keeping perceived relational aggression as an outcome, but will drop the negative affect variables in favor of a negative attachment variable and substitute marital conflict as a mediating variable between economic constraints and perceived relational aggression. Reasons for doing so are explained in the next section.

Insecure Attachment and Aggression

Aggression has been studied through the context of attachment styles within relationships. Conger and colleagues (1990) assess aggression in their relationship for both men and women, and found hostility to be a mediating variable between economic strain and marital outcomes, such as marital instability.

Focusing specifically on attachment anxiety (insecure attachment), Mikulincer (1998) found that individuals who reported attachment anxiety were prone to experiences of anger toward an attachment figure, less able to control expressions of angry feelings, more likely sustain brooding thoughts of anger, more likely to hold hostile attitudes toward romantic partners, and more likely to become enveloped in distress during anger-

eliciting interactions. Saliency of aggression tends to develop out of insecure attachment, whereas anger and hostility are expressed more frequently when romantic partners attempt to identify unresolved problems within the relationship and then set out to discuss and resolve them (Simpson et al., 1996).

In a study of overt manifestations of anger, Rholes, Simpson, and Oriña (1999) found that women who self-reported attachment anxiety showed more intense anger toward their partner when they were told that a task that was to be performed no longer needed their attention. Dutton et al. (1994) reported positive relationships between insecure attachment and men's psychological abuse toward partners, whereas Senchak and Leonard (1992) found frequent verbal aggression when either wives or both partners were assessed as having an insecure attachment. Bookwala (2002) reported that sustained aggression was more common in relationships where both partners identify as insecure, whereas having at least one secure partner seems to mitigate experiences of aggression.

As described above, attachment theory provides a rich framework to study relational aggression. Those with insecure attachments seem to be more prone to angry and hostile actions toward their partners in reaction to stressful events. The proposed study will use insecure attachment as a modifying agent between marital conflict and perceived relational aggression, and will look to build upon the solid foundation of linking attachment to relational/marital functioning.

Research Question

The recent economic recession that began in 2008 has brought back a decades old question addressed by Conger et al. in 1990: Does economic strain affect family

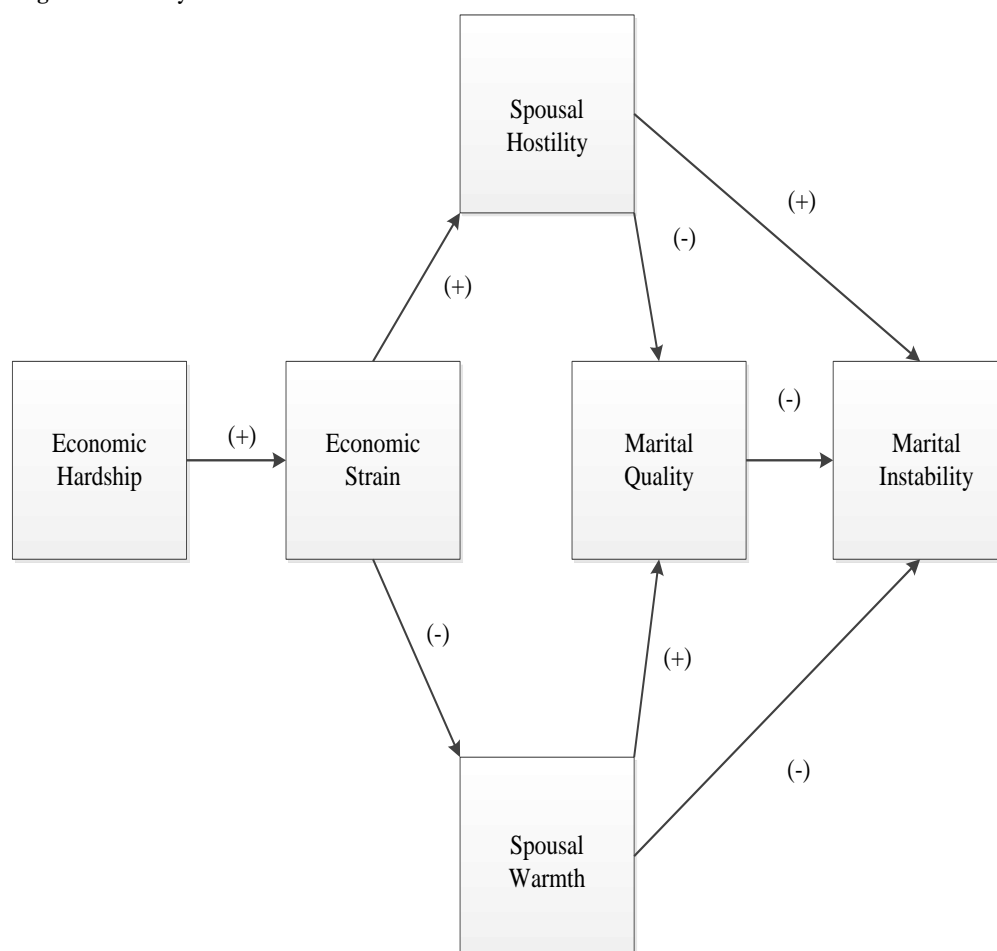
functioning, and if yes, how so? Past (Conger et al., 1990; Komarovsky, 1940; Liker & Elder, 1984) and recent (Falconier & Epstein, 2010; Kinnunen & Feldt, 2004; Gudmunson et al., 2007) studies have found that economic strain indirectly effects marital quality through hostile and withdrawing behaviors of men and the hostility of women when faced with economic uncertainty or inability to meet current needs. Conger and colleagues' (1990) family stress model has been validated in numerous studies with populations in Argentina (Falconier, 2010; Falconier & Epstein, 2010; 2011) Czechoslovakia (Hraba, Lorenz & Pechacova, 2000), Finland (Kinnunen & Feldt, 2004; Kinnunen & Pulkkinen, 1998), Romania (Robila & Krishnakumar, 2005), South Korea (Kwon et al., 2003), and the United States (Conger, Elder et al., 1990; Conger, Wallace et al., 2002; Dew & Yorgason, 2009; Gudmunson et al., 2007; Vinkour, Price, & Caplan, 1996).

Recent studies have examined the mediating effects of psychological variables including depression and anxiety (Falconier, 2010), and female-demand/male-withdrawal communication patterns (Falconier & Epstein, 2011). Although many of these studies have mirrored the original model (Conger et al., 1990) by measuring husband and wife hostility and warmth/supportiveness, few studies have measured other couple variables such as marital conflict or relational aggression as mediators. Most studies have used measures of marital conflict/psychological aggression as outcome variables. Further, little to no research has examined whether attachment style plays a role in moderating marital conflict or perceived relational aggression when applied to the family stress model. To address this shortage, this research addresses the question: Does attachment

style moderate the effects of economic strain on marital conflict, and in turn moderate the effects of marital conflict on perceived relational aggression?

Theoretical Perspective

Conger et al.'s (1990) family economic stress model draws from Berkowitz's (1989) frustration-aggression hypothesis and Lazarus and Folkman's (1984) and Pearlin's (1989) discussions of how accumulated stressors may overburden an individual's ability to cope and lead to the expression of negative behavior toward the partner, that, in turn could lead to a decrease in satisfaction in or dissolution of the relationship. The purpose of developing this model was to investigate nuances in marital interaction that might account for the influence of difficulty on spousal perceptions of marital quality and instability (Conger et al, 1990). The model (See Figure 1) hypothesizes that economic pressure will diminish perceptions of marital quality/stability by increasing negative interactions between spouses at the expense of warm and supportive expressions. Secondary in the hypothesis is that the catalyst for reciprocal spousal hostility and withdrawal is the husband's negative response to financial problems. Conger et al. (1990) point out that the husband's social role and identity would be most at risk when economic hardship is encountered, consequently reinforcing negativity in family interactions.

Figure 1.1 Family Stress Model

Note: Family Stress Model showing mediation between economic strain and marital instability by spousal hostility/warmth. In “Linking Economic Hardship to Marital Quality and Instability”, Conger et al., 1990, *Journal of Marriage and Family*, 52, p. 646.

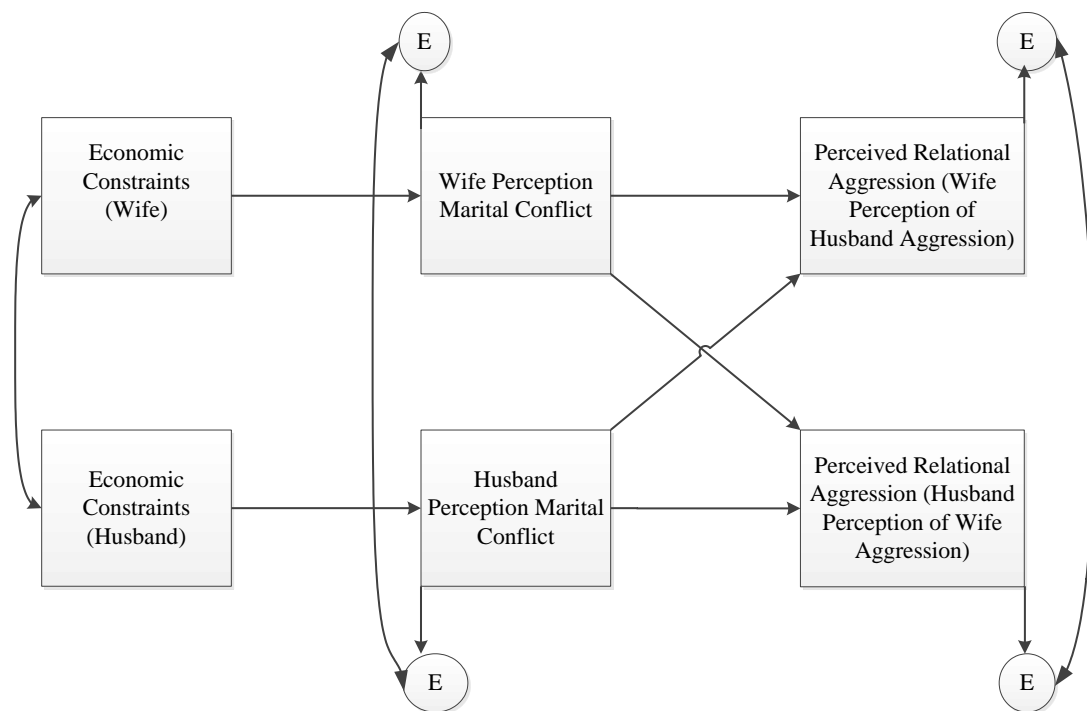
When Conger and his colleagues applied this model to the effects of economic pressure, they proposed that both partners would experience subjective pressure and strain, not just the husband. This subjective strain was posited to cause both partners to experience emotional strain, decrease supportive and warm behaviors, and increase hostile interactions with each other. The mounting emotional strain and increasing hostile behavior ultimately leads to an over taxation of spouses' abilities to cope, resulting in feelings of distress and/or a reduced sense of marital quality.

Researchers today continue to use the Conger family stress model when addressing the influence of economic strain on marital processes, and the model has been validated in numerous samples in the United States and abroad. Recent studies have expanded the model to include changes in communication patterns in the form of demand/withdrawal (Falconier & Epstein, 2011) and psychological aggression (Falconier, 2010). Yet, these studies have continued to use basic principles of the model by including psychological markers of negative affect such as depression and anxiety. Further research should examine other psychological or social markers that could potentially influence these interactions.

To address this limitation, this study proposes to use a similar model with a few modifications. These modifications include more focus on conflict by including a measure of marital conflict in the model (which aims to show negative affect and mediational properties) and a measure of psychological aggression: perceived relational aggression (See Figure 1.2). Psychological aggression continues to be an underreported

and understudied process of the marital dyad. The proposed model does not include depression and anxiety, as these psychological symptoms have been thoroughly established as factors in previous literature.

Figure 1.2. Proposed Family Stress Model.



Note: Attachment is not shown. Moderation will be conducted by producing groups of secure and insecure couples.

One key area that has not been addressed is how attachment influences the marital dyad when applied to the economic family stress model. Attachment is prevalent in the romantic relationship literature and has focused on marital processes in the past. Based on the literature, we know that having a supportive partner and receiving supportive appraisals from a partner during stressful events leads partners to experience less distress and could reduce the development of emotional and somatic problems (S. Cohen, Gottlieb, & Underwood, 2000; S. Cohen & Willis, 1985; Finch, Okun, Pool & Ruehlman, 1999; Schwarzer & Leppin, 1989). Perceiving a partner to be supportive also buffers the effects of stressful events and it bolsters perceived coping capabilities, mitigating the catastrophic appraisals of stressful events, intrusive worries, fruitless rumination, and maladaptive coping (S. Cohen & McKay, 1984; Lepore, Silver, Wortman, & Wayment, 1996; Thoits, 1986).

In a meta-analysis of 48 studies, Finch et al. (1999) found that distressing interactions had adverse effects on psychological well-being and resulted in increases of anxiety, anger, and sadness. Those with poor attachment styles addressed negative experiences and threats to relationships in varying ways (see Kirkpatrick & Hazan, 1994), and conflict negotiation may be particularly stressful for some (Powers et al., 2006). Including a measure of attachment in the proposed model may help explain the interaction between attachment and a propensity for conflict. Conflict may reveal attachment processes by acting as a stressor on the relationship, activating the attachment system (Simpson, Rholes & Phillips, 1996), challenging a partner's ability to regulate emotions and behavior (Koback & Duemmler, 1994), and promoting intimacy-seeking behavior (Pietromonaco & Barrett, 1997).

Hypotheses

H1: Partner's level of marital conflict will mediate the relation between economic strain and relational aggression. In other words, economic strain will have a direct, positive effect on one's level of marital conflict, which in turn will positively predict one's perception of one's partner's relational aggression. H2: There will be a positive association between both partners' levels of economic strain and relational aggression. H3: An insecure attachment style will strengthen the effect of economic strain on marital conflict. In other words, having an insecure attachment will magnify the relation between economic strain and marital conflict for both husbands and wives. Also an insecure attachment style will strengthen the effects of marital conflict on perceived relational aggression. In other words, having an anxious attachment will magnify the relation between marital conflict and perceived relational aggression of both husbands and wives H4: Under economic strain, women as well as men will perceive greater marital conflict. H5: Wives' perceptions of perceived relational aggression will be positively related to husband's reports of marital conflict for secure and insecure attachment groups. Men's perceptions of perceived relational aggression will be positively related to wives' marital conflict.

