

LINK BETWEEN COUPLE DISCORD AND
ADOLESCENT ADJUSTMENT: AN EXAMINATION
OF DIRECT AND MODERATING EFFECTS

By

ANTOINETTE LONDON-JOHNSON

Bachelor of Science in Psychology Honors

Wayne State University

Detroit, Michigan

2010

Submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
MASTER OF SCIENCE
December, 2014

LINK BETWEEN COUPLE DISCORD AND
ADOLESCENT ADJUSTMENT: AN EXAMINATION
OF DIRECT AND MODERATING EFFECTS

Thesis Approved:

Dr. Amanda Morris

Thesis Adviser

Dr. Michael Criss

Dr. Glade Topham

Name: Antoinette London-Johnson

Date of Degree: DECEMBER, 2014

Title of Study: LINK BETWEEN COUPLE DISCORD AND ADOLESCENT
ADJUSTMENT: AN EXAMINATION OF DIRECT AND
MODERATING EFFECTS

Major Field: Human Development and Family Science

Abstract: The purpose of this study was to examine the link between couple discord and adolescent adjustment (i.e. antisocial behavior, prosocial behavior, depressive symptoms, school grades) and whether this link was moderated by parent-youth relationship quality, adolescent emotion regulation, and adolescent gender. The sample consisted of 145 families with adolescents who participated in the Family Youth and Development Project. The results indicate that high levels of couple discord was significantly related to poorer school grades. The findings also indicate that couple discord was positively and significantly related to antisocial behavior under low levels of parent-youth relationship quality. In addition, there were significant couple discord X youth sex interactions in the prediction of antisocial behavior. Likewise, adolescent emotion regulation served as a moderator in the link between couple discord and adolescent adjustment. Specifically, youth positive affect served as a moderator in the link between couple discord and youth antisocial behavior such that couple discord was significantly and positively related to youth antisocial behavior for boys (but not girls). Similarly, youth anger served as a moderator in which results showed that high levels of couple discord were significantly related to antisocial behavior for boys (but not girls). Moreover, significant couple discord X youth sadness X youth sex interaction terms were found in the prediction of youth antisocial behavior and youth prosocial behavior. The findings indicate that for boys, the link between couple discord and antisocial behavior was significant and positive under high levels of youth sadness but not significant under low levels of sadness. Likewise, the findings indicate that for boys, the link between couple discord and prosocial behavior was significant and negative under high levels of youth sadness but not significant under low levels of sadness. For girls, couple discord was not significantly related to antisocial behavior or prosocial behavior regardless of level of sadness. Implications for the findings for parents, therapists, and interventionists are discussed.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION.....	1
II. REVIEW OF LITERATURE.....	4
Adolescent Development and Importance of Parents Overview	4
Definition and Measurements of Couple Discord	6
Link between Couple Discord and Adolescent Adjustment.....	8
Potential Moderators.....	12
Summary, Research Goals, and Hypotheses.....	16
III. METHODOLOGY	19
Participants.....	19
Procedures.....	20
Measures: Couple Discord.....	20
Measures: Moderator Variables.....	21
Measures: Adolescent Outcomes	22
Analytic Plan	23

Chapter	Page
IV. FINDINGS.....	25
Descriptive Statistics.....	25
Bivariate Correlations	25
Research Goal # 1	27
Research Goal # 2	27
Research Goal # 3	28
V. CONCLUSION.....	30
Research Goal # 1	31
Research Goal # 2	33
Research Goal # 3	34
Implications.....	36
Limitations and Future Directions	38
Conclusions.....	39
REFERENCES	41
APPENDICES	49

LIST OF TABLES

Table	Page
1.....	50
2.....	52
3.....	53
4.....	54
5.....	55
6.....	56
7.....	57

CHAPTER I

INTRODUCTION

Adolescence is an important time in a developing child's life. During this stage, numerous changes occur in the adolescent's cognitive functioning, perspective taking, and social needs. Although as children get older parents may believe less attention and support is needed, adolescents actually rely on secure attachments and positive relationships to successfully adjust to the transitions and changes that occur during this developmental period (Oliva et al., 2009; Green et al., 2013). With such high need for support and positive interactions, those faced with parents who are distracted by couple conflict, either with a marital, cohabitating, or romantic partner, encounter risk for maladaptive development. Indeed, parents' lack of support and positive relations with each other and their adolescents due to couple discord place adolescents at greater risk for developing aggressive behavior, depressive symptoms, less prosocial behavior, and lower school grades (Shelton & Harold, 2008; Sturge-Apple et al., 2006). Although couple discord may place adolescents at a disadvantage for healthy development, adolescents' emotion regulation and gender and parent-child relationship quality may attenuate or exacerbate the effects of couple discord on adolescent development.

Research supports the link between couple discord and maladaptive adolescent development, however several gaps in the literature remain. For example, research focusing on the effects of couple discord on adolescent adjustment is scarce, with more research focused on younger children. However, understanding the influence of couple discord on adolescent development is essential to ensuring healthy development, in addition to, providing direction for prevention and intervention work for troubled families. Likewise, there is limited research on the moderating effects of emotion regulation on adolescent adjustment in the face of couple discord. However, emotion dysregulation has been found to be a key marker in the development of maladaptive behaviors (i.e. aggressive behavior, depressive symptoms, less prosocial behavior, and lower school grades; Shelton & Harold, 2007; Lee et al., 2011). In addition, literature highlighting the importance of strong and supportive parent-child relationships, particularly in families with couple discord is scant. However, the importance of strong and positive parent-child relationships are imperative to the well-being of adolescents exposed to risk (i.e. couple discord). Lastly, how couple discord may affect girls and boys due to sex differences is important to understand when working to improve adolescents' adjustment. To address these gaps in the literature, three research goals have been identified for the current study:

1. To examine the association between couple discord and adolescent adjustment (i.e. aggressive behavior, depressive symptoms, prosocial behavior, and school grades).
2. To examine whether adolescent emotion regulation and parent-youth relationship quality moderate the link between couple discord and adolescent adjustment.

3. To examine youth sex as a moderator in the link between couple discord and adolescent adjustment.

CHAPTER II

Literature Review

The following literature review will consist of five sections. First, an overview of the changes in behaviors, emotions, and perspectives during adolescence which may be influenced by the parent-child relationship are discussed. Next, a review of the possible maladaptive behaviors emerging during adolescence in relation to couple discord. In the third section, there is a summary of the literature addressing the influence of adolescent emotion regulation and parent-youth relationship quality as possible moderators in the link between couple discord and adolescent adjustment. Fourth, an overview of the literature examining potential sex differences as a moderator in the relationship between couple discord and adolescent adjustment is provided. Lastly, the research goals and hypotheses are specified.

Adolescent Development and the Importance of Parents

During adolescence, there are advances in social, cognitive, and perspective taking abilities allowing youth to go beyond concrete thinking to more abstract rationality (Steinberg, 2011). In addition, youth experience puberty during adolescence leading to physical body changes and a more mature body structure (Susman & Rogol, 2004). Moreover, adolescents undergo functional and physical brain developments during this pubertal period (Paus, 2009). These developmental changes tend to shape how adolescents and parents view the emerging teen (Mezulis et al., 2011). Teens seek

security and support from parents to adapt to the transitions in cognitive, social, and emotional changes experienced. Without a strong foundation and guide to confidently explore and embrace these developmental transitions, adolescents are at risk for developing internalizing and externalizing problem behaviors (Green, et al., 2013). Instability in the parent-child relationship affects adolescents' confidence and security (Caskey, 2009). Poor quality of the relationship has been associated with aggression and delinquency (Eichelsheim et al., 2010). In addition, negative quality of the parent-adolescent relationship, low support, and lack of parental autonomy granting are related to aggression and delinquency (Eichelsheim et al., 2010). Also, the level of conflict and hostility in the parent-child relationship is related to adolescents' level of aggression (Schulz et al., 2005). These externalizing problems in adolescents have been correlated with low perceived attachment (i.e., the emotional bond between a parent and teen) (Oliva et al., 2009). In addition, parental attachment is believed to be a contributing factor in the emergence and maintenance of internalizing symptoms, such as anxiety and depression (Robila & Krishnakumar, 2006). Closeness and trust within a secure parent-adolescent relationship may buffer against mood and anxiety symptoms (Green et al., 2013). Research supports the idea that the quality of parent-adolescent relationship despite external circumstances impacts the healthy functioning of adolescents (Green et al., 2013). In the next section, additional factors influencing adolescent development will be discussed in detail. Specifically, the effects of couple discord on adolescent adjustment outcomes are explored with a focus on the emergence and maintenance of aggressive behavior, depressive symptoms, less prosocial behavior, and lower school grades.

Couple Discord and Adolescent Adjustment

For the purpose of this paper, a couple is defined as those married, cohabitating, in a sexual relationship and sharing space on a regular basis (two-four times out of the week), and those living together as co-parents. Couple discord is used rather than marital discord to allow for inclusion of multiple family types and households that are prevalent in today's society. To exclude families that are not legally married would limit sample representativeness. Couple discord has been defined by previous studies as **destructive conflict** often consisting of physical and/or verbal aggression, undermining statements, negative emotionality, and anger expressions (Erath, Bierman, and Conduct Problems Prevention Research Group, 2006; Miga, Gdula, & Allen, 2012;).