Methods

Sample

Data came from the *Flourishing Families Project (FFP)* set. The purpose of the *FFP* project is to show how family processes impact the social development of young people as they make the transition from grade school, through high school, and into young adulthood. The FFP is an ongoing, longitudinal study of inner family life involving families with a child between the ages of 10 and 14 at Wave 1 (M age of child = 11.29, SD = 1.01; M age = 14.24, SD = 0.99 for two-parent at Time 4).). At Wave 1, this study consisted of 500 (163 single parent and 337 two-parent) families, with a 96% retention rate at Wave 2 (N = 480, 155 single parent and 325 two-parent families), 91.8% at Wave 3 (N = 459, 138 single parent and 321 two-parent families), and 93.8% retention rate at Wave 4 (N = 469, 149 single parent and 320 two-parent families). The average age between spouses was fairly similar (wives: M age 43.44, SD 5.54; husbands: M age 45.32, SD 6.23). The average length of marriage at Wave 1 was 17 years (SD 5.25).

The participants for this study will be taken from Wave 4 of *FFP*. The sample consists of 469 families (330 two-parent families and 139 single-parent families). For this study, only 2-parent families that identify as married will be used, with marital dyad n = 287 (N = 574). For two-parent families, in the original sample 86.6% of fathers, 80.7% of mothers, and 77.9% of children were European American, 5.4% of fathers, 5.9% of mothers, and 5.4% of children were African American, and 8.0% of fathers, 13.5% of mothers, and 16.7% of children were from other ethnic groups or were multiethnic. In terms of education, 68.6% of mothers and 70.9% fathers had a bachelor's degree or higher. With regard to income, 15.8% of families made less than

\$59,000 per year, 33.7% made between \$60,00 and \$99,000 a year, 33.3% made between \$100,000 and \$149,000, with the remaining 17.2% making more than \$150,000. A little fewer than 95% of two parent families were never divorced.

Flourishing Family Project families were selected from a large northwestern city and were interviewed during the first eight months of 2007 to develop a Wave 1 data sample. Families were then interviewed yearly for a second (2008), third (2009), and fourth time (2010). There has subsequently been another wave (2011) collected. Recruitment was assisted through the purchasing of a national telephone survey database (Polk Directories/InfoUSA). Eighty-two million households across the United States were claimed to be represented in the database, along with detailed information pertaining to each household. This information included presence and age of children within each household. Families selected mirrored the socioeconomic and racial stratification of reports of local school districts, as identified in the Polk Directory. Families with a child between the ages of 10 and 14 at Time 1 were deemed eligible to participate in the study. In all, 423 families agreed to participate out of 692, resulting in a 61% response rate. The Polk directory database was generated using telephone, magazine, and internet subscription reports; therefore lower socioeconomic families were under-represented in this study. An effort to represent local demographics more closely was made by attempting to recruit a limited number of families through other means (e.g., referrals, fliers; $n = 77$, 15%). Broadening the approach allowed for a significant increase in the socioeconomic and ethnic diversity of the overall sample.

Potentially eligible families were contacted directly first by a formal letter of introduction (this process was skipped for the 15 families who responded to fliers).

Second, home visits and phone calls were conducted by interviewers to confirm eligibility and willingness to participate. After eligibility and consent were established, appointments were made by interviewers to conduct in-home assessment interviews that included videotaped interactions (not used in the current study) as well as questionnaires. Both parents and children completed questionnaires in the home. Attempts were made to ensure each participant completed an individual questionnaire. As interviewers collected the in-home interviews, steps were taken to screen for missing answers and double markings. This process helped reduce the amount of missing data. Funding for this project was provided by grants to individual investigators and to the collective project at Brigham Young University by multiple private donors and funding entities within Brigham Young University. Families in the study were given \$200 for participation. \$175 dollars to the parents, \$25 to the target child (Day, 2009).

Predictor Variables

Financial Constraints: Each partner's family financial constraints were assessed using six items adapted from the Family Transitions Project (Spilman & Burzette, 2006). Likert-scale responses ranged from 1 (*strongly disagree*) to 5 (*strongly agree*), with higher scores indicating less felt constraint in meeting material needs. To retain consistency with the measures, these six items were reverse coded so that higher scores reflected greater financial constraints. Sample items include "I have enough money to afford the kind clothing that I should have" and "I have enough money to afford the kind of medical care that I need." Spilman and Burzette (2006) report prior reliability for this measure to be strong ($\alpha = .90$). Similarly, in the current sample, reliability coefficients were found to be .918 (P1) and .929 (P2). According to Voydanoff (1988), financial

constraints would be classified as objective measures of employment or income, as participants are asked to identify the level of money in their possession. Two additional items were assessed at the time of this survey, with one question asking “During the past 12 months, how much difficulty have you had in paying your bills?” and “Over the past 12 months, at the end of each month, do you generally end up with”.

Marital Conflict. To assess marital conflict, eight items were selected from the RELATE assessment battery (Busby, Holman, & Taniguchi, 2001), which included items such as, “parents/in-laws,” “communication” and “financial matters.” The eight items selected represent the most common areas conflict within marriage (Day, 2010). Responses were based on a 5-point Likert scale ranging from 1 (*never*) to 5 (*very often*). The original scale contained 15 items; for this study, only 8 of the most common areas of marital conflict were selected. The original study by Busby, Holman, and Taniguchi (2001) provided reliability measures of .80 (husbands) and .83 (wives). The reliability for this sample (Cronbach’s Alpha) was .75 (P1) and .76 (P2).

Couple Adult Attachment. Each partner’s attachment style was assessed using eight items from the Revised Experiences in Close Relationships Questionnaire (ECR-R) (Fraley, Waller, & Brennan, 2000). This scale measures anxious and avoidant attachment styles. The 7-point Likert response scale ranged from 1 (*strongly agree*) to 7 (*strongly disagree*). Sample questions include, “I often worry that my partner does not love me” and “I find it difficult to allow myself to depend on my partner.” Higher scores on questions 1 - 4 indicate higher levels of an anxious attachment style, whereas higher scores on questions 5 - 8 indicate higher levels of an avoidant attachment style. Items for measuring secure attachment were not included, as well as the four items measuring

avoidant attachment. In the original study, reliability for anxiety was .91 and .90 for avoidance (Fraley, Waller, & Brennan, 2000). The reliability (Cronbach's Alpha) for this sample was .91 for P1 anxiety and .88 for P2 anxiety. Validity of the original Experience in Close Relationships has been demonstrated in numerous studies, including both experimental manipulations and behavior observations (for a summary, see Mikulincer & Shaver, 2007). The ECR-R (R for revised), which was used in the current study, has reliability and stability estimates that are comparable to those of the original ECR items (Sibley, Fischer & Lui, 2005; Sibley and Lui, 2004).

Perceived Relational Aggression. Each partner's relational aggression was measured using an adapted version of the Self-Report of Aggression and Victimization in Marriage (SRAV-M, Nelson & Carroll, 2006). Based on the original Self-Report of Aggression and Victimization (Linder, Crick, & Collins, 2002; Morales & Crick, 1998), the SRAV-M was modified in language for committed couples where respondents were instructed to respond about their current relationship. The social sabotage subscale includes six items measuring the degree to which partners feel that their spouse utilizes socially aggressive behaviors in times of conflict and difference. Items include, "My partner gets other people to 'take sides' with him/her and gets them upset with me too" and "My partner has spread negative information about me to be mean." The love withdrawal subscale includes six items measuring the degree to which partners feel their spouse withdraws affection and support when there is conflict. Items include: "My partner ignores me when she/his is angry with me" and "My partner has threatened to leave me to get me to do what she/he wants." Both scales are measured on a 7-point Likert scale ranging from 1 (*not at all true*) to 7 (*very true*). Higher scores indicate higher

perceived relational victimization. Reliability tests for this sample produced a Cronbach's Alpha of .91 for P1 (.90 for P2) for the overall scale, with reliability coefficients .88 for P1 (.89 for P2) for the social sabotage and .90 for P1 (.88 for P2) for the love withdrawal subscale.

Analytic Plan

First, the variables being used for the investigation will kept while all other variables will be removed using Stata 12. The measures of *marital conflict*, *adult attachment*, and *perceived relational aggression* will be averaged by finding the mean score for men and women respectively to simplify interpretation. Consistent with other studies, descriptive data and a matrix of correlations for all variables will be provided.

To maintain consistency with the Conger model of family stress, structural equation modeling (SEM) using Stata 12 will be employed to establish direct/indirect paths between the dependent and independent variables. Because interactions cannot be done using path analysis and adult attachment is a proposed moderator, multiple group comparison will be used to distinguish between couples that fall into three categories: High Secure, High Insecure and Mixed Security attachment. Cross tabulation will be employed to distinguish between the mean scores of all 287 couples to determine where they lie between scores of 1 (*high security*) to 7 (*high insecurity*). High secure group will contain all couples who score high on secure attachment, which is determined by having a score of 3.25 or lower on the insecure attachment measure; the high insecure group will contain couples who score high on insecure attachment, which is determined by having a score of 3.5 or higher on insecure attachment; mixed secure group will contain couples who have one member with a high insecure and high secure attachment or variations of

attachment security, including no response. Brown's (2006) suggested cut-offs ($CFI \geq .95$, $RMSEA \leq .06$, $SRMR \leq 0.8$) will be used to assess model fit.

Past research has implemented the path model twice, once for each member because of expected gender differences (Conger et al., 1990). Recent research has used the married couple as the unit of analysis to investigate nonindependence as well as dyadic and transactional associations between husbands and wives (Falconier & Epstein, 2010; Kinnunen & Feldt, 2004; Wickrama et al., 2012) by using the Actor-Partner Interaction Measure (APIM) (Kenny, Kashay, & Cook, 2006). Because there will be group analysis, the APIM method will not be implemented. To test multiple groups, multiple group invariance tests will be conducted. These tests begin with a global test of the equality of covariance structures across the three groups (Byrne, 2012). Rejection of the null hypothesis argues for nonequivalence of groups, with subsequent tests becoming increasingly restrictive to identify sources of nonequivalence. Baseline models will be estimated for each group; no constraints will be implemented at this time because the data are analyzed separately for each group. When testing for invariance, equality constraints will be implemented and the data for all groups will be analyzed simultaneously to obtain estimates (Benter, 2005; Joreskog & Sorbom, 1996).

Missing Data

SEM is unique in that it provides a platform in which to address missing values in multiple ways. This estimation is based on the assumption that information is missing at random (MAR), with other approaches possible depending on the nature of the missing data.

Expectations and Limitations

With the proposed analysis, I expect to learn whether attachment is a viable measure to include with the Conger et al. (1990) economic family stress model. In most articles pertaining to the topic, investigators call for more variation in the factors examined. Attachment is a theoretically justified variable for inclusion within that rationale. With women contributing more to household incomes than ever before, I hope to see that economic strain is just as stressful to them as to men. To me, this would strengthen an argument that economic strain does not discriminate between gender. I also expect to learn that couples are resilient, and that although they show signs of economic strength, their abilities to cope limit the extent to which they engage in negative conflict management and psychological aggression.

This study is not without limitations. The sample is rather homogenous in that the majority is middle- to upper-middle class, White, and highly educated. These characteristics limit the possibility that this particular model can be generalized to the greater population. Another limitation is that study focuses solely on heterosexual couples, which again, reduces the possibility for generalization. The study will be cross-sectional, limiting the analysis of change within the dyad across time. Also, the data were collected using self-report questionnaires. Although data collectors were present while questionnaires were completed, their presence does not diminish the possibility of social desirability, which tends to be elicited when discussing sensitive topics, such as perceived relational aggression.

Another limitation is that this study has one respondent addressing multiple constructs in a causal model, which tends to inflate parameter estimates (Bank et al., 1989; Dillon, Kumar, & Mulani, 1987). Single sources of information do not reduce

method variance error; having trained coders observe taped interactions of behavior between spouses would greatly reduce the method variance error, even with the minimal observer bias that would be present (Conger et al., 1990). The proposed study also uses a brief measure of insecure attachment from the Experience in Close Relationships-Revised scale and does not measure secure attachment.

Although limited in some capacities, the present study also has strengths. The study has a large sample of couples ($N = 287$), and also has a high retention rate at Wave 4 (93.8%). The study also has a strong focus on perceived psychological aggression, which has been neglected in past studies. The study also introduces adult attachment into the family stress model. Adult attachment has been used to assess conflict, aggression, and romantic love styles all within the context of marital relationships but has yet to be evaluated in the family stress model. The proposed research will introduce adult attachment as a new direction to be considered when addressing families in economic strain. The proposed study will also conduct multiple group analysis, a technique that has been limited in the approach to looking at the family stress model, and has only recently been applied to elderly couples (Dew & Yorgason, 2009).

Chapter 2

Effects of Insecure Attachment on Marital Interactions: Examining the Family Stress Model

Steven M. Wicks, Alan Acock, Alexis Walker, and Randal Day

Submitted to *Family Relations*, September 2012

ABSTRACT

This exploratory study posited that being in an insecure marriage would increase marital conflict and perceived relational aggression when the couple is experiencing economic constraints. The cross-sectional design assessed two groups of marriages: secure and insecure. A structural equation model tested the effect of each type of marriage, controlling for husband and wife education, number of children, and length of marriage. Results indicated that husbands who identify as insecure experience greater marital conflict and perceive their spouses to be more psychologically aggressive. There was also evidence of a cross-lag effect indicating husbands' perceived marital conflict positively influences wives' perceptions of greater spousal psychological aggression for insecure couples, but not secure couples. This is the first study to use attachment as a moderating variable in the family stress model. Future research should look to include greater measures of attachment, with a focus on longitudinal designs. Implications are also discussed.

Keywords: *family stress model, attachment, marital interactions*

A global economic recession over the past half-decade has brought forth old memories of what is becoming a continuing trend in United States economics. Financial insecurity is once again at the forefront of issues faced by families. Across the United States, families are being forced to navigate the treacherous waters of employment uncertainty, inflating debt, a troubled housing market, and ever decreasing assets. According to the Bureau of Labor Statistics (2012), families with at least one unemployed member nearly doubled from 6.3% to 12.4% between 2007 and 2010. In homes with dual spousal employment, 47.8% of married couples were employed in 2010, compared with 48.5% in 2009.