Measures such as the *Conflict Tactic Scale* (CTS) which assesses couples' use of reasoning tactics (i.e. talking calmly, providing supporting information for opinions or beliefs) and the *Physical Assault Subscale* originated from the Conflict Tactic Scale which assesses couples' use of physical (i.e. choked, hit, kicked, pushed) and verbal (i.e. yelling) aggression during conflict has been used to measure couple discord (Duggan, O'Brien, & Kennedy, 2001; Kinsfogel & Grych, 2004; Hare, Miga, & Allen, 2009; Miga, Gdula, & Allen, 2012). In addition, the *Revised Conflict Tactic Scale* (CTS2) which consist of 39 items used to measure physical aggression (i.e. throwing objects at partner), psychological aggression (i.e. making threatening statements), and verbal reasoning used by couples has been utilized to assess couple discord (Marcus, Lindahl, & Malik, 2001). Another measured that has been used to measure couple discord is the *O'Leary Porter Scale* (OPS) which assesses overt couple conflict in front of children (Lindsey, Chambers, Frabutt, & Mackinnon-Lewis, 2009; Shelton & Harold, 2008). Likewise,

couple discord has been assessed using *Marital Daily Records* (MDR) which measure conflict based on individual diary reports following conflict whether positive (i.e. humor, support, calm discussion) or negative (i.e. verbal hostility, physical aggression) emotions and behaviors are displayed (Cummings, Goeke-Morey, & Papp, 2004). Similarly, couple discord has been measured using the *Iowa Youth and Families Project Rating Scale* which measure conflict based on four items (i.e. Throughout the last month, how frequently has your partner gotten angry at you?) used to assess couple hostility (Shelton & Harold, 2008). Also, the *Marital Adjustment Scale* which is a global scale used to measure couple conflict that assess overall marital adjustment has been used in previous studies (Shelton & Harold, 2008).

For the current study, the Locke-Wallace relationship questionnaire (see appendix for items; Locke & Wallace, 1959) was used to assess couple discord based on milder forms of conflict (e.g. matters of recreation, demonstration of affection, friends, sex relations, philosophy of life) compared to other studies measuring couple conflict based on more aggressive behaviors (i.e. physical and verbal aggression). This questionnaire was completed by parents who were in a current romantic relationship. The Locke-Wallace is a widely used measure that has demonstrated excellent reliability and validity. For the purposes of this study, we used the measure to determine if even milder forms of conflict among parents produce similar detrimental effects on adolescent adjustment that have been found by previous studies examining more destructive emotions and behaviors during couple discord.

From a social learning perspective (Bandura, 1977), social learning can produce positive or negative outcomes for children's development based on behaviors displayed

within the family system. Exposure to couple discord is linked to children's aggressive behavior and depressive symptoms. Emergence and maintenance of this maladjustment (i.e. aggressive behavior, depressive symptoms) over time may be contributed to social learning. Children modeling what they see may often result in emotional insecurity and maladaptive mental functioning (i.e. belief that destructive conflict is normal).

Adolescents experiencing high levels of couple discord are at risk for becoming aggressive (Lindsey et al., 2009). Exposure to couple discord is linked to children's aggressive behavior in various ways due to social learning, emotional insecurity, and possibly resulting in misguided beliefs about appropriate behaviors. Children who witness couple discord in the home tend to be more aggressive toward others (Lindsey et al., 2009). In addition, emotional reciprocity, described as positive or negative interactions or emotional expressions in the parent-teen relationship, has been found to impact youth's aggressive behavior. Specifically, couple discord has been found to influence children's aggressive behavior with others through its effect on mother-adolescent emotional reciprocity (Lindsey et al., 2009). Moreover, children who develop maladaptive cognitive functioning (i.e. beliefs that aggressive behavior is acceptable) are at risk for becoming aggressive (Marcus, Lindahl, & Malik, 2001). Children's cognitive processing may be altered due to exposure to high levels of couple discord, leading to more negative and hostile attributions toward others. Aggressive behavior exhibited by children at school, can be partly attributed to the development of cognitive beliefs that aggression is an acceptable and normal response to addressing conflict (Marcus, Lindahl, and Malik, 2001).

Focusing on **social learning**, Lindsey et al. (2009) found that children who come from homes with high levels of couple discord display more blatant and social aggression toward others. Similarly, Cummings, Goeke-Morey, and Papp (2004) found that negative parental emotionality and destructive conflict strategies were linked to increased probability of aggressive behavior in children when they witnessed couple discord. On the other hand, witnessing constructive strategies during couple discord served as a guide to appropriately handling conflict. For example, Cummings, Goeke-Morey, and Papp (2004) found that constructive conflict techniques and positive parental emotionality witnessed during couple conflict decreased the likelihood of aggressive behavior in children. In addition to being at risk for aggressive behavior, adolescents exposed to high levels of couple discord are at a disadvantage due to a lack of learning prosocial behaviors, helping behaviors necessary for healthy social functioning. Constant exposure to destructive interactions does not provide an example of how to handle problems in a positive manner. However, there is some evidence that exposure to constructive conflict may be associated with positive outcomes. For example, McCoy, Cummings, and Davies (2009) found that constructive couple discord increased positive behaviors in children, instead of just decreasing negative behaviors.

Adolescents' **emotional insecurity** due to couple discord also serves as a strong contributor to the development of aggressive behavior due to the fear and anxiety of the instability of the family system. Topics potentially threatening to youths' emotional security (conflicts about the child or the couple's relationship) are linked to greater behavioral dysregulation in youth, as indicated by a heightened probability for aggressiveness (Cummings, Goeke-Morey, & Papp, 2004). Consequently, when faced

with couple discord, adolescents are at risk for increased internalizing and externalizing problems (Kouros, Merrilees, & Cummings, 2008). However, heightened emotional security about couple conflict has been associated with more prosocial behavior (McCoy, Cummings, and Davies, 2009). Nevertheless, it is likely that when faced with high levels of couple discord adolescents may be less likely to be prosocial among others, although there is little research on this topic.

Adolescents experiencing high levels of couple discord are also at risk for developing depressive symptoms (Cui, Donnellan, & Conger, 2007). Couple discord often leads to low quality couple relationships over time and has been linked to increased depressive symptoms in adolescents (Clavarino et al., 2009). In addition, couple discord may have lasting effects on adolescents' mental health (Turner & Kopiec, 2006). Furthermore, adolescents who observe persistent quarreling, fighting, and intense exchanges among parents may develop related forms of interactions that produce tension in their own relationships leading to depression (Clavarino et al., 2009).

Research also links couple discord to adolescent depressive symptoms. For example, in a longitudinal study, a poor-quality couple relationship was related to increased depressive symptoms in both mothers and children 7 years later (follow-up occurred when children were 14 years old; Clavarino et al., 2009). Likewise, exposure to couple discord in childhood was significantly correlated with existing depressive symptoms among young adults (Turner & Kopiec 2006). Although, these studies show couple discord being linked to increases in depressive symptoms among adolescents, other studies have found that adolescent depressive symptoms may fluctuate based on changes in the level of couple discord over time. For instance, Papp (2012) examined

indicators of parents' relational differences (i.e. disagreements or conflict) when adolescents were 11 years old as predictors of adolescents' depressive symptoms post puberty. Higher couple discord correlated with sharper rises in depressive symptoms over time, and greater conflict resolution related to diminished depressive symptoms. Moreover, escalations or reductions in couple discord seemed to be the critical component in predicting corresponding escalations or reductions in adjustment issues (Cui, Conger, & Lorenz, 2005).

Adolescents' constant experience with couple discord can also have negative effects on academic achievement. For example, Sturge-Apple et al. (2006) examined the link between couple discord over the course of three years and found that parents' emotional withdrawal due to couple discord was related to children's academic maladjustment. Similarly, Lee et al. (2011) examined the association between couple discord and adolescent academic achievement using parenting practices as a moderator in a community-based sample of Taiwanese adolescents. Results indicated that mothers faced with high levels of couple discord employed harsher parenting practices which were linked to poor academic achievement among adolescents (Lee et al., 2011). Likewise, adolescents' frequent exposure to couple discord can influence psychological processing and self-esteem leading to poorer academic success. Specifically, research has found that adolescents' who develop appraisals of couple discord in which they blame themselves for their parents' discord are at risk for poor academic achievement (Harold et al., 2007).

In summary, couple conflict has been associated with a host of negative outcomes such as aggressive behavior, depressive symptoms, less prosocial behavior, and low

academic achievement. Nevertheless, more research is needed on the link between couple discord and youth adjustment based on studies comparing differences between developmental periods. Moreover, research is needed on factors within the family and the adolescent that may protect teens from adverse outcomes associated with couple discord.