Dating back to the Great Depression, researchers have documented the effects of economic downturn on family interactions (Liker & Elder, 1983; Komarovsky, 1940). Financial instability has been associated with poor physiological and psychological health (Kinnunen & Feldt, 2004; Wickrama et al., 2012), decreased marital satisfaction (Kwon et al., 2003; Vinokur, Price, & Caplan, 1996), increased marital conflict (Dew & Yorgason, 2009; Gudmunson et al., 2007), increased aggression (Falconier & Epstein, 2010; Conger et al., 1990), poor parenting (Conger et al., 2002; White & Rogers, 2000).

Continued research on financial instability and families has been guided by the general family stress model, developed in the late 1980s during the Iowa farm crisis. Conger and colleagues (1990) posited that accumulated stress may overburden a person's ability to cope, which potentially leads to increased negative behavior toward their partner (Lazarus & Folkman, 1984; Pearlin, 1989). The family stress model also includes concepts from Berkowitz's (1989) frustration-aggression hypothesis, which posits that frustration derived from negative affect will contribute to aggression and anger. When

Conger and colleagues (1990) applied their family stress model to families experiencing financial instability, they reaffirmed that financial instability contributed to increased negative affect (anxiety and depression), as well as increased hostility, marital conflict, and marital instability. The family stress model has proven useful in multicultural contexts, as the model has been applied to couples and families in Czechoslovakia (Hraba, Lorenz, & Pechacova, 2000), Finland (Kinnunen & Feldt, 2004; Kinnunen & Pulkkinen, 1998), South Korea (Kwon et al., 2003), Romania (Robila & Krishnakumar, 2005), and the United States (Falconier & Epstein, 2011; Gudmunson et al., 2007; Wickrama, et al., 2012).

The present study is an exploratory analysis of the theoretical capability of incorporating measures of attachment as a proxy or the well-established negative psychological affect variables of previous studies, into the family stress model.. While keeping true to the mediational properties of previous family stress models (Gudmunson, et al., 2007; Falconier & Epstein, 2011; Kwon et al., 2003), the present study looks to include a moderator variable between economic stress and negative marital interactions: insecure attachment. Adult attachment theory may provide a new avenue for explaining why some marital dyads experience conflict and psychological aggression when confronted with economic strain while other dyads do not.

Attachment in Marital Relationships

Attachment in adulthood has been posited to mirror the three styles of childhood attachment identified by Ainsworth, Blehar, Waters, and Wall (1978), including secure, anxious/ambivalent, and avoidant styles. Secure attachment is often recognized when a child actively seeks contact with a caregiver, a proxy for overall security, and when a

child is easily settled after an upsetting encounter or separation from a caregiver.

Anxious/ambivalent attachment is reflected when a child portrays clingy behavior to a caregiver, attempts little to no exploration of the environment, , and exhibits anger and resistance when reunited with a caregiver. Avoidant attachment is identified when a child is unresponsive to a caregiver, shows little distress during separation from a caregiver, and slow is to react and even failures to cling to a primary caregiver after reunification.

Applied to adult relationships, anxious attachment would be portrayed by an individual that exhibits jealousy, preoccupation with the relationship, and has an implicit fear of and anxiety about rejection. Avoidant individuals reflect behaviors that include discomfort with intimacy, a lack of interdependence, fearfulness, and distancing from a partner (Strauss, Morry, & Kito, 2012). Attachment is ‘invisible’ until the system is activated, usually during stressful periods. Using classic attachment terms, stressors in marital relationships, such as conflict or uneasy finances, may activate an individual’s attachment system, exposing the processes that govern the individual’s approach to conflict resolution, and escalating his or her physical or psychological aggression (Mayseless, 1991).

Hazan and Shaver (1987) were the first to posit that romantic love in adult relationships could be explained through the use of attachment theory. Their initial work established that the primary caregiver-child styles of attachment are found in adult couples, (Bowlby, 1982). This study is grounded in the initial work of Hazan and Shaver (1987) and focuses on adult relational processes.

Attachment has been used to study relationship quality and duration (Feeney, 1995; Hazan & Shaver, 1994), relationship satisfaction (Feeney, 1994; Kirkpatrick & Hazan, 1994), perceived partner support (Cohen & McKay, 1984), and conflict negotiations (Powers et al, 2006). Appraisals of negative events and conflict negotiation in particular are relevant to the family stress model (Conger et al., 1990). Numerous studies have examined the family stress model; none to this date have considered using attachment as a way to address potential variance in the relationships between economic constraints and marital interactions. The present exploratory study sought to determine the viability of including attachment measures in the family stress model.

Linking Insecure Attachment to the Family Stress Model

Research on adult attachment has helped explain many of the outcome variables that are found in family stress models. For example, conflict in intimate and marital relationships (Maseless, 1991; Simpson, Rholes, & Phillips, 1996), physical and psychological aggression in intimate relationships (Henderson et al., 2005; Meesters & Muris, 2002; Weston, 2008), hostility (Rholes, Simpson, & Oriña, 1999), and relational/marital quality (Feeny & Noller, 1990; Hollist & Miller, 2005) all have been addressed by attachment theory. The connections among economic strain, attachment in adulthood, and marital interactions are undetermined.

One way to connect attachment theory to the family stress model is to view economic constraints as a threat to the relationship. An apparent threat is often used in attachment literature as defining an activating condition of the attachment system (Bowlby, 1984). Another link between attachment theory and the family stress model is conflict within the relationship. Insecurely attached individuals appraise conflict as a

threat that potentially decreases access to approval, support, and security from their partner (Pietromonaco, Greenwood, & Barrett, 2004). An intensification of emotions also has been found to negatively affect conflict negotiation by decreasing communication and compromise among insecurely attached individuals (Mikulincer & Shaver, 2007). Whereas negotiating conflict may help develop and maintain intimacy and satisfaction (Fincham & Beach, 1999; Gottman & Notarius, 2000), conflict may also inhibit an individual's ability to regulate emotion and behavior (Koback & Duemmler, 1994).

Aggression also has been linked to attachment and the family stress model. Mikulincer (1998) discussed that individuals who report having attachment anxiety are less able to control expressions of anger, hold hostile attitudes towards a romantic partner, and experience anger directed toward an attachment figure/partner. Senchak and Leonard (1992) discussed how frequent verbal aggression was found when either wives or both partners were evaluated as having insecure attachment. Dutton et al. (1994) reported positive relationships between men's psychological abuse towards their partners and having an insecure attachment style. Overall, sustained aggression has been reported to be more common in relationships where both partners are assessed as insecure; having at least one partner with secure attachment seems to mitigate any aggressive tendencies (Bookwala, 2002).

Hypotheses

Given the literature presented on the linking variables and outcomes between attachment and the family stress model, we anticipate that partner's level of marital conflict will mediate the relation between economic strain and relational aggression. In

other words, economic strain will have a direct, positive effect on one's level of marital conflict, and it will positively predict one's perception of one's partner's relational aggression. In addition, an insecure attachment style will strengthen the effect of economic constraints on marital conflict. In other words, having an insecure attachment will magnify the relation between economic constraints and marital conflict for both husbands and wives. Also, an insecure attachment style will strengthen the effects of marital conflict on perceived relational aggression. In other words, having an anxious attachment will magnify the relation between marital conflict and perceived relational aggression of both husbands and wives. Wives' perceptions of perceived relational aggression will be positively related to husband's reports of marital conflict for secure and insecure attachment groups; men's perceptions of perceived relational aggression will be positively related to wives' marital conflict. Finally, economic constraints, perceived marital conflict, and perceived relational aggression will be positively associated with each other.

Methods

Sample

Data for this study were taken from Wave 4 of the *Flourishing Families Project* (FFP). The purpose of the FFP is to show how the social development of young people is impacted by family processes as they transition from grade school, to high school, and into young adulthood. The FFP is an ongoing, longitudinal study of inner family life involving families with a child in the target age range of 10 to 14 at Wave 1 (M age of child = 11.29, SD = 1.01; M age 14.24, SD = .099 for two-parent family at Time 4). At

Wave 4, the FFP had a retention rate of 93.8% ($N = 469$, 149 single parent and 320 two-parent families). This study used a subsample of two-parent married families from a Pacific Northwest city ($n = 287$ married couples, $N = 574$ total) that had a child in the target age range. Table 1.1 lists sample description data, which can be found in Appendix A.

Procedure

FFP families selected for the project have been interviewed continuously since project origins in 2007 with the latest sample collection executed in 2011. Recruitment of families was aided by purchasing a national telephone survey database (Polk Directories/InfoUSA). Eighty-two million households across the United States are purported to be contained within the database that includes detailed information about each household; age and presence of children is also included within the information provided. Families chosen to participate in the study paralleled the socioeconomic and racial stratification of local school district reports, as identified in the Polk Directory. Families with a child between the ages of 10 and 14 at Time 1 and fell within designated census tracts were considered eligible to participate. In total, 423 out of 692 families agreed to participate, resulting in a 61% response rate. Because the Polk directory was generated using telephone, magazine, and internet subscription reports, lower socioeconomic families were underrepresented in this study. An attempt was made to more closely represent local demographics by using other means of recruitment (e.g., referrals, fliers; $n = 77$, 15% of total sample).

Prospectively eligible families were contacted directly first by a formal letter of introduction. Second, home visits and phone calls were conducted by trained

interviewers to confirm eligibility and willingness to participate. After eligibility and consent were established, interviewers made appointments to conduct in-home assessment interviews that included videotaped interactions and questionnaires. Parents and children completed questionnaires in the home with an interviewer present. Participants completed an individual questionnaire, and steps were taken to screen for missing answers and double markings to reduce the amount of missing data. Funding for this project was provided by grants to individual investigators and to the collective project at Brigham Young University by multiple private donors and funding entities within Brigham Young University. Families in the study were given \$200 dollars for participation; \$175 dollars to the parents, \$25 to the target child (Day, 2009).

Measures

Financial Constraints. To assess financial constraints, six items were adapted from the Family Transitions Project. Likert-scale responses ranged from 1 (*strongly disagree*) to 5 (*strongly agree*), with higher scores indicating less felt constraint meeting material needs. Sample items include “I have trouble sleeping because of my financial problems.” Reliability coefficients (α) were found to be .92 (wives) and .93 (husbands). According to Voydanoff (1989), financial constraints would be classified as objective measures of employment or income, as participants are asked to identify the level of money in their possession. Two additional items were assessed at the time of this survey, which assess general financial difficulty assessed over a twelve month period. These additional items were not included in the analysis.

Marital Conflict. To assess marital conflict, eight items were selected from the RELATE assessment battery (Busby, Holman, & Taniguchi, 2001). Likert-scale

responses ranged from 1 (*never*) to 5 (*very often*); sample items included “parents/in-laws” and “financial matters.” These items represent the most common areas of conflict within marriage (Day, 2010) as the original scale contained 15 items. Higher scores on the marital conflict scale indicate greater marital conflict. Reliability coefficients (α) for this sample were found to be .75 (wives) and .76 (husbands.)

Couple Attachment. Each partner’s attachment style was assessed using four items from the Revised Experiences in Close Relationships Questionnaire (ECR-R, Fraley, Waller, & Brennan, 2000). The ECR-R assesses current attachment styles in adulthood. The four items used for this study focused on measuring anxious/ambivalent attachment. Likert-responses ranged from 1 (*strongly agree*) to 7 (*strongly disagree*). Sample items include “I often worry that my partner will not want to stay with me.” Higher scores on the couple attachment measure indicate greater insecure attachment. Reliability coefficients (α) for this sample were found to be .91 (wives) and .88 (husbands).

Perceived Relational Aggression. Each partner’s relational aggression was measured using an adapted version of the Self-Report of Aggression and Victimization in Marriage (SRAV-M, Nelson & Carroll, 2006). The SRAV-M contains modified language for committed couples, from the original Self-Report of Aggression and Victimization (Linder, Crick, & Collins, 2002; Morales & Crick, 1998). The SRAV-M contains two subscales: social sabotage and love withdrawal. For the purpose of this study, the overall scale was used. Sample items from the overall scale include, “Tries to embarrass me or make me look stupid in front of others” and “My partner ignores me when she/he is angry with me.” Higher scores indicate higher perceived relational

aggression. Reliability coefficients (α) for the overall scale were found to be .91 (wives) and .90 (husbands).

Analysis

Due to some limitations of the statistical software Stata 12C, interactions cannot be calculated using path analysis, which limits a direct use of adult attachment as a moderator. In order to run the analyses, multiple group comparison was used. Cross tabulations were conducted to distinguish between the mean scores of all 287 couples to determine where their scores of attachment landed on a scale of 1 (*high security*) to 7 (*high insecurity*). High secure groups contained all couples who scored high on secure attachment ($n = 102$). Secure couples were defined as having a score of 3.25 or lower on the insecure attachment measure. The high insecure group contained all couples that scored high on insecurity ($n = 89$), which was determined by having a score of 3.5 or higher.

Multiple group comparisons were tested within a Structural Equation Model (SEM) framework (Stata 12C). First tested was a free estimating dyadic model of the two groups without constraints, including cross-lag influences between husband and wife conflict and their perceived aggression of their partner respectively. After the free estimation, a Wald Test was performed to determine if any of the structural coefficients were significantly different between the models. Following suggestions from the Wald Test, a second model was run with the corresponding structural coefficient constraint between husband's perceptions of conflict in the marriage and wives' perception of her husbands' psychological aggression. After re-running the model, the results did not produce significantly better fit. Multiple indices were used to evaluate model fit. These

indices include the Comparative Fit Index (CFI), Root Mean Standard Error of Approximation (RMSEA), Standard Root Mean Square Residual (SRMR), and chi-square statistic. Brown's (2006) suggested cut-offs ($CFI \geq 0.95$, $RMSEA \leq .06$, $SRMR \leq 0.8$) were used to determine good model fit.

Results

Descriptive statistics and correlations among path model variables are presented in Table 1.2, which can be found in Appendix A. Figure 2.1 (also found in Appendix A), shows the results of the structural model for secure attachment couples, and figure 2.2 (Appendix A) shows the results of the structural model for insecure attachment couples.

The overall model for the groups fit the data well, $\chi^2(12) = 19.25$, $p < .08$, $CFI = .968$, $RMSEA = .079$, $SRMR = .039$. The second model, run using the suggested constraints from the Wald Test, did not suggest a better fit, $\chi^2(14) = 26.77$, $p < .02$, $CFI = .943$, $RMSEA = .098$, $SRMR = .053$. Table 1.2 and 1.3 present the unstandardized and standardized coefficients for secure and insecure attachment couples; Figure 2.1 and 2.2 present models with standardized coefficients (both can be found in the Appendix). Post hoc analysis did not provide modification indices worth pursuing as there would have been an insignificant change to the model fit.

Moderating Effects of Attachment

As hypothesized, economic strain had a direct, positive effect on one's own level of marital conflict, and in turn positively predicted one's perception of one's partner's relational aggression. For secure wives, the relationship between economic constraints and their perceptions of conflict was marginally significant ($\beta = .22$, $p < .10$), while the relationship between their perceptions of conflict to perceived relational aggression of

their husbands showed a significant, positive association ($\beta = .30, p < .01$). For secure husbands, their economic constraints to their perceptions of conflict showed a significant positive association ($\beta = .32, p < .01$), while their perceptions of conflict to perceived relational aggression of their wives also showed a significant, positive association ($\beta = .27, p < .01$). Proposed cross-lag effects in secure couples between wives' perception of conflict and husbands' perceived relational aggression ($\beta = .05$), and husbands' perception of conflict and wives' perceived relational aggression ($\beta = .01$) were found to be non-significant.

For insecure wives, the path between their economic constraints and perceived marital conflict showed a significant, positive association ($\beta = .24, p < .05$), while the path between perceived conflict and perceived spousal relational aggression also showed a significant, positive association ($\beta = .27, p < .05$). For insecure husbands, the path between their economic constraints and perceived conflict showed a significant, positive association ($\beta = .42, p < .001$), while the path between perceived conflict and perceived spousal relational aggression also showed a significant, positive association ($\beta = .48, p < .001$).

As hypothesized, effect sizes for insecure couples were found to be greater than that of secure couples, except for the path between wives' perceived marital conflict and wives' perceived spousal relational aggression (secure: $\beta = .30, p < .01$; insecure: $\beta = .27, p < .05$). Post-hoc analysis showed a trending difference between the secure and insecure wives, $\chi(1) = 3.28, p < .10$.

The proposed cross-lag effect between insecure husbands' perceived conflict and wives' perceived spousal relational aggression showed a small, significant association (β

= .23, $p < .05$) suggesting that women may perceive their husbands to be more psychologically aggressive during conflicting exchanges. Also emerging from the analysis is a small, positive marginally significant cross-lag effect between insecure husbands' economic constraints and insecure wives' perceived marital conflict ($\beta = .22$, $p < .10$), and a significant, positive cross-lag effect between insecure wives' economic constraints and insecure husbands' perceived marital conflict ($\beta = .21$, $p < .05$).

Overall, perceived marital conflict and perceived spousal psychological aggression accounted for 34% of the variance of the insecure group model, while the perceived marital conflict and perceived spousal psychological aggression accounted for 21% of the variance of marital interactions within the secure model.

Indirect Effects

While not hypothesized, indirect effects emerged from the data analysis. A significant, positive indirect effect emerged on the path from secure husbands' economic constraints to their perceived spousal relational aggression through their perceived conflict ($\beta = .10$, $p < .05$). A significant indirect effect also emerged on the path from insecure husbands' economic constraints to their perceived spousal relational aggression through their perceived conflict ($\beta = .22$, $p < .001$). As for wives, a significant indirect effect emerged from insecure wives' economic constraints to their perceived spousal relational aggression through their perceived conflict ($\beta = .11$, $p < .05$). The findings suggest that husbands' experience of economic constraints present a greater stressor to the perceptions of relationship functioning compared to women.

Discussion

A recent downward trend in the global economy has brought forth a renewed interest in understanding how economic constraints influence family and marital interactions. Using structural equation modeling, we examined attachment within the framework of a family stress model to measure the effects of insecure attachment on marital interactions during times of economic constraint. This study confirmed that economic constraints directly influence marital conflict, and in turn, positively influences partners' appraisals of their spouses' psychological aggression. These results provide strong support for Hypothesis 1. Consistent with previous research (Conger & Elder, 1994; Conger et al., 1990) our findings add to the family stress model literature (Falconier, 2011; Falconier & Epstein, 2010; Kinnunen & Feldt, 2004; Gudmunson et al., 2007), suggesting that when couples are economically constrained, the effects of such constraints directly affect marital interactions by increasing perceived conflict, and leading to couples perceiving their partners to be more psychologically aggressive. Also supported by our results was Hypothesis 2. Our results indicate that insecure couples report more perceived conflict stemming from economic strain. The results suggest that economic constraints may be processed as threats to the marital relationship that leads couples to engage in negative behavior, or exacerbate existing problems within the relationship.

One interesting note is that for secure wives, their economic constraints did not reach significance in directly influencing their perceptions of conflict within the marriage, yet their perceived conflict was significantly related to their perceptions of spousal relational aggression. Over the past two decades, the number of women entering

the workforce has steadily increased (Amato, Johnson, Booth, & Rogers, 2003), bringing forth an argument that increases in the household economy will increase economic constraints on women. In dual-earner households, though, women may still hold traditional views that their husbands are the primary breadwinner, so any decrease in their own contribution to the household won't be as great as that of their husbands (Hass, 1986; Voydanoff, 1990). Another possible explanation may be that women who earn less than their husbands or who experience an income gap change do not experience a marital-role quality change, whereas husbands still seem to be affected more by such changes (Brennan, Chait Barnett, & Gareis, 2001).

Our results indicate that insecure couples report greater psychological aggression, lending support for Hypothesis 3. Interestingly, insecure wives report more conflict, while secure wives report more psychological aggression, offering contradictory support for Hypothesis 3. Attachment literature, suggests that secure couples approach conflict negotiation positively and may approach conflict as a relationship building component (Fincham & Beach, 1999; Gottman & Notarius, 2000). Also supported by past literature is the notion that insecure couples will engage in conflict, as economic constraints can be viewed as threats to the marital relationship, activating the attachment system (Mikulincer & Shaver, 2007). Conflict regarding economic constraints may lead to questioning a partner's responsiveness to one's own needs, leading to an intensification of emotions to elicit a spousal response.. At the same time, the insecure partner also could have difficulty attending to the information conveyed by the partner, further leading their partner to believe that this intensification of emotion is a form of psychological aggression (Rholes & Simpson, 2004). Archer and Coyne (2005) noted

that there has been an increase in the prevalence of covert forms of aggression in social interactions possibly explaining why conflict may be perceived as a precursor to aggression. One note though, is that conflict is a regular occurrence in close relationships (Brehm, Miller, Perlman, & Campbell, 2002), so reporting of is not unusual.

Of the cross-lag influences referenced in Hypothesis 4, only one influence was supported by the results. Insecure husbands' perceptions of marital conflict positively influenced insecure wives' perceptions of spousal psychological aggression. This result is not too surprising, given the notion that marriages can be resilient in times of economic constraint. Conger et al. (1999) point to spousal supportiveness as an explanation of why secure couples would not exhibit rises in emotional distress.

Common in attachment literature is the idea that secure couples are equipped with effective conflict negotiation skills. This idea is consistent with Conger and Conger's (2002) explanation of why spousal supportiveness alone would not mitigate economic constraints and their influences on marital functioning. Overall, couples that elicit emotional support, engage in effective problem-solving, and exude self-confidence seem to be adept at reducing the effects of negative life events that potentially could reduce their marital functioning.

Hypothesis 5 was supported as a strong positive association was found between partners' economic constraints, perceived marital conflict, and perceived spousal psychological aggression for insecure couples. These results reflect previous studies (Kwon et al., 2003) suggesting spousal transmission of stress, spouses experiencing a common stressor (Westman & Vinokur, 1998) or both (Falconier & Epstein, 2010). Partner's influence on their spouse's behaviors, beliefs, and moods have been

documented by family researchers (O'Brien, 2005), an understandable finding given the amount of time and energy dyadic units invest in their relationships over the course of their lives.

Interestingly, indirect effects that were not hypothesized were found more so for insecure couples than for secure couples. These findings align not only with Conger and colleagues (1990) seminal research, but also with more recent research (Falconier & Epstein, 2011; Kwon et al., 2003), that suggest an indirect relationship between an economic variable and marital process variables. Perhaps the number of indirect effects is in part a product of insecure attachment, as only one emerged for secure couples. Another possible explanation is the idea that secure couples are resilient, even when presented with economic constraints (Conger & Conger, 2002).

The results from this study provide support for the inclusion of attachment theory into the growing literature of the economic stress model. Unlike previous studies that used psychological affect variables, the findings from this exploratory research suggests that insecure attachment plays a significant role in how couples interact when facing economic constraints.

Limitations and Future Directions

This study is not without limitations. First, the attachment construct was measured by very few items. The ECR-R (Fraley, Waller, & Brennan, 2000) consists of 18 questions each for anxious/ambivalent and avoidant attachment. The present study used only four items to assess anxious/ambivalent (insecure) attachment. While the ECR-R is the main choice for measuring adult attachment and offers considerable reliability, stability, and validity (Mikulincer & Shaver, 2007), four items cannot fully investigate insecure attachment. Second, the sample is homogenous with a majority of

the participants being denied as middle-to-upper class, White, and highly educated. Because of these characteristics, generalization to the greater population is severely limited. Past studies have focused on other ethnic groups, such as inner-city African Americans (Conger et al., 2002), and this trend should continue, as the disparities between class and ethnicity continue to deepen in the United States. Third, this study focused solely on heterosexual couples. The data set had very few gay and lesbian couples (four total). This study was cross-sectional in design, limiting the analysis of change within the dyad across time. This holds implications for attachment, as attachment in intimate relationships has been considered relatively unstable compared to parental relationships (Fraley, Vicary, Brumbaugh, & Roisman, 2011), and stable by other accounts (Klohnen & Bera, 1998; Crowell, Treboux, & Waters, 2002), with little variability over the life span. Other studies have failed to find attachment-appropriate life incidents and changes in attachment patterns (Davila & Cobb, 2003; Cozzarelli, Karafa, Collins, & Tagler, 2003).

Another limitation is that data were collected using self-report questionnaires. While data collectors were present during the questionnaire process, the presence of the collectors did not influence possible social desirability. Social desirability is often elicited from survey participants when responding to sensitive questions or topics, such as marital aggression and sexual activities. Researchers (Bank et al., 1989; Dillon, Kumar, & Mulani, 1987) have discussed the tendencies for multiple constructs measured in a casual model to inflate parameter estimates. Also, this study did not incorporate measures from taped observations of marital interactions. Kim, Laurent, Capaldi, and Feingold (2008) have noted that young men tend to be rated more psychologically

aggressive by observers, than data obtained from combined self-and partner reports.

Conger et al. (1990) have noted that integrating such ratings would greatly reduce the method variance error, as single sources of information do not reduce method variance error.

Future research would benefit from suggestions elicited from the results of this research. First, incorporating the full scale of anxious/ambivalent and avoidant measures from the ECR-R (Fraley, Waller, & Brennan, 2000) would provide a more robust platform for examining marital attachment. Even more relevant would be to include a new measure developed by Fraley, Hefferman, Vicary, and Brumbaugh (in press) called the Experiences in Close Relationships-Relationship Structures questionnaire (ECR-RS). This new measure is derived from the ECR-R (Fraley, Waller, & Brennan, 2000), and assesses individual differences in four different relationship domains: relationships with father, mother, best friend (nonromantic), and romantic partner (Fraley et al., 2012, p. 980). This new measure would provide a more robust assessment of attachment, compared to the ECR-R.

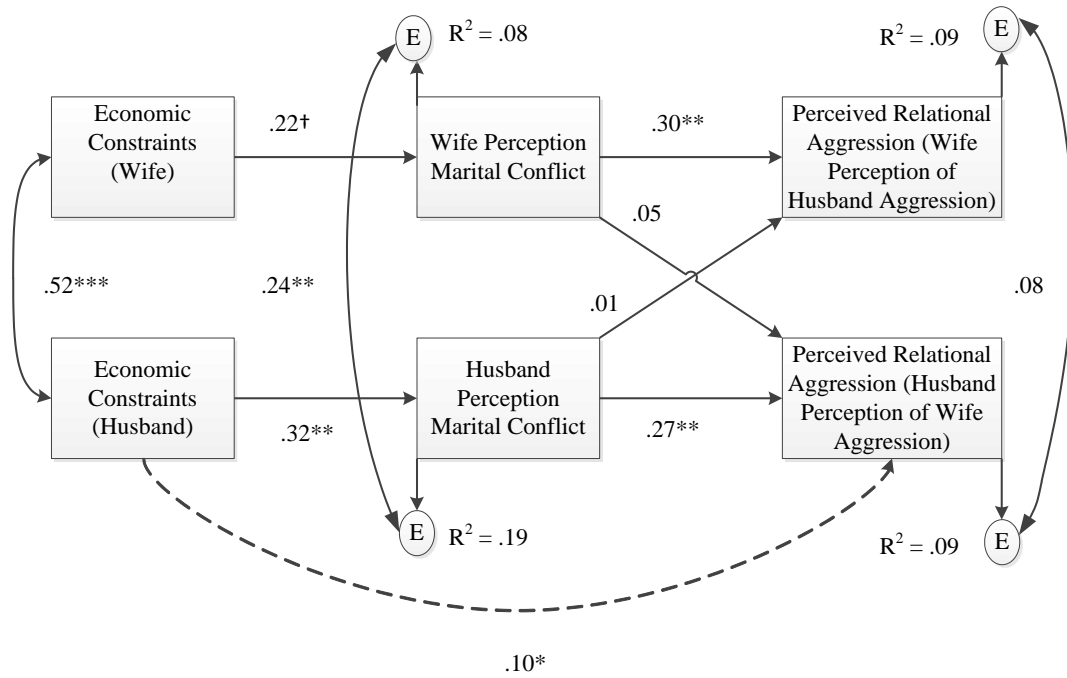
Avoidant attachment may also explain some of the variance in marital interactions. Individuals with avoidant attachment who encounter conflict in a relationship may see this conflict as a threat to their independence in the relationship. Being urged to become emotionally involved with their partner may cause the avoidant individual to emotionally withdraw from the relationship (Pietromonaco, Greenwood, & Barrett, 2004). Future research incorporating measures of psychological aggression would benefit from observer ratings. Kim, Laurent, Capaldi, and Feingold (2008) have

noted that young men tend to be rated more psychologically aggressive by observers, than data obtained from combined self-and partner reports.