Potential Moderators

Although there has been reliable data linking couple discord to adolescent adjustment, it is plausible that this link may be moderated by parent-youth relationships, adolescents' emotion regulation, and gender. Moderators are variables that describe *when* the independent and dependent variables are correlated (Baron & Kenny, 1986). When there is indication of moderation, the type and strength of the relationship among the independent and dependent variables varies based on the level of the moderator. For example, the link between two variables might be significant under high (but not low) levels of a specific moderator. Analysis of moderation models is essential because it provides useful information regarding the generalizability of findings from studies investigating links among various variables (Fairchild & McKinnon, 2009). In other words, an analysis of moderation may offer valuable data concerning when and under which circumstances two factors are related, which can provide important implications for service providers and interventionists.

Emotion regulation can be defined as the “internal and external processes involved in initiating, maintaining, and modulating the occurrence, intensity, and expression of emotions” (Morris et al., 2007, p. 363). The way adolescents go about regulating their emotions during times of stress (i.e. couple discord) may serve as an attenuating or exacerbating factor in the face of couple discord. Emotion regulatory

abilities may help determine whether adolescents use hostile or helping responses in the presence of couple discord (Schulz, Waldinger, Hauser, & Allen, 2005). Importantly, high levels of negative emotional responses to couple discord may lead to forms of emotion dysregulation that result in symptoms of psychopathology (Cummings, El-Sheikh, Kouros, & Buckhalt, 2009). Unregulated emotional reactions, such as anger, may diminish the quality of adolescents' functioning and possibly prompt aggressive coping reactions (Marcus, Lindahl, & Malik, 2001).

Based on emotional security theory, adolescents care about the meaning of couple discord in regards to the implication it has on the entire family system (Goeke-Morey, Cummings, & Papp, 2007). Adolescents experience a greater sense of security emerging from the perception that although their parents have disagreements, their relationship is nontoxic and will survive (Goeke-Morey, Cummings, & Papp, 2007). However, couple discord that is composed of high levels of both psychological cruelty and physical forcefulness prompt robust emotional reactions in adolescents, including greater levels of anger and sadness (Cummings, El-Sheikh, Kouros, & Buckhalt, 2009). Children who are prone to such emotional reactions and dysregulation may be more likely to have adjustment difficulties in the face of couple discord, whereas children with better emotion regulation may be less affected (Schulz, Waldinger, Hauser, & Allen, 2005).

In general, how well youth manage their emotions is predictive of their overall internalizing and externalizing behaviors. Adolescents who have a tendency to respond negatively when faced with stressful situations tend to encounter greater levels of anger and sadness, and research suggests this places them at a higher risk for developing behavioral and emotional problems (Morris et al., 2007). Youth physiological attributes

may be a contributing factor in how adolescents respond to couple discord. For example, low baseline respiratory sinus arrhythmia (RSA) is measured as an indicator of emotion regulation at the physical level, and adolescents' RSA has been found to function as a moderator or vulnerability feature, which intensifies the relationship between couple discord and internalizing problems (El-Sheikh, Keiley, Erath, & Dyer, 2013).

Similarly, in another study examining couple discord and adolescent emotion regulation, adolescents who engaged in maladaptive coping techniques including destructive emotion venting to deal with couple discord tended to exhibit more depressive symptoms and aggressive behavior (Shelton & Harold, 2007). In contrast, adolescents with greater ability to endure negative emotions when faced with couple discord showed a greater probability of displaying increased positive involvement (interactions with parents), and adolescents who are better capable of modulating their emotional expressions have a lower probability of displaying anger (Schulz, Waldinger, Hauser, & Allen, 2005).

Parent-child relationship quality may also serve as a moderator between the effect of couple discord on adolescent adjustment (i.e. aggressive behavior, depressive symptoms, prosocial behavior, and school grades). Continuous exposure to punitive parenting might intensify feelings of helplessness resulting from exposure to couple discord (Schulz, Waldinger, Hauser, & Allen, 2005). Moreover, adolescents may be vulnerable due to constant exposure to couple discord, and witnessing aggressive role models may lead to aggressive tactics in the attempt to regain their emotional security (Schulz, Waldinger, Hauser, & Allen, 2005). However, positive parent-adolescent emotional exchanges may serve as a buffer against the effects of couple discord on

adolescent aggressive behavior when interacting (Lindsey et al., 2009), such that a warm positive relationship may buffer the negative effects of couple discord.

Empirical evidence indicates that more positive emotional exchanges, measured through an observation task between mothers and adolescents decreased the probability of youth's involvement in explicit aggression with others despite their exposure to couple conflict (Lindsey et al., 2009). On the other hand, more negative emotional exchanges between mothers and adolescents increased the chances of youth's involvement in interpersonal aggression with others (Lindsey et al., 2009). Interestingly, support has been found for mother and father behavioral differences that contribute to couple discord which impacts adolescent adjustment in differential ways. Specifically, Shelton and Harold (2008) found that when experiencing rejection by mothers, girls exhibited more externalizing behavior problems when there was high couple conflict in a family. In contrast, boys exhibited more externalizing behavior when they were rejected by their fathers in the context of couple conflict.

Indeed, experiencing couple discord compounded by poor parent-youth relationships makes adolescents susceptible to maladjustment (i.e. aggressive behavior, depressive symptoms, less prosocial behavior, and poor school grades). Furthermore, studies find that adolescents who are exposed to more aggressive parenting are considerably more likely to practice aggressive tactics and slightly less likely to utilize constructive approaches in the occurrence of couple discord (Schulz, Waldinger, Hauser, & Allen, 2005). Overall, the research that has been done on this topic points to couple discord having an effect on parents' interactions with their adolescents, possibly leading to aggressive parenting and more aggressive adolescent behavior (Schulz, Waldinger,

Hauser, & Allen, 2005). Nevertheless, positive parent-teen relationships may act as a moderator against the negative impact of couple discord on teens who feel that they are loved and accepted by their parents even in the face of couple conflict.

Gender Differences Considered

Gender differences may moderate the effects of couple discord on adolescent adjustment. Boys and girls may respond differently in the context of couple discord which may lead to various developmental pathways. Specifically, Kinsfogel and Grych (2004) found that boys exposed to couple conflict were more accepting of aggressive behavior (i.e. physical and verbal abuse) among parents which was linked to more physical and verbal aggression displayed by boys but not girls. In contrast, couple discord was not found to impact girls' aggressive behavior or beliefs about such negative behaviors during conflict (Kinsfogel & Grych, 2004). In addition, Lindsey et al. (2009) found sex differences such that boys with positive relationships with mothers in the context of couple discord exhibited less overt aggressive behavior. Whereas girls with negative relationships with their mother in the context of couple discord displayed more relational aggressive behavior. Furthermore, mothers' positive behaviors impacted girls more than boys in the context of couple discord. However, fathers' negative behaviors were more effective for boys than girls when exposed to couple conflict (Cummings et al., 2004).

Summary, Research Goals, and Hypotheses

In summary, couple discord is associated with adolescent adjustment (i.e. aggressive behavior, depressive symptoms, less prosocial behavior, and poor school grades). The need for a healthy parent-child relationship and good emotion regulation, is

essential when adolescents are exposed to couple discord. In addition, how gender differences influence youths' response to couple discord is important to understand when working to improve adolescent development. Although, the literature has provided important contributions to the understanding of couple discord on adolescent adjustment and moderating factors involved in this link, there are some gaps in the literature that need to be filled.

First, research focusing on the effects of couple discord in intact families on adolescent adjustment is scarce, as more research has focused on younger children. However, understanding the influence of couple discord on adolescent development is essential to ensuring healthy development during this developmental stage, in addition to, providing direction for prevention and intervention work for troubled families. Also, this is the developmental period when adolescents often begin dating and having romantic interests, and they need a strong foundation and positive model for how relationships should function. Next, there is limited research on the moderating effects of emotion regulation on adolescent adjustment in the face of couple discord, and most research has focused on the compounding effects of emotion dysregulation and negative parenting rather than examining successful emotion regulation and positive parent-child relationships as moderating factors. In addition, literature highlighting the importance of strong and supportive parent-child relationships, particularly in families with couple discord, is scant. However, positive parent-child relationships are imperative to the well-being of adolescents exposed to risk (i.e. couple discord). Lastly, research identifying differential effects of couple discord on adolescent adjustment based on gender is worth exploring, as some studies have noted sex differences.

To address these gaps in the literature, three research goals have been identified for the current study. The *first research goal* was to examine the link between couple discord and adolescent adjustment (i.e. aggressive behavior, depressive symptoms, prosocial behavior, and school grades). Couple discord was based on parent reports, whereas the four adolescent outcomes were based on parent and youth reports. Specifically, aggressive behavior (parent and youth reports), depressive symptoms (youth reports), prosocial behavior (parent and youth reports), and school grades (parent and youth reports). It was hypothesized that greater couple discord would be associated with greater problem behavior (aggressive behavior, depressive symptoms) and less positive behavior (prosocial behavior, academic achievement). The *second research goal* was to determine whether the association between couple discord and adolescent adjustment was moderated by adolescent emotion regulation based on three levels of affect (i.e. positive, anger, and sadness) and parent-youth relationship quality (observer ratings). It was hypothesized that adolescents' successful emotion regulation would serve as a protective factor, such that low levels of emotion dysregulation would attenuate or weaken the link between couple discord and adolescent adjustment. Likewise, it was hypothesized that positive parent-child relationships would serve as a buffer, such that high levels of parent-youth relationship quality would diminish or lessen the link between couple discord and adolescent adjustment. The *third research goal* was to investigate potential sex differences regarding this link. It was hypothesized that couple discord would be associated with more aggressive and less prosocial behavior among boys and more depressive symptoms and poorer school grades among girls.