Future research should also consider continuing the trend of measuring depression and anxiety (Gudmunson et al., 2007; Wickrama et al., 2012) as men's psychological aggression has been found to be highly associated with depression; psychological aggression is also becoming more frequent in relationships, compared to physical aggression, as the impact tends to be greater than that of physical (Taft et al., 2006). Also noted by Taft et al., (2006), gender differences exist between psychological aggression and overall mental health, suggesting that men's psychological aggression has a greater mental health impact than women's. Future studies should also focus on longitudinal studies of economic constraints on marital interactions, while focusing on attachment style. Longitudinal studies would allow for the study of marital couples' resiliency in the face of economic constraints (Conger & Conger, 2002), change within the dyad across time, and to further study the ambiguous nature of changes in attachment over time (Fraley et al., 2012).

Appendix

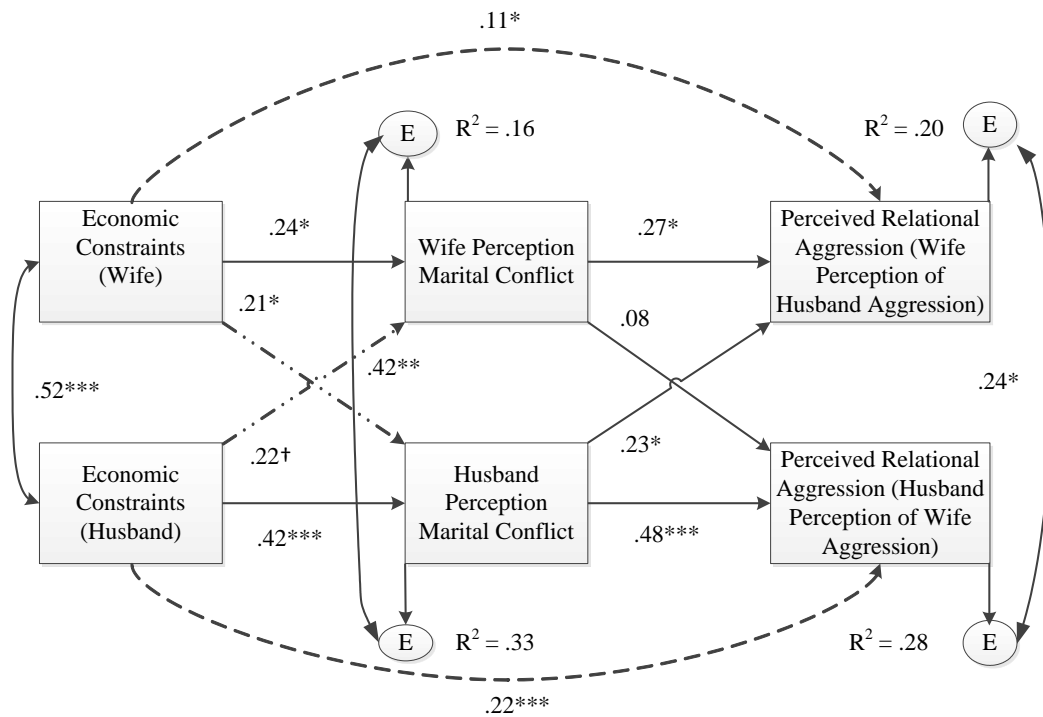
Figure 2.1. Structural Equation Model of Influence of Economic Strain on Marital Interactions for Secure Group (Standardized Solution; $N = 109$)



Note: Dashed line represents indirect effect between Husband Economic Constraints and Husband's Perception of Wife's Relational Aggression. $\chi^2(12) = 19.25, p < .08$; CFI = .97; RMSEA = .08; SRMR = .04.

$^\dagger p < .10$. $^* p < .05$. $^{**} p < .01$. $^{***} p < .001$

Figure 2.2. Structural Equation Model of Influence of Economic Strain on Marital Interactions for Insecure Group (Standardized Solution; $N = 89$)



Note: Dashed lines represents indirect effects between Wife's Economic Constraints, Wife's Conflict Perception and Wife's Perceived Relational Aggression by Husband; Husband's Economic Constraints, Husband's Conflict Perception, and Husband's Perceived Relational Aggression by Wife. Dashed cross-lag effects represent emerging associations not hypothesized. $\chi^2(12) = 19.25, p < .08$; CFI = .97; RMSEA = .08; SRMR = .04.

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

Table 2.1

Correlations and Descriptive Statistics for Path Model Variables and Controls of Married Couples (N = 287)

Variables	1	2	3	4	5	6	7	8	9	10	11
1. Wife's economic constraint	—										
2. Wife's perception of marital conflict	.33***	—									
3. Wife's perception of husband's psychological aggression	.20***	.52***	—								
4. Husband's economic constraint	.52***	.27***	.16**	—							
5. Husband's perception of marital conflict	.38**	.56***	.41***	.45***	—						
6. Husband's perception of wife's psychological aggression	.26***	.38***	.44***	.22***	.54**	—					
7. Number of children in family	.15*	.02	-.06	.11	.02	.06	—				
8. Children currently in home	.12*	.03	-.07	.09	.07	-.006	.68***	—			
9. Length of Marriage	-.23**	.00	.05	-.21**	-.09	-.06	-.004	-.13	—		
10. Wife Education	-.34***	-.11	-.08	-.31**	-.10	-.18**	-.25***	-.18**	.14*	—	
11. Husband Education	-.32***	-.16**	-.16	-.40**	-.12*	-.15*	-.06	-.02	.19**	.46***	—
<i>M</i>	2.18	2.37	1.87	2.13	2.37	2.14	2.41	2.31	20.85	4.70	4.85
<i>SD</i>	.82	.50	.90	.83	.53	.94	1.0	.92	4.83	1.38	1.44

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

Table 2.2

Means and Standard Deviations of Covariates (N = 574).

Variables	<i>M</i>	<i>SD</i>	Range
Mother's education ^a	4.70	1.38	1 – 7
Father's education ^b	4.85	1.44	1 – 7
Length of marriage	20.85	4.83	5 – 35
Number of children	2.41	1.00	1 – 11

Note: ^aMother's Education 1 = *less than highschool* to 7 = *advanced degree (PhD, PsyD, JD, etc.)*. ^bFather's Education follows the same labeling as ^aMother's Education.

Table 2.3

*Unstandardized, Standardized, and Significance Levels for Secure Group in Figure 2.1
(Standard Errors in Parentheses; N = 102)*

<i>Parameter Estimate</i>	<i>Unstandardized</i>	<i>Standardized</i>
Structural Model		
Husband Economic Constraints → Husband Perception of Conflict	.15 (.05).	.32**
Husband Perception of Conflict → Perceived Psychological Aggression (Husband Perception of Wife Aggression)	.39 (.14)	.27**
Wife Economic Constraints → Wife Perception of Conflict	.11 (.06)	.22†
Wife Perception of Conflict → Perceived Psychological Aggression (Wife Perception of Husband Aggression)	.32 (.11)	.30**
Residual for Husband Perception of Conflict	.14 (.02)	.81
Residual for Perceived Psychological Aggression (Husband Perception of Wife Aggression)	.33 (.05)	.91
Residual for Wife Perception of Conflict	.17 (.02)	.92
Residual or Perceived Psychological Aggression (Wife Perception of Husband Aggression)	.19 (.03)	.91
Covariance of Husband Perceived and Wife Perceived Conflict	.04 (.02)	.24**
Covariance of Perceived Psychological Aggression (Husband and Wife)	.02 (.02)	.08

Note: $\chi^2(12) = 19.25, p > .08$; CFI = .968; RMSEA = .079; SRMR = .039

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

Table 2.4

Unstandardized, Standardized, and Significance Levels for Insecure Group in Figure 2.2 (Standard Errors in Parentheses; N = 89)

<i>Parameter Estimate</i>	<i>Unstandardized</i>	<i>Standardized</i>
Structural Model		
Husband Economic Constraints → Husband Perception of Conflict	.28 (.07)	.42***
Husband Perception of Conflict → Perceived Psychological Aggression (Husband Perception of Wife Aggression)	.95 (.21)	.48***
Wife Economic Constraints → Wife Perception of Conflict	.15 (.08)	.24*
Wife Perception of Conflict → Perceived Psychological Aggression (Wife Perception of Husband Aggression)	.58 (.24)	.27**
Residual for Husband Perception of Conflict	.21 (.03)	.67
Residual for Perceived Psychological Aggression (Husband Perception of Wife Aggression)	.89 (.13)	.72
Residual for Wife Perception of Conflict	.22 (.03)	.84
Residual or Perceived Psychological Aggression (Wife Perception of Husband Aggression)	.95 (.14)	.80
Covariance of Husband Perceived and Wife Perceived Conflict	.10 (.02)	.42***
Covariance of Perceived Psychological Aggression (Husband and Wife)	.22 (.10)	.24*

Note: $\chi^2(12) = 19.25$, $p > .08$; CFI = .968; RMSEA = .079; SRMR = .039.

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

REFERENCES

- Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Hillsdale, NJ: Erlbaum.
- Amato, P. R., Johnson, D. R., Booth, A., & Rogers, S. J. (2003). Continuity and change in marital quality between 1980 and 2000. *Journal of Marriage and Family*, 65(1), 1-22. doi: 10.1111/j.1741-3737.2003.00001.x
- Archer, J., & Coyne, S. M. (2005). An integrated review of indirect, relational, and social aggression. *Personality and Social Psychology Review*, 9(3), 212-230. doi: 10.1207/s15327957pspr0903_2
- Bank, L., Dishion, T., Skinner, M., & Patterson, G. R. (1990). Method variance in structural equation modeling: Living with 'glop'. In G. R. Patterson (Ed.). *Aggression and depression in family interactions*, (pp. 247-279). Hillsdale, NJ: Erlbaum.
- Berkowitz, L. (1989). Frustration-aggression hypothesis: Examination and reformulation. *Psychological Bulletin*, 106(1), 59-73. doi: 10.1037/0033-2909.106.1.59
- Brehm, S. S., Miller, R. S., Perlman, D., & Campbell, S. M. (2002). *Intimate relationships*. Boston: McGraw-Hill.
- Brennan, R. T., Barnett, R. C., & Gareis, K. C. (2001). When she earns more than he does: A longitudinal study of dual-earner couples. *Journal of Marriage and Family*, 63(1), 168-182. doi: 10.1111/j.1741-3737.2001.00168.x
- Brown, T. (2006). *Confirmatory factor analysis for applied research*. New York: World.
- Bookwala, J. (2002). The role of own and perceived partner attachment in relationship aggression. *Journal of Interpersonal Violence*, 17(1), 84-100. doi: 10.1177/0886260502017001006
- Bowlby, J. (1982). Attachment and loss: Retrospect and prospect. *American Journal of Orthopsychiatry*, 52(4), 664-678. doi: 10.1111/j.1939-0025.1982.tb01456.x
- Bowlby, J. (1984). *Attachment and loss* (Vol. 1, 2nd ed.), Harmondsworth, UK: Penguin.
- Busby, D. M., Holman, T. B., & Taniguchi, N. (2001). RELATE: Relationship evaluation of the individual, cultural, and couple contexts. *Family Relations: An Interdisciplinary Journal of Applied Family Studies*, 50(4), 308-316. doi: 10.1111/j.1741-3729.2001.00308.x

- Carroll, J. S., Nelson, D. A., Yorgason, J. B., Harper, J. M., Ashton, R. H., Jensen, A. C. (2010). *Aggressive Behavior*, 36(5), 315-329. doi: 10.1002/ab.20349
- Cohen, S., & McKay, G. (1984). Social support, stress, and the buffering hypothesis: A theoretical analysis. In A. Baum, S. E. Taylor, & J. E. Singer (Eds.), *Handbook of psychology and health* (pp. 253-267). Hillsdale, NJ: Erlbaum.
- Collins, N. L., Guichard, A. C., Ford, M. B., & Feeney, B. C. (2004). Working models of attachment: New developments and emerging themes. In W. S. Rholes, & J. A. Simpson (Eds.), *Adult attachment: Theory, research, and clinical implications*. New York: The Guilford Press.
- Collins, N. L., & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology*, 58(4), 644-663. doi: 10.1037/0022-3514.58.4.644
- Conger, R. D., & Conger, K. J. (2002). Resilience in midwestern families: Selected findings from the first decade of a prospective longitudinal study. *Journal of Marriage and Family*, 64 (2), 361-373. doi: 10.1111/j.1741-3737.2002.00361.x
- Conger, R. D., Conger, K. J., Elder, G. H., Jr., Lorenz, F. O., Simons, R. L., & Whitbeck, L. B. (1992). A family process model of economic hardship and adjustment of early adolescent boys. *Child Development*, 63(3), 526-541. doi: 10.2307/1131344
- Conger, R. D., & Elder, G. H., Jr. (1994). *Families in troubled times*. Hawthorne. Aldine De Gruyter.
- Conger, R.D., Elder, G. H., Jr., Lorenz, F. O., Conger, K. J., Simons, R. L., Whitbeck, L. B., Huck, S., & Melby, J. N. (1990). Linking economic hardship to marital quality and instability. *Journal of Marriage and Family*, 52 (3), 643-656. doi: 10.2307/352931
- Conger, R. D., Ge, X., Elder, G. H., Jr., Lorenz, F. O., & Simons, R. L. (1994). Economic stress, coercive family process, and developmental problems of adolescents. *Child Development*, 65(2), 541-561. doi: 10.2307/1131401
- Conger, R. D., Wallace, L. E., Sun, Y., Simons, R. L., McLoyd, V. C., Brody, G. H. (2002). Economic pressure in African American families: A replication and extension of the family stress model. *Developmental Psychology*, 38(2), 179-193. doi: 10.1037//0012-1649.38.2.179
- Cozzarelli, C., Karafa, J. A., Collins, N. L., & Tagler, M. J. (2003). Stability and change in adult attachment styles: Associations with personal vulnerabilities, life events,

- and global construals of self and others. *Journal of Social and Clinical Psychology*, 22(3), 315-346. doi: 10.1521/jscp.22.3.315.22888
- Crowell, J. A., Treboux, D., & Waters, E. (2002). Stability of attachment representations: The transition to marriage. *Developmental Psychology*, 38(4), 467-479. doi: 10.1037/0012-1649.38.4.467
- Davila, J., & Cobb, R. J. (2003). Predicting change in self-reported and interviewer-assessed adult attachment: Tests of the individual difference and life stress models of attachment change. *Personality and Social Psychology Bulletin*, 29(7), 859-870. doi: 10.1177/0146167203029007005
- Day, R. (2009). The Flourishing Families Project. Dataset codebook.
- Dew, J., & Yorgason, J. (2009). Economic pressure and marital conflict in retirement-aged couples. *Journal of Family Issues*, 31(2), 164-188. doi: 10.1177/01925X09344168
- Dillon, W. R., Kumar, A., & Mulani, N. (1987). Offending estimates in covariance structure analysis: Comments on the causes of an solutions to Heywood cases. *Psychological Bulletin*, 101(1), 126-135. doi: 10.1037/0033-2909.101.1.126
- Dutton, D. G., Saunders, K., Starzomski, A., & Bartholomew, K. (1994). Intimacy-anger and insecure attachment as precursors of abuse in intimate relationships. *Journal of Applied Social Psychology*, 24(15), 1367-1386. doi: 10.1111/j.1559-1816.1994.tb01554.x
- Falconier, M. K., & Epstein, N. B. (2010). Relationship satisfaction in Argentinean couples under economic stress: Gender differences in a dyadic stress model. *Journal of Social and Personal Relationships*, 27(6), 781-799. doi: 10.1177/0265407510373260
- Falconier, M. K., & Epstein, N. B. (2011). Female-demand/male-withdrawal communication in Argentinean couples: A mediating factor between economic strain and relationship distress. *Personal Relationships*, 18(4), 586-603. doi: 10.1111/j.1475-6811.2010.01326.x
- Falconier, M. K., & Epstein, N. B. (2011). Couples experiencing financial strain: What we know and what we can do. *Family Relations: An Interdisciplinary Journal of Applied Family Studies*, 60(3), 303-317. doi: 10.1037/12326-007
- Feeney, J. A. (1994). Attachment style, communication patterns and satisfaction across the life cycle of marriage. *Personal Relationships*, 1(4), 333-348. doi: 10.1111/j.1475-6811.1994.tb00069.x

- Feeney, J. A. (2004). Adult attachment and relationship functioning under stressful conditions: Understanding partners' responses to conflict and challenge. In W. Steven Rholes & Jeffrey A. Simpson (Eds). *Adult attachment: Theory, research, and clinical implications*, (pp. 267-299). New York: The Guilford Press.
- Feeney, J. A., & Noller, P. (1990). Attachment style as a predictor of adult romantic relationships. *Journal of Personality and Social Psychology*, 58(2), 281-291. doi: 10.1037/0022.3514.58.2.281
- Feeney, J. A., & Noller, P. (1991). Attachment style and verbal descriptions of romantic partners. *Journal of Social and Personal Relationships*, 8(2), 187-215. doi: 10.1177/0265407591082003
- Feeney, J. A., & Noller, P. (1996). *Adult attachment*. Thousand Oaks, CA: Sage Publications, Inc.
- Fincham, F. D., & Beach, S. R. (1999). Marital conflict: Implications for working with couples. *Annual Review of Psychology*, 50, 47-77. doi: 10.1146/annurev.psych.50.1.47
- Fraley, R. C., Heffernan, M., Vicary, A. M., & Brumbaugh, C. C. (in press). The Experiences in Close Relationships-Relationship Structures Questionnaire: A method for assessing attachment orientations across relationships. *Psychological Assessment*.
- Fraley, R. C., Vicary, A. M., Brumbaugh, C. C., & Roisman, G. I. (2011). Patterns of stability in adult attachment: An empirical test of two models of continuity and change. *Journal of Personality and Social Psychology*, 101(5), 974-992. doi: 10.1037/a0024150
- Gottman, J. M. (1994). *Why marriages succeed or fail*. New York: Simon & Schuster.
- Gottman, J. M., & Levenson, R. W. (1992). Marital processes predictive of later dissolution: Behavior, physiology, and mental health. *Journal of Personality and Social Psychology*, 63(2), 221-233. doi: [10.1037/0022-3514.63.2.221](https://doi.org/10.1037/0022-3514.63.2.221)
- Gottman, J. M., & Notarius, C. I. (2000). Decade review: Observing marital interaction. *Journal of Marriage and Family*, 62(4), 927-947. doi: 10.1111/j.1741-3737.2000.00737.x
- Gudmunson, C. G., Beutler, I. F., Israelsen, C. L., McCoy, J. K., & Hill, E. J. (2007). Linking financial strain to marital instability: Examining the roles of emotional distress and marital interaction. *Journal of Family Economic Issues*, 28, 357-376. doi: 10.1007/s10834-007-9074-7

- Hass, L. (1986). Wives' orientation toward breadwinning: Sweden and the United States. *Journal of Family Issues*, 7(4), 358-381. doi: 10.1177/019251386007004002
- Henderson, A. J. Z., Bartholomew, K., Trinke, S., & Kwong, M. J. (2005). When loving means hurting: An exploration of attachment and intimate abuse in a community sample. *Journal of Family Violence*, 20(4), 219-230. doi: 10.1007/s10896-005-5985-y
- Hraba, J., Lorenz, F. O., & Pechacova, Z. (2000). Family stress during the Czech transformation. *Journal of Marriage and Family*, 62(2), 520-531. doi: 10.1111/j.1741-3737.2000.00520.x
- Karney, B. R., & Bradbury, T. N. (1995). The longitudinal course of marital quality and stability: A review of method, theory, and research. *Psychological Bulletin*, 118, 3-34. doi: 10.1037/0033-2909.118.1.3
- Kim, H. K., Laurent, H. K., Capaldi, D. M., & Feingold, A. (2008). Men's aggression toward women: A 10-year panel study. *Journal of Marriage and Family*, 70(5), 1169-1187. doi: 10.1111/j.1741-3737.2008.00558.x
- Kinnunen, U., & Feldt, T. (2004). Economic stress and marital adjustment among couples: Analysis at the dyadic level. *European Journal of Social Psychology*, 34, 519-532. doi: 10.1002/ejsp.213
- Kinnunen, U., & Pulkkinen, L. (1998). Linking economic stress to marital quality among Finish marital couples. *Journal of Family Issues*, 19(6), 705-724. doi: 10.1177/019251398019006003
- Kirkpatrick, L. A., & Hazan, C. (1994). Attachment styles and close relationships: A four-year prospective study. *Personal Relationships*, 1(2), 123-142. doi: 10.1111/j.1475-6811.1994.tb00058.x
- Klohnen, E. C., & Bera, S. (1998). Behavioral and experiential patterns of avoidantly and securely attached women across adulthood: A 31-year longitudinal perspective. *Journal of Personality and Social Psychology*, 74(1), 211-223. doi: 10.1037/0022-3514.74.1.211
- Koback, R., & Duemmler, S. (1994). Attachment and conversation: Toward a discourse analysis of adolescent and adult security. In K. Bartholomew & D. Perlman (Eds.). *Attachment processes in adulthood: Advances in personal relationships*, Vol. 5, (pp. 121-149). London, England: Jessica Kingsley Publishers.
- Komarovsky, M. (1940). *The unemployed man and his family*. New York: Octagon Books.

- Kwon, H.K., Rueter, M. A., Lee, M.S., Koh, S., Ok, S. (2003). Marital relationships following the Korean economic crisis: Applying the family stress model. *Journal of Marriage and Family*, 65(2), 316-325. doi: 10.1111/j.1741-3737.2003.00316.x
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer Publishing Company, Inc.
- Liker, J. K., & Elder, G. H. (1983). Economic hardship and marital relations in the 1930s. *American Sociological Review*, 48(3), 343-359. doi: 10.2307/2095227
- Linder, J. R., Crick, N. R., & Collins, W. A. (2002). Relational aggression and victimization in young adults' romantic relationships: Associations with perceptions of parent, peer, and romantic relationship quality. *Social Development*, 11(1), 69-86. doi: 10.1111/1467-9507.00187
- Mayseless, O. (1991). Adult attachment patterns and courtship violence. *Family Relations*, 40(1), 21-28. doi: 10.2307/585654
- Meesters, C., & Muris, P. (2002). Attachment style and self-reported aggression. *Psychological Reports*, 90(1), 231-235. doi: 10.2466/PRO.90.1.231-235
- Mikulincer, M. (1998). Adult attachment style and individual differences in functional versus dysfunctional experiences in anger. *Journal of Personality and Social Psychology*, 74(2), 513-524. doi: 10.1037/0022-3514.74.2.513
- Mikulincer, M., & Shaver, P. R. (2007). *Attachment in Adulthood: Structure, dynamics, and change*. New York: The Guilford Press.
- Morales, J. R., & Crick, N. R. (1998). Self-report measure of aggression and victimization. Unpublished measure.
- Nelson, D. A., & Carroll, J. S. (2006). *Couples Relational Aggression and Victimization Scale (CRAViS)*. Provo, UT.
- O'Brien, M. (2005). Studying individual and family development: Linking theory and research. *Journal of Marriage and Family*, 67(4), 880-890. doi: 10.1111/j.1741-3737.2005.00181.x
- Pearlin, L. I. (1989). The sociological study of stress. *Journal of Health and Social Behavior*, 30(3), 241-256. doi: 10.2307/2136956
- Pietromonaco, P. R., Greenwood, D., Barrett, L. F. (2004). Conflict in adult close relationships: An attachment perspective. In W. Steven Rholes & Jeffry A. Simpson (Eds). *Adult attachment: Theory, research, and clinical implications*, (pp. 267-299). New York: The Guilford Press.

- Rholes, W. S., & Simpson, J. A. (2004). *Adult attachment: Theory, research, and clinical implications*. New York: The Guilford Press.
- Rholes, W. S., Simpson, J. A., & Oriña, M. M. (1999). Attachment and anger in an anxiety-provoking situation. *Journal of Personality and Social Psychology*, 76(6), 940-957. doi: 10.1037/0022-3514.76.6.940
- Robila, M., & Krishnakumar, A. (2005). Effects of economic pressure on marital conflict in Romania. *Journal of Family Psychology*, 19(2), 246-251. doi: 10.1037/0893-3200.19.2.246
- Senchak, M., & Leonard, K. E. (1992). Attachment styles and marital adjustment among newlywed couples. *Journal of Social and Personal Relationships*, 9(1), 51-64. doi: 10.1177/0265407592091003
- Simpson, J. A., Rholes, W. S., & Phillips, D. (1996). Conflict in close relationships: An attachment perspective. *Journal of Personality and Social Psychology*, 71(5), 899-914. doi: 10.1037/0022-3514.71.5.899
- Spilman, S. K., & Burzette, R. G. (2006) *Critical Project Technical Reports, F10 2003*. Ames, IA: Family Transitions Project, Iowa State University.
- Straus, C., Morry, M. M., & Kito, M. (2012). Attachment styles and relationship quality: Actual, perceived, and ideal partner matching. *Personal Relationships*, 19(1), 14-36. doi: 10.1111/j.1475-6811.2010.01333.x
- Taft, C. T., O'Farrell, T. J., Torres, S. E., Panuzio, J., Monson, C. M., Murphy, M., & Murphy, C. M. (2006). Examining the correlates of psychological aggression among a community sample of couples. *Journal of Family Psychology*, 20(4), 581-588. doi: 10.1037/0893-3200.20.4.581
- U.S. Department of Labor, Bureau of Labor Statistics. (2012). *Employment characteristics of families-2011* (BLS Publication No. USDL-12-0771). Retrieved from bls.gov/news.release/pdf/fame.pdf
- Vinokur, A. D., Price, R. H., & Caplan, R. D. (1996). Hard times and hurtful partners: How financial strain affects depression and relationship satisfaction of unemployed persons and their spouses. *Journal of Personality and Social Psychology*, 71(1), 166-179. doi: 10.1037/0022-3514.71.1.166
- Voydanoff, P. (1989). Economic distress and mental health: The role of family coping resources and behaviors. *Lifestyles*, 10(2), 139-162. doi: 10.1007/BF00988534

- Weston, R. (2008). Insecure attachment mediates effects of partners' emotional abuse and violence on women's relationship quality. *Journal of Family Violence*, 23(6), 483-493. doi: 10.1007/s10896-008-9176-5
- White, L., & Rogers, S. J. (2000). Economic circumstances and family outcomes: A review of the 1990s. *Journal of Marriage and the Family*, 60(2), 1035-051. doi: 10.2307/353849
- Wickrama, K. A. S., Surjadi, F. F., Lorenz, F. O., Conger, R. D., & Walker O'Neal, C. (2012). Family economic hardship and progression of poor mental health in middle-aged husbands and wives. *Family Relations*, 61 (2), 297-312. doi: 10.1741-3729.2011.00697.x

Chapter 3: Implications and Conclusion

Examining couples in the same model provides for a better understanding of how couples influence and share each other's daily experiences, for better or worse. The family stress model continues to provide relevant and timely information about how families process financial difficulties and how these difficulties influence marital processes, such as aggression and conflict. This exploratory study establishes insecure attachment as a viable variable for inclusion in future research investigating the family stress model and marital processes. Our findings suggest that couples who are insecurely attached to their partners experience a greater perception of economic constraints. These constraints then lead individuals to perceive greater global conflict in their marriages; perceived conflict is then related to greater perceptions of spousal psychological aggression. These results provide support for past and current research suggesting the mediational properties of marital conflict between economic variables and aggression.

Our results indicate indirect effects of economic constraints on perceived spousal aggression through perceived marital conflict, suggesting that conflict is a possible driving mechanism between economic constraints and psychological aggression. Cross-lag results between insecure husbands' marital conflict and insecure wives' perceived spousal aggression suggest that insecure couples may approach potentially stressful situations with poor coping strategies and poor communication skills. Emerging cross-lag results between economic constraints and spouses' perceived marital conflict in the insecurely attached group suggest that constraints can be perceived as threats to the stability and availability of romantic attachment figures.