CHAPTER III

Methods

Participants

A subsample of participants were taken from the Family and Youth Development Project (FYDP; Criss et al., in press) that had a total of 206 participants. The single-parent families where the primary caregiver did not identify a romantic partner were excluded in the current study for a total of 145 participants in the current study. The FYDP focused on predictors (i.e. youth affect, parent-youth relationship quality) and outcomes (i.e. youth antisocial behavior, school grades) of adolescent emotion regulation. Data were obtained for both youth (M age = 13.33 years, SD = 2.30, age range = 10-18 years; 55% female, 45% male; 64.5% ethnic minorities) and their primary caregivers (83.4% married, 16.5% cohabiting; 83.2% biological mothers; yearly family income median = \$50,000). Descriptive statistics for the sample characteristics and other study variables are listed in Table 1. As noted in Table 1, there is a greater % of European American (35.4%) and Latino (22.2%) participants in the subsample and a lower % of African American (20.8%) participants in the subsample compared to the original sample. Compared to other families in the larger project, the subsample used in the

analyses had higher income, prosocial behavior, and positive affect, and lower sadness and antisocial behavior.

Procedures

Data in the present study were drawn from questionnaires completed by both parents and youth, and observer ratings of the parent-child relationship and adolescent emotion regulation. As part of the broader FYDP study, parents and teens were recruited from the Tulsa area through fliers distributed throughout schools and other public forums. In addition, snowball sampling was utilized through encouraging families in the study to provide fliers to their families and friends. Parents and adolescents participated in a two-hour lab visit where they completed separate questionnaires and participated in various emotion tasks and a conflict task which was videotaped. Parent questionnaires assessed demographic backgrounds, parenting behaviors, parent-child relationship variables, and adolescent adjustment. Youth questionnaires also assessed demographic backgrounds, parent-child relationship, parenting behaviors, and adolescent adjustment. Parents and adolescents were both paid \$60 for their participation in the lab tasks and were debriefed at the end of the study. All study procedures were approved by the university IRB prior to data collection. Only data relevant to the current research questions will be used for the current study.

Measures

Couple Discord. Couple discord was based on parent reports and reflects conflict among couples married or cohabitating, in a sexual relationship, or couples living together as co-parents. Couple discord was created by combining eight questions from the Locke-Wallace relationship questionnaire (see appendix for items; Locke, H.J. &

Wallace, K.M., 1959). This questionnaire was completed by parents who were in a current romantic relationship. The Locke-Wallace is a widely used measure that has demonstrated excellent reliability and validity. For the purposes of this study, we used 8 items to assess couple discord related to various areas of couple conflict (e.g. matters of recreation, demonstration of affection, friends, sex relations, philosophy of life). For each topic, parents rated how much they agreed with their partner using the following scale: 5 = *Always Agree*, 4 = *Almost Always Agree*, 3 = *Occasionally Disagree*, 2 = *Frequently Disagree*, 1 = *Almost Always Disagree*, 0 = *Always Disagree*. The Cronbach's α was .87 for this scale in the current study.

Youth Emotion Regulation. Adolescent positive affect, anger, and sadness expression was coded based on observer ratings using a scale of (1-5) during a six-minute parent-adolescent conflict resolution task. Observers rated adolescents' ability to control anger or anger expressions and sadness based on a five point scale. The discussion conflict task was based on parent and youth separate scoring rate of conflict on various topics, then the five topics scored highest by both parent and adolescent was used for the conflict resolution task. Twenty-three percent of the interactions were double-coded to determine inter-rater reliability (via intraclass correlations: $\rho = .97, p < .001$).

Parent-Adolescent Relationship Quality. Parent-adolescent relationship quality was measured using observer ratings during a six - minute conflict resolution task, and was used as a measure of the quality of the parent-teen relationship using a revised coding scheme developed originally for the *Child Development Project* (CDP, Criss et al., 2001). Research assistants rated the quality of the parent-adolescent relationship on a 9-point scale according to observed evidence of the relationship. A low score indicates an

unhappy, emotionally unsatisfying, or brittle relationship. A high score indicates a warm, open, happy, and emotionally satisfying relationship. Evidence of knowledge about one another's life, positive replies to one another's expressions, humor, warmth, and respectable communication are reflective of good relationship quality. Evidence of invalidating one another's feelings, limiting verbal expression, guilt induction, lecturing or moralizing, hostility, or intrusiveness are coded as displays of poor relationship quality. Twenty percent of the interactions were double coded to ensure inter-rater reliability (via intraclass correlations: $\rho = .71, p < .001$).

Adolescent Antisocial Behavior. Youth antisocial behavior was based on average ratings of both parent and youth reports using 35 items from the Problem Behavior Frequency Scale (Farrell, Kung, White, & Valois, 2000), which assessed the frequency of verbal, physical, and relational aggression, such as "Insult someone's family" "Get in a fight in which someone was hit" "Spread a rumor." Both parents and adolescents were instructed to rate how often the youths engaged in each behavior during the last year 365 days based on the following scale: 1 = *Never*, 2 = *1-2 times*, 3 = *3-4 times*, 4 = *5-6 times*, 5 = *7 or more times*. Cronbach's α was .92 for adolescent report and .90 for parent report in the current study. The adolescent and parent ratings ($r = .48, p < .001$) were combined to reach a combined score of youth aggressive behavior.

Prosocial Behavior. Youth prosocial behavior was based on average ratings of both parent and youth reports. Both parents and adolescents reported on adolescents' prosocial behavior during the past year based on a 3-point scale (0 = *Not true*, 1 = *Sometimes*, 2 = *True*). The measure (from the Strengths and Difficulties Questionnaires, SDQ, Goodman & Scott, 1999) includes 5 items such as "I try to be nice to other people,

I care about their feelings” and “I usually share with others.” Cronbach’s α was .77 for adolescent-report and .68 for parent-report. A composite score was calculated based on adolescent and parent ratings ($r = .25, p < .01$).

Adolescent Depression. Youth depressive symptoms were measured using youth reports. Youth reported on their own depressive symptoms during the past two weeks using the Child Mood & Feelings Questionnaire (MFQ-C, Angold & Costello, 1987) using a 3-point scale (0 = *Not true*, 1 = *Sometimes*, 2 = *True*). The measure includes 33 items such as “I thought there was nothing for me in the future” “I felt miserable or unhappy” and “I was less hungry than usual.” Cronbach’s α was .94 in the current study and items were averaged for a total score.

Academic Achievement. Adolescents’ academic achievement was based on both parent and youth reports using the youth school grades instrument which reflects the student’s grade point average (A = 4, B = 3, C = 2, D = 1, F = 0) in four subjects: English, Math, Science, and History. Both parent ($r = .88; M = 3.16, SD = .75$) and adolescent ($r = .81; M = 3.61, SD = .65$) reports were created by averaging the 4 items. Parent and youth reports of school grades were significantly related and the final academic factor was created based on the average ($r = .86, p < .001$) of parent and youth reports.

Analytical Plan

First, a series of t-tests were run to investigate whether there were sex differences among the key study variables. Second, bivariate correlations among the study variables were computed. Third, a series of regressions were run in which youth adjustment (antisocial behavior, depressive symptoms, prosocial behavior, or school grades) was

predicted by youth age and sex (Step 1), couple discord (Step 2), moderators (youth positive affect, youth anger, youth sadness, or parent-youth relationship quality) (Step 3), two-way interactions (i.e., couple discord X moderator, couple discord X youth sex, moderator X youth sex) (Step 4), and the three-way interaction (i.e., couple discord X moderator X youth sex) (Step 5). Couple discord and the moderators were centered before creating the two-way and three-way interaction terms. Separate regressions were computed for each moderator and adolescent adjustment factor.

CHAPTER IV

Results

Descriptive Statistics

An independent sample t-test was computed to examine mean differences based on gender for each variable. Significant differences were found for males and females such that males ($M = 1.47$) scored higher than females ($M = 1.36$) on youth antisocial behavior ($t = -2.08, p < .05$). In contrast, girls ($M = 1.74$) scored higher than boys ($M = 1.55$) on youth prosocial behavior ($t = 4.17, p = .000$). Likewise, females ($M = 3.29$) scored higher than males ($M = 2.77$) on youth school grades ($t = 3.85, p = .000$). In addition, girls ($M = 5.33$) scored higher than boys ($M = 4.42$) on parent-youth relationship quality ($t = 2.04, p < .05$). These mean differences for boys and girls provide evidence for significant sex differences among the dependent variables of interest in relation to the effects of couple discord on adolescent adjustment.

Bivariate Correlations

Bivariate correlations are presented in Table 2. Bivariate correlations indicated couple discord was significantly and negatively related to youth school grades and parent-adolescent relationship quality. In addition, couple discord was significantly and positively related to youth sadness. Within and between domains were consistent with expectations. Specifically, youth antisocial behavior was positively associated with youth

depressive symptoms. Youth antisocial behavior was negatively correlated with youth prosocial behaviors and school grades. Within the moderator domain, correlations indicated positive affect was significantly and negatively associated with youth sadness. Moreover, positive affect was significantly and positively associated with parent-youth relationship quality.