One area of attachment that was not explored in the study was avoidant attachment. Avoidant attachment often accompanies the desire to distance oneself from

developing intimacy with a partner. The sample that was examined for the study contained marriages that were well established. Foundational principles of marriage often revolve around two individuals becoming deeply involved with one another, sharing experiences, finances, child rearing duties, and many would suggest that we would find a very small if non-existent sample of couples with an avoidant attachment to their partner. Negative working models possessed by avoidant individuals would potentially negate any formation of a lasting bond with an endgame of marriage. Avoidant individuals often believe that love does not exist because they are often suspicious of others' motives and view others as not trustworthy (Collins, Guichard, Ford, & Feeney, 2004). Love is used as a guiding principle in marriage, and one could argue that marriages in the United States, in particular, are founded on a strong basis of the belief that partners are 'in love' (Coontz, 2005). Given such information, we could postulate if an individual with an avoidant attachment were in a marriage where financial constraints were felt, that individual would likely divorce their partner in order to mitigate dealing with present financial constraints and likely self-preserve their own financial independence.

Overall, the results from this study suggest that being securely attached to a romantic partner provides a buffer against negative marital interactions when couples are experiencing economic constraints. Individuals that elicit a secure attachment to a romantic partner are more likely to see conflict as an opportunity to build the relationship, rather than view it as a detriment. Secure individuals also tend to cope better, overall, when confronted with major stressors compared to their insecure

counterparts. Our results suggest that men are influenced more by economic constraints and this is exacerbated when men have an insecure attachment to their partner.

Results from this study suggest that working models of attachment developed during childhood can have implications for attachment towards a romantic partner in adulthood. Working models of attachment have been thought to be relatively stable throughout the lifespan, while other research suggests working models adjust to experiences that severely alter the attachment system. Continued research that focuses on stability of attachment throughout the lifespan would generate greater understanding into the processes that may alter how individuals approach establishing relationships with romantic and non-romantic partners.

Therapists that provide counseling to couples through an attachment framework may benefit from this research. An underlying theme emerging from the research is the importance of communication in marital relationships (Gottman, 1994; Gottman & Levenson, 1992). Effective communication may help mitigate the rise of conflict in a relationship if both partners are able to fully invest in the conversation and provide each other with a safe space to ask clarifying questions and further explore conflict eliciting topics. Family life educators and financial management educators may also benefit from this research. These educators may develop a collaborative initiative to provide preventative education about financial planning that also educates couples about the benefits developing skills needed for healthy, productive communication. It is important to distinguish between therapists and family life educators. Family life educators focus on teaching and fostering life skills and knowledge to facilitate healthy family

functioning, while therapists focus on underlying psychological issues that inhibit healthy functioning.

BIBLIOGRAPHY

- Ainsworth, M. D. S. (1982). Attachment: Retrospect and prospect. In C. M. Parkers & J. Stevenson-Hinde (Eds.) *The place of attachment in human behavior*, (pp. 3-30). New York: Basic Books
- Ainsworth, M. D. S. (1989). Attachment beyond infancy. *American Psychologist*, 44(4), 709-716. doi: 10.1037/0003-066X.44.4.709
- Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Hillsdale, NJ: Erlbaum.
- Archer, J., & Coyne, S. M. (2005). An integrated review of indirect, relational, and social aggression. *Personality and Social Psychology Review*, 9(3), 212-230. doi: 10.1207/s15327957pspr0903_2.
- Bank, L., Dishion, T., Skinner, M., & Patterson, G. R. (1990). Method variance in structural equation modeling: Living with 'glop'. In G. R. Patterson (Ed.). *Aggression and depression in family interactions*, (pp. 247-279). Hillsdale, NJ: Erlbaum
- Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. *Journal of Social and Personal Relationships*, 7(2), 147-178. doi: 10.1177/0265407590072001.
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology*, 61(2), 226-244. doi: 10.1037/0022-3514.61.2.226.
- Berkowitz, L. (1989). Frustration-aggression hypothesis: Examination and reformulation. *Psychological Bulletin*, 106(1), 59-73. doi: 10.1037/0033-2909.106.1.59
- Brehm, S. S., Miller, R. S., Perlman, D., & Campbell, S. M. (2002). *Intimate relationships*. Boston: McGraw-Hill.
- Brennan, R. T., Barnett, R. C., & Gareis, K. C. (2001). When she earns more than he does: A longitudinal study of dual-earner couples. *Journal of Marriage and Family*, 63(1), 168-182. doi: 10.1111/j.1741-3737.2001.00168.x.
- Brown, T. (2006). *Confirmatory factor analysis for applied research*. New York: World.
- Bookwala, J. (2002). The role of own and perceived partner attachment in relationship aggression. *Journal of Interpersonal Violence*, 17(1), 84-100. doi: 10.1177/0886260502017001006

- Bowlby, J. (1969). *Attachment and loss* (Vol.1). New York: Basic Books.
- Bowlby, J. (1973). *Attachment and loss* (Vol. 2). New York: Basic Books.
- Bowlby, J. (1979). *The making and breaking of affectional bonds*. London: Tavistock.
- Bowlby, J. (1980). *Attachment and loss*. (Vol. 3). New York: Basic Books.
- Bowlby, J. (1982). Attachment and loss: Retrospect and prospect. *American Journal of Orthopsychiatry*, 52(4), 664-678. doi: 10.1111/j.1939-0025.1982.tb01456.x
- Bowlby, J. (1984). *Attachment and loss* (Vol. 1, 2nd ed.), Harmondsworth, UK: Penguin.
- Busby, D. M., Holman, T. B., & Taniguchi, N. (2001). RELATE: Relationship evaluation of the individual, cultural, and couple contexts. *Family Relations: An Interdisciplinary Journal of Applied Family Studies*, 50(4), 308-316. doi: 10.1111/j.1741-3729.2001.00308.x
- Carnelly, K. B., Pietromonaco, P. R., & Jaffe, K. (1994). Depression, working models of others, and relationship functioning. *Journal of Personality and Social Psychology*, 66(1), 127-140. doi: 10.1037/0022-3514.66.1.127
- Carroll, J. S., Nelson, D. A., Yorgason, J. B., Harper, J. M., Ashton, R. H., Jensen, A. C. (2010). *Aggressive Behavior*, 36(5), 315-329. doi: 10.1002/ab.20349
- Cohen, S., Gottlieb, B. H., & Underwood, L. G. (2000). Social relationships and health. In S. Cohen, L. G. Underwood, & B. H. Gottlieb (Eds.), *Social support measurement and intervention* (pp. 3-25). New York: Oxford Press University Press.
- Cohen, S., & McKay, G. (1984). Social support, stress, and the buffering hypothesis: A theoretical analysis. In A. Baum, S. E. Taylor, & J. E. Singer (Eds.), *Handbook of psychology and health* (pp. 253-267). Hillsdale, NJ: Erlbaum.
- Cohen, S., & Willis, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98(2), 310-357. doi: 10.1037/0033-2909.98.2.310
- Collins, N. L., Guichard, A. C., Ford, M. B., & Feeney, B. C. (2004). Working models of attachment: New developments and emerging themes. In W. S. Rholes, & J. A. Simpson (Eds.), *Adult attachment: Theory, research, and clinical implications*. New York: The Guilford Press.
- Collins, N. L., & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology*, 58(4), 644-663. doi: 10.1037/0022-3514.58.4.644.

- Conger, R. D., & Conger, K. J. (2002). Resilience in midwestern families: Selected findings from the first decade of a prospective longitudinal study. *Journal of Marriage and Family*, 64 (2), 361-373. doi: 10.1111/j.1741-3737.2002.00361.x
- Conger, R. D., Conger, K. J., Elder, G. H., Jr., Lorenz, F. O., Simons, R. L., & Whitbeck, L. B. (1992). A family process model of economic hardship and adjustment of early adolescent boys. *Child Development*, 63(3), 526-541. doi: 10.2307/1131344
- Conger, R. D., & Elder, G. H., Jr. (1994). *Families in troubled times*. Hawthorne. Aldine De Gruyter.
- Conger, R.D., Elder, G. H., Jr., Lorenz, F. O., Conger, K. J., Simons, R. L., Whitbeck, L. B., Huck, S., & Melby, J. N. (1990). Linking economic hardship to marital quality and instability. *Journal of Marriage and Family*, 52 (3), 643-656. doi: 10.2307/352931
- Conger, R. D., Ge, X., Elder, G. H., Jr., Lorenz, F. O., & Simons, R. L. (1994). Economic stress, coercive family process, and developmental problems of adolescents. *Child Development*, 65(2), 541-561. doi: 10.2307/1131401
- Conger, R. D., Ge, X. J. , & Lorenz, F. O. (1994). Economic stress and marital relations. In R. D. Conger & G. H. Elder Jr. (Eds.). *Families in troubles times*, (pp. 187-203). Hawthorne. Aldine De Gruyter.
- Conger, R. D., Rueter, M. A., & Elder, G. H., Jr. (1999). Couple resilience to economic pressure. *Journal of Marriage and Family*, 76 (1), 54-71. Doi.10.1037/0022-3514.76.1.54
- Conger, R. D., Wallace, L. E., Sun, Y., Simons, R. L., McLoyd, V. C., Brody, G. H. (2002). Economic pressure in african American families: A replication and extension of the family stress model. *Developmental Psychology*, 38(2), 179-193. doi: 10.1037//0012-1649.38.2.179
- Cozzarelli, C., Karafa, J. A., Collins, N. L., & Tagler, M. J. (2003). Stability and change in adult attachment styles: Associations with personal vulnerabilities, life events, and global construals of self and others. *Journal of Social and Clinical Psychology*, 22(3), 315-346. doi: 10.1521/jscp.22.3.315.22888.
- Creasy, G., & Hesson-McInnis, M. (2001). Affective responses, cognitive appraisals, and conflict tactics in late adolescent romantic relationships: Associations with attachment orientations. *Journal of Counseling Psychology*, 48(1), 85-96. doi: 10.1037/0022-0167.48.1.85

- Creasy, G., Kershaw, K., & Boston, A. (1999). Conflict management with friends and romantic partners: The role of attachment and negative mood regulation expectancies. *Journal of Youth and Adolescence*, 28(5), 523-543. doi: 10.1023/A:1021650525419
- Crowell, J. A., Treboux, D., & Waters, E. (2002). Stability of attachment representations: The transition to marriage. *Developmental Psychology*, 38(4), 467-479. doi: 10.1037/0012-1649.38.4.467.
- Davila, J., & Cobb, R. J. (2003). Predicting change in self-reported and interviewer-assessed adult attachment: Tests of the individual difference and life stress models of attachment change. *Personality and Social Psychology Bulletin*, 29(7), 859-870. doi: 10.1177/0146167203029007005.
- Day, R. (2009). The Flourishing Families Project. Dataset codebook.
- Day, R. (2010). The Flourishing Families Project. Dataset codebook.
- Dew, J., & Yorgason, J. (2009). Economic pressure and marital conflict in retirement-aged couples. *Journal of Family Issues*, 31(2), 164-188. doi: 10.1177/01925X09344168
- Dillon, W. R., Kumar, A., & Mulani, N. (1987). Offending estimates in covariance structure analysis: Comments on the causes of an solutions to Heywood cases. *Psychological Bulletin*, 101(1), 126-135. doi: 10.1037/0033-2909.101.1.126
- Dutton, D. G., Saunders, K., Starzomski, A., & Bartholomew, K. (1994). Intimacy-anger and insecure attachment as precursors of abuse in intimate relationships. *Journal of Applied Social Psychology*, 24(15), 1367-1386. doi: 10.1111/j.1559-1816.1994.tb01554.x
- Elder, G. H., Jr. (1974). *Children of the great depression: Social change in life experience*. Chicago: University of Chicago Press.
- Elder, G. H., Jr., Conger, R. D., Foster, E. M., & Ardel, M. (1992). Families under economic pressure. *Journal of Family Issues*, 13(1), 5-37. doi: 10.1177/019251392013001002
- Elder, G. H. Jr., Robertson, E. B., & Ardel, M. (1994). Families under economic pressure. In R. D. Conger & G. H. Elder Jr. (Eds.) *Families in troubled times*, (pp. 79-103). Hawthorne: Aldine De Gruyter.
- Falconier, M. K. (2010). Female anxiety and male depression: Links between economic strain and psychological aggression in Argentinean couples. *Family Relations: An*

- Interdisciplinary Journal of Applied Family Studies*, 59(4), 424-438. doi: 10.1111/j.1741-3729.2010.00613.x
- Falconier, M. K., & Epstein, N. B. (2010). Relationship satisfaction in Argentinean couples under economic stress: Gender differences in a dyadic stress model. *Journal of Social and Personal Relationships*, 27(6), 781-799. doi: 10.1177/0265407510373260
- Falconier, M. K., & Epstein, N. B. (2011). Female-demand/male-withdrawal communication in Argentinean couples: A mediating factor between economic strain and relationship distress. *Personal Relationships*, 18(4), 586-603. doi: 10.1111/j.1475-6811.2010.01326.x
- Falconier, M. K., & Epstein, N. B. (2011). Couples experiencing financial strain: What we know and what we can do. *Family Relations*, 60(3), 303-317. doi: 10.1037/12326-007.
- Feeney, J. A. (1994). Attachment style, communication patterns and satisfaction across the life cycle of marriage. *Personal Relationships*, 1(4), 333-348. doi: 10.1111/j.1475-6811.1994.tb00069.x
- Feeney, J. A. (2004). Adult attachment and relationship functioning under stressful conditions: Understanding partners' responses to conflict and challenge. In W. S. Rholes & J. A. Simpson (Eds). *Adult attachment: Theory, research, and clinical implications*, (pp. 267-299). New York: The Guilford Press.
- Feeney, J. A., & Noller, P. (1990). Attachment style as a predictor of adult romantic relationships. *Journal of Personality and Social Psychology*, 58(2), 281-291. doi: 10.1037/0022.3514.58.2.281
- Feeney, J. A., & Noller, P. (1991). Attachment style and verbal descriptions of romantic partners. *Journal of Social and Personal Relationships*, 8(2), 187-215. doi: 10.1177/0265407591082003
- Feeney, J. A., & Noller, P. (1996). *Adult attachment*. Thousand Oaks, CA: Sage Publications, Inc.
- Finch, J. F., Okun, M. A., Pool, G. J., & Ruehlman, L. S. (1999). A comparison of the influence of conflictual and supportive social interactions on psychological distress. *Journal of Personality*, 67(4), 581-622. doi: 10.1111/1467-6494.00066
- Fincham, F. D. (2003) Marital conflict: Correlates, structure, and context. *Current Directions in Psychological Science*, 12(1), 23-27. doi: 10.1111/1467-8721.01215