In regards to moderating variables, youth antisocial behavior was negatively related to youth positive affect and parent-youth relationship quality. In addition, youth antisocial behavior was positively linked to youth anger and sadness. Moreover, youth depressive symptoms were significantly and negatively correlated with parent-youth relationship quality. On the other hand, youth prosocial behavior was negatively associated with youth sadness and positively related to parent-youth relationship quality. Likewise, youth school grades were significantly and positively related to youth positive affect and parent-youth relationship quality but negatively related to youth anger and sadness.

Also, there were noticeable sex and age differences, similar as what was found for the *t*-tests. Specifically, levels of antisocial behavior were significantly higher for boys and older adolescents. Whereas, prosocial behavior was higher for girls and younger youth. In addition, gender and sex differences were found such that school grades were higher for girls and younger adolescent. However, there were no significant sex or age differences in relation to youth depressive symptoms.

Regressions

The *first research goal* was to examine the link between couple discord and adolescent adjustment (i.e. aggressive behavior, depressive symptoms, prosocial behavior, and school grades). This association was examined in each regression (see Analytical Plan). As indicated in Tables 3-6, high levels of couple discord were related to low levels of youth school grades after controlling for youth age and sex. Couple discord was not significantly related to youth antisocial behavior, depressive symptoms, or prosocial behavior in the regressions.

The *second research goal* examined moderators of the link between couple discord and adolescent adjustment. As indicated in the Analytic Plan, a series of regressions were computed to address this research goal. Following the recommendations of Jaccard et al. (1990), evidence for moderation is found when the two-way interaction (i.e., independent variable X moderator) is significantly related to the dependent variable after controlling for the main effects. As indicated in Tables 3-6, there was only one significant two-way interaction (out of a possible 16): couple discord X parent-youth relationship quality in the prediction of antisocial behavior (AB). To unpack the interaction factor, the link between couple discord and AB was examined at low (-1 *SD*) and high (+1 *SD*) levels of the moderator. The findings indicated that couple discord was positively and significantly related to antisocial behavior under low levels of parent-youth relationship quality (slope = .09, $p < .05$). Couple discord was not significantly related to antisocial behavior under high levels of parent-youth relationship quality (slope = -.04, *ns*).

The *third research goal* was to investigate potential sex differences regarding this link. Sex was examined as a moderator in two-way interactions (i.e., couple discord X youth sex) and in three-way interactions (i.e., couple discord X moderator X youth sex). As indicated in Table 3 (which focused on youth positive affect and sex as moderators) and Table 4 (which focused on youth anger and sex as moderators), there were significant couple discord X youth sex interactions in the prediction of antisocial behavior. In the regression focusing on youth positive affect as a moderator in the link between couple discord and antisocial behavior, the findings indicated that couple discord was significantly and positively related to youth antisocial behavior for boys (slope = .123, $p < .05$). This link was not significant for girls (slope = -.001, *ns*). In the regression focusing on youth anger as a moderator, the results showed that high levels of couple discord were significantly related to antisocial behavior for boys (slope = .118, $p < .05$). This link was not significant for girls (slope = .003, *ns*).

As indicated in Table 7 (which focused on high and low levels of youth sadness and sex as moderators), there were significant couple discord X youth sadness X youth sex interaction terms found in the prediction of youth antisocial behavior and youth prosocial behavior. The findings indicated that for boys, the link between couple discord and antisocial behavior was significant and positive under high levels of youth sadness (slope = .199, $p < .01$) but not significant among youth displaying low levels of sadness. For girls, couple discord was not significantly related to antisocial behavior regardless of level of sadness (slopes = -.014 & -.005, *ns* for high and low sadness respectively). Likewise, the findings indicated that for boys, the link between couple discord and prosocial behavior was significant and negative under high levels of youth sadness (slope

= -.12, $p < .05$) but not significant among youth displaying low levels of sadness. For girls, couple discord was not significantly related to prosocial behavior regardless of level of sadness (slopes = .02 & -.04, *ns* for high and low sadness respectively).

CHAPTER V

Discussion

In the present study, three research goals were explored. The first goal was to examine the link between couple discord and adolescent adjustment (i.e. antisocial behavior, prosocial behavior, depressive symptoms, and school grades). The second goal was to investigate whether youth emotion regulation (i.e. positive affect, anger, and sadness) and parent-youth relationship quality moderated the effects of couple discord on adolescent adjustment. The third goal was to investigate sex differences in the link between couple discord and adolescent adjustment. The results indicated that high levels of couple discord were related to poorer school grades. In addition, there was support for youth emotion regulation and parent-youth relationship quality moderating the effects of couple discord on adolescent adjustment. The findings indicated that for boys, the link between couple discord and antisocial behavior was significant and positive under high levels of youth sadness. Likewise, the findings indicated that for boys, the link between couple discord and prosocial behavior was significant and negative under high levels of youth sadness. In addition, the findings indicated that couple discord was positively and significantly related to antisocial behavior under low levels of parent-youth relationship quality. Further, the results from the analyses examining sex differences in the link between couple discord and adolescent adjustment revealed moderation based on gender

when exposed to high levels of couple conflict, such that couple discord was associated with antisocial behavior primarily for boys when controlling for positive affect and anger. Sex differences were not found for the protective impact of relationship quality, it attenuated the link between couple discord and antisocial behavior regardless of sex. Implications for adolescent emotion regulation, parent-youth relationships, and youth gender as frameworks that foster resilience among vulnerable teens will be discussed.

Aim # 1:

The first research goal was to examine the association between couple discord and adolescent adjustment (i.e. antisocial behavior, prosocial behavior, depressive symptoms, and school grades). Youth sex and age were entered as covariates. The results provided support for the direct effect of couple discord on adolescent school grades. There was no direct effect found for antisocial behavior, prosocial behavior, or depressive symptoms in this link. These findings are mixed in regards to other studies. Specifically, couple discord has been found to negatively affect school grades (Sturge-Apple et al., 2006; Lee et al., 2011) and suggest adolescents' experience with couple discord impacts feelings of self-blame and low self-esteem negatively affecting academic achievement (Harold et al., 2007). Although the current study did not find direct effects link to couple discord, other studies have found support for couple discord negatively impacting adolescents' adjustment including antisocial behavior (Lindsey et al., 2009), prosocial behavior (McCoy, Cummings, and Davies, 2009), and depressive symptoms (Clavarino et al., 2009).

The lack of support for a direct impact of couple discord on adolescent adjustment (i.e. antisocial behavior, prosocial behavior, and depressive symptoms) may be due to the

sample and measure characteristics. For example, variation in outcomes may have been less because of differences in my sample and measure compared to other studies such as a *smaller sample size, older adolescents*, and only using *parent reports* to measure couple conflict. Specifically, the current study only had data for 145 participants which may have limited significant findings for each outcome variable compared to other studies with sample sizes two-three times as large increasing the probability of finding significance within the sample (Kouros et al., 2008; Shelton & Harold, 2008). Also, the study consisted of older adolescents which tend to spend less time at home and more time outside providing less exposure to couple discord compared to other studies utilizing younger adolescents who tend to spend more time at home with parents, thus experiencing more direct contact with couple discord (Marcus et al., 2001; Lindsey et al., 2009). Moreover, the current study only had mother reports on adolescent adjustment compared to other studies using multi-informants and multi-methods to assess adolescent adjustment which may yield greater significant results than the present study single measure (Turner & Kopiec, 2006; Papp, 2012). In addition, the measure used to assess couple discord may not provide sufficient a conflict variable (i.e. handling family finances, dealing with in-laws; Locke, H.J. & Wallace, K.M., 1959) among parents to produce effects of maladjustment among adolescents compared to studies that have measured couple discord in regards to more physical or verbal aggression (i.e. hitting, yelling) displayed by parents (Erath, Bierman, and Conduct Problems Prevention Research Group, 2006). This lack of direct findings was surprising; however, there was evidence of moderating effects (i.e. adolescent emotion regulation, parent-youth relationship quality) in this link.

Aim # 2:

The second research goal was to explore whether adolescent emotion regulation (i.e. positive affect, anger, and sadness) and parent-youth relationship quality moderated the effects of couple discord on adolescent adjustment. The findings in this study provided support for moderation under high and low levels of the moderators. The findings indicated that couple discord was significantly and positively related to youth antisocial behavior for boys exhibiting low levels of positive affect. In addition, youth anger moderated the link, the results showed that high levels of couple discord were significantly related to antisocial behavior for boys displaying high levels of anger. Youth sadness was associated with less prosocial behavior when exposed to couple conflict and more antisocial behavior, but only among boys. These findings provide support for emotion regulation serving as an exacerbating factor against couple discord. This is consistent with previous studies that have focused on emotion regulation (i.e. anger) in which poor regulation was related to exhibiting aggressive behaviors in response to couple discord (Marcus, Lindahl, & Malik, 2001). In addition, this dysregulation can lead to psychological and emotional problems in adolescents who cope negatively when exposed to couple discord (Cummings, El-Sheikh, Kouros, & Buckhalt, 2009). However, adolescents who are able to better regulate emotions may attenuate the negative effects of couple discord on adjustment (Schulz, Waldinger, Hauser, & Allen, 2005). Adolescents demonstrating the ability to regulate their emotions when faced with adversity (i.e. couple discord) may be better able to put the conflict into perspective and determine the severity of the argument. This may help to lessen the concern about the breakdown of the family

system thus reducing the likelihood of adjustment difficulties (Goeke-Morey, Cummings, & Papp, 2007).