- Fincham, F. D., & Beach, S. R. (1999). Marital conflict: Implications for working with couples. *Annual Review of Psychology*, 50, 47-77. doi: 10.1146/annurev.psych.50.1.47
- Fraley, R. C., Waller, N. G., & Brennan, K. A. (2000). An item response theory analysis of self-report measures of adult attachment. *Journal of Personality and Social Psychology*, 78(2), 350-365. doi: 10.1037/0022-3514.78.2.350
- Fraley, R. C., Heffernan, M., Vicary, A. M., & Brumbaugh, C. C. (in press). The Experiences in Close Relationships-Relationship Structures Questionnaire: A method for assessing attachment orientations across relationships. *Psychological Assessment*.
- Fraley, R. C., Vicary, A. M., Brumbaugh, C. C., & Roisman, G. I. (2011). Patterns of stability in adult attachment: An empirical test of two models of continuity and change. *Journal of Personality and Social Psychology*, 101(5), 974-992. doi: 10.1037/a0024150
- Gallo, L. C., & Smith, T. W. (2001). Attachment style in marriage: Adjustment and responses to interaction. *Journal of Social and Personal Relationships*, 18(2), 263-289. doi: 10.1177/0265407501182006
- Gottman, J. M. (1994). *Why marriages succeed or fail*. New York: Simon & Schuster.
- Gottman, J. M., & Levenson, R. W. (1992). Marital processes predictive of later dissolution: Behavior, physiology, and mental health. *Journal of Personality and Social Psychology*, 63(2), 221-233. doi: [10.1037/0022-3514.63.2.221](https://doi.org/10.1037/0022-3514.63.2.221)
- Gottman, J. M., & Notarius, C. I. (2000). Decade review: Observing marital interaction. *Journal of Marriage and Family*, 62(4), 927-947. doi: 10.1111/j.1741-3737.2000.00737.x
- Gudmunson, C. G., Beutler, I. F., Israelsen, C. L., McCoy, J. K., & Hill, E. J. (2007). Linking financial strain to marital instability: Examining the roles of emotional distress and marital interaction. *Journal of Family Economic Issues*, 28, 357-376. doi: 10.1007/s10834-007-9074-7
- Hass, L. (1986). Wives' orientation toward breadwinning: Sweden and the United States. *Journal of Family Issues*, 7(4), 358-381. doi: 10.1177/019251386007004002
- Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, 52(3), 511-524. doi: 10.1037/0022-3514.52.3.511

- Hazan, C., & Shaver, P. R. (1990). Love and work: An attachment-theoretical perspective. *Journal of Personality and Social Psychology*, 59(2), 270-280. doi: 10.1037/0022-3514.59.2.270
- Hazan, C., & Shaver, P. R. (1994). Attachment as an organizational framework for research on close relationships. *Psychological Inquiry*, 5(1), 1-22. doi: 10.1207/s15327965pli0501_1
- Henderson, A. J. Z., Bartholomew, K., Trinke, S., & Kwong, M. J. (2005). When loving means hurting: An exploration of attachment and intimate abuse in a community sample. *Journal of Family Violence*, 20(4), 219-230. doi: 10.1007/s10896-005-5985-y
- Hraba, J., Lorenz, F. O., & Pechacova, Z. (2000). Family stress during the Czech transformation. *Journal of Marriage and Family*, 62(2), 520-531. doi: 10.1111/j.1741-3737.2000.00520.x
- Hollist, C. S., & Miller, R. B. (2005). Perceptions of attachment style and marital quality in midlife marriage. *Family Relations*, 54(1), 46-57. doi: 10.1111/j.0197-6664.2005.00005x
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indices in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1-55. doi: 10.1080/10705519909540118
- Karney, B. R., & Bradbury, T. N. (1995). The longitudinal course of marital quality and stability: A review of method, theory, and research. *Psychological Bulletin*, 118, 3-34. doi: 10.1037/0033-2909.118.1.3
- Kessler, R. C., Turner, J. B., & House, J. S. (1988). Effects of unemployment on health in a community survey: Main, modifying, and mediating effects. *Journal of Social Issues*, 44(4), 69-85. doi: 10.1111/j.1540-4560.1988.tb02092.x
- Kim, H. K., Laurent, H. K., Capaldi, D. M., & Feingold, A. (2008). Men's aggression toward women: A 10-year panel study. *Journal of Marriage and Family*, 70(5), 1169-1187. doi: 10.1111/j.1741-3737.2008.00558.x
- Kinnunen, U., & Feldt, T. (2004). Economic stress and marital adjustment among couples: Analysis at the dyadic level. *European Journal of Social Psychology*, 34, 519-532. doi: 10.1002/ejsp.213
- Kinnunen, U., & Pulkkinen, L. (1998). Linking economic stress to marital quality among Finish marital couples. *Journal of Family Issues*, 19(6), 705-724. doi: 10.1177/019251398019006003

- Kirkpatrick, L. A., & Hazan, C. (1994). Attachment styles and close relationships: A four-year prospective study. *Personal Relationships*, 1(2), 123-142. doi: 10.1111/j.1475-6811.1994.tb00058.x
- Klohnen, E. C., & Bera, S. (1998). Behavioral and experiential patterns of avoidantly and securely attached women across adulthood: A 31-year longitudinal perspective. *Journal of Personality and Social Psychology*, 74(1), 211-223. doi: 10.1037/0022-3514.74.1.211
- Koback, R., & Duemmler, S. (1994). Attachment and conversation: Toward a discourse analysis of adolescent and adult security. In K. Bartholomew & D. Perlman (Eds.). *Attachment processes in adulthood: Advances in personal relationships*, Vol. 5, (pp. 121-149). London, England: Jessica Kingsley Publishers.
- Komarovsky, M. (1940). *The unemployed man and his family*. New York: Octagon Books.
- Kwon, HK., Rueter, M. A., Lee, MS, Koh, S., Ok, S. (2003). Marital relationships following the Korean economic crisis: Applying the family stress model. *Journal of Marriage and Family*, 65(2), 316-325. doi: 10.1111/j.1741-3737.2003.00316.x
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer Publishing Company, Inc.
- Lepore, S. J., Silver, R. C., Wortman, C. B., & Wayment, H. A. (1996). Social constraints, intrusive thoughts, and depressive symptoms among bereaved mothers. *Journal of Personality and Social Psychology*, 70(2), 271-282. doi: 10.1037/0022-3514.70.2.271
- Liker, J. K., & Elder, G. H. (1983). Economic hardship and marital relations in the 1930s. *American Sociological Review*, 48(3), 343-359. doi: 10.2307/2095227
- Linder, J. R., Crick, N. R., & Collins, W. A. (2002). Relational aggression and victimization in young adults' romantic relationships: Associations with perceptions of parent, peer, and romantic relationship quality. *Social Development*, 11(1), 69-86. doi: 10.1111/1467-9507.00187
- Mayer, S. E., & Jencks, C. (1989). Growing up in poor neighborhoods: How much does it matter?. *Science*, 243(4897), 1441-1445. doi: 10.1126/science.243.4897.1441
- Mayseless, O. (1991). Adult attachment patterns and courtship violence. *Family Relations*, 40(1), 21-28. doi: 10.2307/585654
- Meesters, C., & Muris, P. (2002). Attachment style and self-reported aggression. *Psychological Reports*, 90(1), 231-235. doi: 10.2466/PRO.90.1.231-235

- Mikulincer, M. (1998). Adult attachment style and individual differences in functional versus dysfunctional experiences in anger. *Journal of Personality and Social Psychology*, 74(2), 513-524. doi: 10.1037/0022-3514.74.2.513
- Mikulincer, M., & Shaver, P. R. (2007). *Attachment in Adulthood: Structure, dynamics, and change*. New York: The Guilford Press.
- Morales, J. R., & Crick, N. R. (1998). Self-report measure of aggression and victimization. Unpublished measure.
- Nelson, D. A., & Carroll, J. S. (2006). *Couples Relational Aggression and Victimization Scale (CRAViS)*. Provo, UT.
- O'Brien, M. (2005). Studying individual and family development: Linking theory and research. *Journal of Marriage and Family*, 67(4), 880-890. doi: 10.1111/j.1741-3737.2005.00181.x
- Pearlin, L. I. (1989). The sociological study of stress. *Journal of Health and Social Behavior*, 30(3), 241-256. doi: 10.2307/2136956
- Pietromonaco, P. R., & Barrett, L. F. (1997). Working models of attachment and daily social interactions. *Journal of Personality and Social Psychology*, 73(6), 1409-1423. doi: 10.1037/0022-3514.73.6.1409
- Pietromonaco, P. R., Greenwood, D., Barrett, L. F. (2004). Conflict in adult close relationships: An attachment perspective. In W. S. Rholes & J. A. Simpson (Eds). *Adult attachment: Theory, research, and clinical implications*, (pp. 267-299). New York: The Guilford Press.
- Powers, S. I., Pietromonaco, P. R., Gunlicks, M., & Sayer, A. (2006). Dating couples' attachment styles and patterns of cortisol reactivity and recovery in response to a relationship conflict. *Journal of Personality and Social Psychology*, 90(4), 613-628. doi: 10.1037/0022-3514.90.4.613
- Rholes, W. S., & Simpson, J. A. (2004). *Adult attachment: Theory, research, and clinical implications*. New York: The Guilford Press.
- Rholes, W. S., Simpson, J. A., & Oriña, M. M. (1999). Attachment and anger in an anxiety-provoking situation. *Journal of Personality and Social Psychology*, 76(6), 940-957. doi: 10.1037/0022-3514.76.6.940
- Robila, M., & Krishnakumar, A. (2005). Effects of economic pressure on marital conflict in Romania. *Journal of Family Psychology*, 19(2), 246-251. doi: 10.1037/0893-3200.19.2.246

- Schwarzer, R., & Leppin, A. (1989). Social support and health: A meta-analysis. *Psychology and Health, 3*(1), 1-15. doi: 10.1080/08870448908400361
- Senchak, M., & Leonard, K. E. (1992). Attachment styles and marital adjustment among newlywed couples. *Journal of Social and Personal Relationships, 9*(1), 51-64. doi: 10.1177/0265407592091003
- Sibley, C. G., Fischer, R., & Liu, J. H. (2005). Reliability and validity of the revised experiences in close relationships (ECR-R) self-report measure of adult romantic attachment. *Personality and Social Psychology Bulletin, 31*(11), 1524-1536. doi: 10.1177/0146167205276865
- Sibley, C. G., & Liu, J. H. (2004). Short-term temporal stability and factor structure of the revised experiences in close relationships (ECR-R) measure of adult attachment. *Personality and Individual Differences, 36*(4), 969-975. doi: 10.1016/S0191-8869(03)00165-X
- Simpson, J. A., Ickes, W., & Grich, J. (1999). When accuracy hurts: Reactions of anxious-ambivalent dating partners to a relationship-threatening situation. *Journal of Personality and Social Psychology, 76*(5), 754-769. doi: 10.1037/0022-3514.76.5.754
- Simpson, J. A., Rholes, W. S., & Phillips, D. (1996). Conflict in close relationships: An attachment perspective. *Journal of Personality and Social Psychology, 71*(5), 899-914. doi: 10.1037/0022-3514.71.5.899
- Spilman, S. K., & Burzette, R. G. (2006) *Critical Project Technical Reports, F10 2003*. Ames, IA: Family Transitions Project, Iowa State University.
- Taft, C. T., O'Farrell, T. J., Torres, S. E., Panuzio, J., Monson, C. M., Murphy, M., & Murphy, C. M. (2006). Examining the correlates of psychological aggression among a community sample of couples. *Journal of Family Psychology, 20*(4), 581-588. doi: 10.1037/0893-3200.20.4.581
- Thoits, P. A. (1986). Social support as coping assistance. *Journal of Consulting and Clinical Psychology, 54*(4), 416-423. doi: 10.1037/022-006X.54.4.416
- U.S. Department of Labor, Bureau of Labor Statistics. (2012). *Employment characteristics of families-2011* (BLS Publication No. USDL-12-0771). Retrieved from bls.gov/news.release/pdf/fame.pdf
- Vinokur, A. D., Price, R. H., & Caplan, R. D. (1996). Hard times and hurtful partners: How financial strain affects depression and relationship satisfaction of

- unemployed persons and their spouses. *Journal of Personality and Social Psychology*, 71(1), 166-179. doi: 10.1037/0022-3514.71.1.166
- Voydanoff, P. (1989). Economic distress and mental health: The role of family coping resources and behaviors. *Lifestyles*, 10(2), 139-162. doi: 10.1007/BF00988534
- Voydanoff, P. (1990). Economic distress and family relations: A review of the eighties. *Journal of Marriage of Family*, 52 (4), 1099-1115. Retrieved from <http://www.jstor.org/stable/353321>
- Voydanoff, P., & Donnelly, B. W. (1989). Work and family roles and psychological distress. *Journal of Marriage and Family*, 51 (4), 923-932. doi: 10.2307/353205
- Weston, R. (2008). Insecure attachment mediates effects of partners' emotional abuse and violence on women's relationship quality. *Journal of Family Violence*, 23(6), 483-493. doi: 10.1007/s10896-008-9176-5
- White, L., & Rogers, S. J. (2000). Economic circumstances and family outcomes: A review of the 1990s. *Journal of Marriage and the Family*, 60(2), 1035-051. doi: 10.2307/353849
- Wickrama, K. A. S., Surjadi, F. F., Lorenz, F. O., Conger, R. D., & Walker O'Neal, C. (2012). Family economic hardship and progression of poor mental health in middle-aged husbands and wives. *Family Relations*, 61 (2), 297-312. doi: 10.1741-3729.2011.00697.x