Further, parent-youth relationship quality moderated the effects of couple discord on adolescent adjustment. The findings indicated that couple discord was positively and significantly related to antisocial behavior under low levels of parent-youth relationship quality. Couple discord was not significantly related to antisocial behavior under high levels of parent-youth relationship quality. In general, the findings were consistent with previous studies (Lindsey et al., 2009; Schulz, Waldinger, Hauser, & Allen, 2005) which demonstrated that the link between couple discord and adolescent adjustment was attenuated when there was a positive and supportive parent-adolescent relationship. These findings are important as they provide support that a good relationship with parents may offset the risk of couple discord on adolescent adjustment. It could be that having a warm, close relationship with parents may decrease the likelihood of maladjustment associated with adolescents' exposure to couple discord by limiting teens' feelings of personal danger and nurturing positive coping skills (Bruce, Farrell, & Kliewer, 1998; Kliewer et al., 2004). Moreover, positive parent-youth relationship quality may reduce the detrimental effects of couple discord on adolescent adjustment by providing feelings of security and confidence in the family system despite conflict (Green et al., 2013).

Aim # 3

The third research goal was to examine sex differences in the link between couple discord and adolescent adjustment. Interestingly, there were noticeable effects for boys but not girls in models examining emotion regulation. Boys exposed to couple discord were at increased risk for exhibiting antisocial behavior when controlling for the effects

of positive affect and anger. In addition, boys exhibiting high levels of sadness displayed more antisocial behavior and less prosocial behavior in the context of couple discord. In general, these findings contribute to support for gender differences found in previous studies that determined couple discord may affect girls and boys differently based on the level of conflict and the emotional response of the adolescent (Shelton & Harold, 2008; McCoy, Cummings, & Davies, 2009). Focusing on boys inability to regulate sadness when exposed to couple discord provides inference on the need for emotion coaching and support among male adolescents who tend to be more prone than girls to exhibiting negative behaviors (i.e. antisocial behavior) when exposed to adversity (i.e. couple discord) which can foster constructive coping strategies and better emotion regulation abilities (Bruce, Farrell, & Kliewer, 1998; Kliewer et al., 2004). Based on socialization patterns in which girls are taught to value relationships, they may be less likely to respond to conflict in an aggressive manner due to the destruction such behavior could cause to the family relationship. However, boys may use more aggressive tactics to gain control over negative situations occurring in their lives (Kinsfogel & Grych, 2004). Also, mothers tend to be more responsive to girls' emotions than boys which may lead boys to respond more negatively to conflict due to lack of emotional support (Lindsey et al., 2009). Furthermore, girls and boys may respond differently to mothers and fathers behaviors during couple discord. For example, fathers' negative behaviors were more effective for boys than girls which influenced more negative behaviors among boys exposed to couple discord (Cummings et al., 2004). These findings add to the literature by providing insight into how gender may need to be one focus of intervention work, as it

suggests that girls and boys may respond differently to couple discord requiring different forms of help and support.

Implications:

The findings from the current study suggest several implications for practitioners, family scientists, and policy makers. First, the results suggest that couple discord can affect multiple dimensions of adolescent adjustment based on youth emotion regulation. Teaching youth better coping skills when exposed to couple discord may help to improve emotion regulation such as increasing positive affect that may help attenuate effects on school grades. In addition, better control over feelings of sadness and anger especially among boys may help reduce displays of antisocial behavior and increase prosocial behavior. As reviewed in the literature, exposure to couple discord may reduce youth feelings of security and stability leading to anger and sadness. With this in mind, youth from high conflict homes may benefit from counseling when exposed to couple discord. In addition, practitioners should work with families to make them knowledgeable about the negative effects of couple discord on their children and provide suggestions to minimize exposure to couple discord.

A second implication from this study is that positive and supportive parent-youth relationships are essential to combat the consequences of experiencing couple discord. Adolescents who have close and loving relationships with parents despite couple discord may be buffered from the negative effects of couple discord. Family practitioners working with couples and their children should help parents become more knowledgeable of the importance of maintaining a nurturing and supportive relationship with their teens. This positive interaction and connection with parents can provide youth with a feeling of

love and acceptance regardless of couple relationship quality. Parenting programs should target couples with high levels of conflict and focus on teaching parents constructive methods for addressing and resolving conflict. Previous studies have shown parents using constructive tactics and positive emotionality to resolve conflict provides heightened emotional security and more positive behaviors while decreasing negative behaviors among adolescents (McCoy, Cummings, & Davies, 2009). In addition, interventions done by Cummings and Schatz (2012) focusing on teaching parents communication skills used to decrease destructive conflict (i.e. yelling, aggression) and facilitate constructive conflict (i.e. resolution, compromise) based on emotional security theory using communication training has proven beneficial to improving the couple relationship and reducing the risk of adjustment problems (i.e. antisocial behavior, depression, and poor school grades) in adolescents (Cummings & Schatz, 2012).

The implications regarding sex differences in the link between couple discord and adolescent adjustment is important. As indicated in the study, the needs of boys to appropriately adjust when exposed to couple discord may differ from the needs of girls. The methods used to help youth regulate emotions and develop positive coping strategies to reduce risk of maladaptive behaviors may need to be revised to fit the emotional needs and combat the differing responses to couple discord observed by teens of the opposite sex (Shelton & Harold, 2008). Parents being more knowledgeable about the roles mothers and fathers play in impacting their children's development is critical to ensure optimal development even when faced with adversity (McCoy, Cummings, & Davies, 2009).

Limitations and Future Directions:

Although, this study contributes to the literature informing researchers of multiple dimensions that may be affected by couple discord impacting adolescent adjustment, it is not without limitations. First, this is a cross-sectional study which creates a challenge when determining directional effects. It is unclear if couple discord is negatively affecting adolescent adjustment or if adolescent behaviors are leading to increased conflict among parents. To this end, a longitudinal study would be useful to determine the interplay of couple discord and adolescent adjustment on one another. In addition, assessing how fluctuations in couple discord impact adolescent development at multiple time points would provide more clarity in how the two variables are linked. Also, the study only had mother reports on couple discord and adolescent adjustment, as well as, one measure of a milder form of couple conflict. It would be useful to have multi-informants and methods to assess couple discord and adolescent adjustment factors providing additional insight into the aims of this study. In addition, the measure used to assess adolescent emotion regulation was based on parent-youth conflict not actual adolescent's responses to couple discord. It would be valuable to assess adolescents' emotional responses when exposed to couple discord such that the emotion regulation during parental conflict may prove to be different than when the youth is engaged in direct conflict with the parent. Also, the measure used to assess adolescent emotion regulation is not a pure measure of emotion regulation. It is emotion expressed during a conflict task with the parent. A more pure measure would include self-reports and other informant reports, as well as, physiological measures to assess emotion regulation. Moreover, all three affect codes (i.e. positive, anger, sadness) and parent-youth

relationship quality were assessed based on a single task which may not clearly represent the emotions and complete relationship quality of the families. It would be useful to assess these variables during separate task to gain a more representative understanding of the moderators' role in the link between couple discord and adolescent adjustment. Lastly, this research was not designed to investigate all possible moderators in the link between couple discord and adolescent adjustment. Thus, it is possible that the link may be moderated by youth emotional security (Cummings, Goeke-Morey, & Papp, 2004) and parents' knowledge of the detrimental effects of exposure to couple discord on adolescent adjustment (Cummings & Schatz, 2012).

Conclusions:

In closing, the present study investigated the link between couple discord and adolescent adjustment (i.e. antisocial behavior, prosocial behavior, depressive symptoms, and school grades) and whether youth emotion regulation, parent-youth relationship quality, and youth gender moderated this link. Results provided evidence for the hypotheses indicating that greater couple discord was significantly associated with lower school grades. Moreover, high levels of youth sadness when exposed to couple discord was associated with more antisocial behavior and less prosocial behavior but only for boys. In addition, boys were more negatively affected by couple discord. Specifically, couple discord was associated with greater antisocial behavior for boys but not girls, controlling for positive affect and anger. Lastly, high quality parent-youth relationship moderated the link between couple discord and adolescent adjustment. In general, these findings support the importance of examining protective factors in the face of couple discord for adolescents. This may be particularly important during this developmental

transition and more research is needed to further understand the impact of couple discord and ways in which to help adolescents cope with couple discord.

REFERENCES

- Baron, R. M. & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173 – 1182.
- Bascoe, S. M., Davies, P. T., Sturge-Apple, M., & Cummings, E. M. (2009). Children’s representations of family relationships, peer information processing, and school adjustment. *Developmental Psychology*, *45*(6), 1740-1751. doi:10.1037/a0016688
- Clavarino, A., Hayatbakhsh, M. R., Williams, G. M., Bor, W., O’Callaghan, M., & Najman, J. M. (2011). Depression following marital problems: Different impacts on mothers and their children? A 21-year prospective study. *Social Psychiatry and Psychiatric Epidemiology*, *46*(9), 833-841. doi:10.1007/s00127-010-0253-8
- Criss, M. M., Lee, T. K., Morris, A., Cui, L., Bosler, C. D., Shreffler, K. M., & Silk, J. S. (in press). Link between monitoring behavior and adolescent adjustment: An analysis of direct and indirect effects. *Journal of Child and Family Studies*.
- Cui, M., Conger, R. D., & Lorenz, F. O. (2005). Predicting change in adolescent adjustment from change in marital problems. *Developmental Psychology*, *41*(5), 812-823. doi:10.1037/0012-1649.41.5.812

- Cui, M., Donnellan, M. B., & Conger, R. D. (2007). Reciprocal influences between parents' marital problems and adolescent internalizing and externalizing behavior. *Developmental Psychology, 43*(6), 1544-1552. doi:10.1037/0012-1649.436.1544
- Cummings, E. M., El-Sheikh, M., Kouros, C. D., & Buckhalt, J. A. (2009). Children and violence: The role of children's regulation in the marital aggression-child adjustment link. *Clinical Child and Family Psychology Review, 12*(1), 3-15. doi:10.1007/s10567-009-0042-7
- Cummings, E. M., George, M. R. W., McCoy, K. P., & Davies, P. T. (2012). Interparental conflict in kindergarten and adolescent adjustment: Prospective investigation of emotional security as an explanatory mechanism. *Child Development, 83*(5), 1703-1715. doi:10.1111/j.1467-8624.2012.01807.x
- Cummings, E. M., Goeke-Morey, M., & Papp, L. M. (2004). Everyday marital conflict and child aggression. *Journal of Abnormal Child Psychology, 32*(2), 191-202. doi:10.1023/B:JACP.0000019770.13216.be
- Cummings, E. M., & Schatz, J. N. (2012). Family conflict, emotional security, and child development: Translating research findings into a prevention program for community families. *Clinical Child and Family Psychology Review, 15*(1), 14-27. doi:10.1007/s10567-012-0112-0
- Davies, P. T., Cicchetti, D., & Martin, M. J. (2012). Toward greater specificity in identifying associations among interparental aggression, child emotional reactivity to conflict, and child problems. *Child Development, 83*(5), 1789-1804. doi:10.1111/j.1467-8624.2012.01804.x

- Davies, P. T., Martin, M. J., & Cicchetti, D. (2012). Delineating the sequelae of destructive and constructive interparental conflict for children within an evolutionary framework. *Developmental Psychology, 48*(4), 939-955.
doi:10.1037/a0025899
- Davies, P. T., Winter, M. A., & Cicchetti, D. (2006). The implications of emotional security theory for understanding and treating childhood psychopathology. *Development and Psychopathology, 18*(3), 707-735.
doi:10.1017/S0954579406060354
- Davies, P. T., & Woitach, M. J. (2008). Children's emotional security in the interparental relationship. *Current Directions in Psychological Science, 17*(4), 269-274.
doi:10.1111/j.1467-8721.2008.00588.x
- Duggan, S., O'Brien, M., & Kennedy, J. K. (2001). Young adults' immediate and delayed reactions to simulated marital conflicts: Implications for intergenerational patterns of violence in intimate relationships. *Journal of Consulting and Clinical Psychology, 69*(1), 13-24. doi:10.1037/0022-006X.691
- El-Sheikh, M., Cummings, E. M., Kouros, C. D., Elmore-Staton, L., & Buckhalt, J. (2008). Marital psychological and physical aggression and children's mental and physical health: Direct, mediated, and moderated effects. *Journal of Consulting and Clinical Psychology, 76*(1), 138-148. doi:10.1037/0022-006X.76.1.138

- El-Sheikh, M., Keiley, M., Erath, S., & Dyer, W. J. (2013). Marital conflict and growth in children's internalizing symptoms: The role of autonomic nervous system activity. *Developmental Psychology, 49*(1), 92-108. doi:10.1037/a0027703
- Erath, S. A., & Bierman, K. L. (2006). Aggressive marital conflict, maternal harsh punishment, and child aggressive-disruptive behavior: Evidence for direct and mediated relations. *Journal of Family Psychology, 20*(2), 217-226. doi:10.1037/0893-3200.20.2.217
- Farrell, A. D., Kung, E. M., White, K. S., & Valois, R. F. (2000). The structure of self-reported aggression, drug use, and delinquent behaviors during early adolescence. *Journal of Clinical Child Psychology, 29*, 282-292. doi:10.1207/S15374424jccp2902_13
- Goeke-Morey, M., Cummings, E. M., & Papp, L. M. (2007). Children and marital conflict resolution: Implications for emotional security and adjustment. *Journal of Family Psychology, 21*(4), 744-753. doi:10.1037/0893-3200.21.4.744
- Goodman R, Meltzer H, Bailey V (1998) The Strengths and Difficulties Questionnaire: A pilot study on the validity of the self-report version. *European Child and Adolescent Psychiatry, 7*, 125-130.
- Green, E. J., Myrick, A. C., & Crenshaw, D. A. (2013). Toward secure attachment in adolescent relational development: Advancements from sandplay and expressive play-based interventions. *International Journal of Play Therapy, 22*(2), 90-102. doi:10.1037/a0032323

- Hare, A. L., Miga, E. M., & Allen, J. P. (2009). Intergenerational transmission of aggression in romantic relationships: The moderating role of attachment security. *Journal of Family Psychology, 23*(6), 808-818. doi:10.1037/a0016740
- Jaccard, J., Turrisi, R., & Wan, C. K. (1990). *Interaction effects in multiple regression*. Newbury Park, CA: Sage.
- Kinsfogel, K. M., & Grych, J. H. (2004). Interparental conflict and adolescent dating relationships: Integrating cognitive, emotional, and peer influences. *Journal of Family Psychology, 18*(3), 505-515. doi:10.1037/0893-3200.18.3.505
- Kliewer, W., Cunningham, J. N., Diehl, R., Parrish, K. A., Walker, J. M., Atiyeh, C., Neace, B., Duncan, L., Taylor, K., & Mejia, R. (2004). Violence exposure and adjustment in inner city youth: Child and caregiver emotion regulation skills, child and caregiver relationship quality, and neighborhood cohesion as protective factors. *Journal of Clinical Child and Adolescent Psychology, 33*, 477-487.
- Kouros, C. D., Merrilees, C. E., & Cummings, E. M. (2008). Marital conflict and children's emotional security in the context of parental depression. *Journal of Marriage and Family, 70*(3), 684-697. doi:10.1111/j.1741-3737.2008.00514.x
- Lindsey, E. W., Chambers, J. C., Frabutt, J. M., & Mackinnon-Lewis, C. (2009). Marital conflict and adolescents' peer aggression: The mediating and moderating role of mother-child emotional reciprocity. *Family Relations: An Interdisciplinary Journal of Applied Family Studies, 58*(5), 593-606. doi:10.1111/j.1741-3729.2009.00577.x

- Locke, H.J. & Wallace, K.M. (1959) Short marital adjustment and prediction tests: Their reliability and validity. *Marriage and Family Living*, 21, 251-255.
- Marcus, N. E., Lindahl, K. M., & Malik, N. M. (2001). Interparental conflict, children's social cognitions, and child aggression: A test of a mediational model. *Journal of Family Psychology*, 15(2), 315-333. doi:10.1037/0893-3200.15.2.315
- McCoy, K., Cummings, E. M., & Davies, P. T. (2009). Constructive and destructive marital conflict, emotional security and children's prosocial behavior. *Journal of Child Psychology and Psychiatry*, 50(3), 270-279. doi:10.1111/j.1469-7610.2008.01945.x
- Mezulis, A. H., Hyde, J. S., Simonson, J., & Charbonneau, A. M. (2011). Integrating affective, biological, and cognitive vulnerability models to explain the gender difference in depression. In T. J. Strauman, P. R. Costanzo, & J. Garber (Eds.). *Depression in adolescent girls: Science and prevention*. New York: The Guilford Press.
- Miga, E. M., Gdula, J. A., & Allen, J. P. (2012). Fighting fair: Adaptive marital conflict strategies as predictors of future adolescent peer and romantic relationship quality. *Social Development*, 21(3), 443-460. doi:10.1111/j.1467-9507.2011.00636.x
- Morris, A. S., Silk, J. S., Steinberg, L., Myers, S. S., & Robinson, L. R. (2007). The role of the family context in the development of emotion regulation. *Social Development*, 16(2), 361-388. doi:10.1111/j.1467-9507.2007.00389.x

- Oliva, A., Jiménez, J. M., & Parra, Á. (2009). Protective effect of supportive family relationships and the influence of stressful life events on adolescent adjustment. *Anxiety, Stress & Coping: An International Journal*, 22(2), 137-152.
doi:10.1080/10615800802082296
- Papp, L. M. (2012). Longitudinal associations between parental and children's depressive symptoms in the context of interparental relationship functioning. *Journal of Child and Family Studies*, 21(2), 199-207. doi:10.1007/s10826-011-9463-2
- Paus, T. (2009). Brain development. In R. Lerner & L. Steinberg (Ed.), *Handbook of adolescent psychology* (3rd ed., Vol. 1, pp. 95-115). New York: Wiley.
- Robila, M., & Krishnakumar, A. (2006). Economic pressure and children's psychological functioning. *Journal of Child and Family Studies*, 15(4), 435-443.
doi:10.1007/s10826-006-9053-x
- Schulz, M. S., Waldinger, R. J., Hauser, S. T., & Allen, J. P. (2005). Adolescents' behavior in the presence of interparental hostility: Developmental and emotion regulatory influences. *Development and Psychopathology*, 17(2), 489-507.
doi:10.1017/S0954579405050236
- Shelton, K. H., & Harold, G. T. (2008). Interparental conflict, negative parenting, and children's adjustment: Bridging links between parents' depression and children's psychological distress. *Journal of Family Psychology*, 22(5), 712-724.
doi:10.1037/a0013515

Shelton, K. H., & Harold, G. T. (2007). Marital conflict and children's adjustment: The mediating and moderating role of children's coping strategies. *Social Development, 16*(3), 497-512. doi:10.1111/j.1467-9507.2007.00400.x

Steinberg, L. (2011). Adolescent risk taking: A social neuroscience perspective. In E. Amsel & J. Smetana (Eds.), *Adolescent vulnerabilities and opportunities: Developmental and constructivist perspectives* (pp. 41-64). New York, NY, US: Cambridge University Press.

Susman, E. J., Rogol, A. (2004). Puberty and Psychological Development. In R. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (2nd Ed., pp. 15-44). New York: Wiley.

Turner, H. A., & Kopiec, K. (2006). Exposure to interparental conflict and psychological disorder among young adults. *Journal of Family Issues, 27*(2), 131-158.
doi:10.1177/0192513X05280991

APPENDICES

Couple Discord Items

1. Handling Family Finances
2. Matters of Recreation
3. Demonstration of Affection
4. Friends
5. Sex Relations
6. Conventuality (right, good, or proper conduct)
7. Philosophy of Life
8. Ways of dealing with in-laws

Table 1: Attrition analyses

Factor	Families in Subsample	Families not in Subsample	Statistic
Adolescent sex			$\chi^2(1) = 2.90$
Male	65	36	
Female	79	26	
Adolescent age	13.33 (2.30)	13.48 (2.40)	$F(1, 204) = .18$
Adolescent ethnicity			$\chi^2(1) = 30.25^{***}$
European American	51	11	
African American	30	37	
Latino American	32	6	
Native American	11	2	
Other	20	6	
Parent sex			$\chi^2(1) = 1.11$
Male	22	6	
Female	121	55	

Table 1 continues

Table 1 (cont.)

Factor	Families in Subsample	Families not in Subsample	Statistic
Parent age	39.38 (6.27)	39.15 (7.78)	$F(1, 202) = .05$
Biological parent			$\chi^2(1) = .84$
Yes	136	56	
No	7	5	
Parent education	4.10 (1.17)	3.82 (1.07)	$F(1, 202) = 2.56$
Yearly family income	56,904.47 (34,896.52)	25,137.52 (17,696.79)	$F(1, 187) = 39.17^{***}$
Youth antisocial behavior	1.44 (.35)	1.64 (.51)	$F(1, 204) = 10.61^{***}$
Youth depressive symptoms	11.63 (11.00)	13.69 (11.10)	$F(1, 204) = 1.52$
Youth prosocial behavior	1.65 (.28)	1.48 (.35)	$F(1, 204) = 13.27^{***}$
Youth school grades	3.23 (.67)	3.00 (.66)	$F(1, 203) = 5.12^*$
Parent-youth relationship quality	4.92 (2.64)	4.21 (2.60)	$F(1, 197) = 3.06$
Youth positive affect	2.09 (.52)	1.81 (.58)	$F(1, 193) = 10.93^{***}$
Youth anger	1.52 (.42)	1.58 (.51)	$F(1, 193) = .75$
Youth sadness	2.01 (.66)	2.25 (.68)	$F(1, 193) = 5.27^*$

Note: *** $p < .001$, * $p < .05$

Table 2: *Bivariate correlations*

	1	2	3	4	5	6	7	8	9	10	11
1. Couple Discord _a		.16	-.02	-.15	-.25**	-.06	.05	.22*	-.24**	-.03	.01
2. Youth Antisocial Behavior _b			.33***	-.39***	-.42***	-.17*	.30***	.18*	-.32***	.17*	.20*
3. Youth Depressive Symptoms _c				-.07	-.25**	-.14	.11	.13	-.25**	.11	.14
4. Youth Prosocial Behavior _b					.38***	.12	-.15	-.23**	.28**	-.33***	-.18*
5. Youth School Grades _b						.26**	-.25**	-.25**	.38***	-.31***	-.23**
6. Youth Positive Affect _d							-.16	-.42***	.20*	-.14	.04
7. Youth Anger _d								.19*	-.37***	-.06	.26**
8. Youth Sadness _d									-.32***	.12	.02
9. P-Y Relationship Quality _d										-.17*	-.23**
10. Youth Sex _e											.06
11. Youth Age											

Note: *** $p < .001$, ** $p < .01$, * $p < .05$; _a = parent reports; _b = parent and youth reports; _c = youth reports; _d = observer ratings; _e = coded -1 = female and 1 = male; P-Y = parent-youth

Table 3: Regressions examining youth positive affect and sex as moderators in the link between couple discord and adolescent adjustment

Step	Predictors	Youth Antisocial Behavior		Youth Depressive Symptoms		Youth Prosocial Behavior		Youth School Grades	
		Std. β	ΔR^2	Std. β	ΔR^2	Std. β	ΔR^2	Std. β	ΔR^2
		1	Youth Age	.20*	.06*	.13	.03	-.19*	.13***
	Youth Sex _a	.13		.11		-.30***		-.28**	
2	Couple Discord	.16	.03	-.02	.00	-.16	.03	-.26**	.07**
3	Youth Positive Affect	-.16	.02	-.13	.02	.08	.01	.22**	.05**
4	Couple Discord X Youth Positive Affect	-.02	.03	.15	.02	-.07	.04	-.05	.00
	Couple Discord X Youth Sex	.18*		-.03		-.12		-.03	
	Youth Positive Affect X Youth Sex	.05		-.03		-.17*		.02	
5	Couple Discord X Positive Affect X Youth Sex	-.06	.00	-.03	.00	.08	.01	-.01	.00

Note: *** $p < .001$, ** $p < .01$, * $p < .05$; _a = coded -1 = females and 1 = males

Table 4: Regressions examining youth anger and sex as moderators in the link between couple discord and adolescent adjustment

Step	Predictors	Youth Antisocial Behavior		Youth Depressive Symptoms		Youth Prosocial Behavior		Youth School Grades	
		Std. β	ΔR^2	Std. β	ΔR^2	Std. β	ΔR^2	Std. β	ΔR^2
1	Youth Age	.20*	.06*	.13	.03	-.18*	.13***	-.20*	.13***
	Youth Sex _a	.13		.11		-.30***		-.28**	
2	Couple Discord	.16	.03	-.02	.00	-.16	.03	-.26**	.07**
3	Youth Anger	.27**	.07**	.09	.01	-.12	.01	-.22**	.05**
4	Couple Discord X Youth Anger	-.01	.03	-.05	.00	.01	.01	.01	.00
	Couple Discord X Youth Sex	.17*		-.02		-.10		-.03	
	Youth Anger X Youth Sex	-.03		-.01		-.06		-.05	
5	Couple Discord X Anger X Youth Sex	.16	.02	.10	.01	-.06	.00	-.04	.00

Note: *** $p < .001$, ** $p < .01$, * $p < .05$; _a = coded -1 = females and 1 = males

Table 5: Regressions examining youth sadness and sex as moderators in the link between couple discord and adolescent adjustment

Step	Predictors	Youth Antisocial Behavior		Youth Depressive Symptoms		Youth Prosocial Behavior		Youth School Grades	
		Std. β	ΔR^2	Std. β	ΔR^2	Std. β	ΔR^2	Std. β	ΔR^2
1	Youth Age	.20*	.06*	.13	.03	-.18*	.13***	-.20*	.13***
	Youth Sex _a	.13		.11		-.30***		-.29**	
2	Couple Discord	.16	.03	-.02	.00	-.16	.03	-.26**	.07**
3	Youth Sadness	.13	.02	.13	.02	-.17*	.03*	-.16*	.02*
4	Couple Discord X Youth Sadness	.11	.05	-.08	.01	-.01	.01	-.07	.01
	Couple Discord X Youth Sex	.19*		-.02		-.12		-.05	
	Youth Sadness X Youth Sex	.03		.05		-.00		-.04	
5	Couple Discord X Sadness X Youth Sex	.20*	.03*	.08	.00	-.18*	.02*	-.11	.01

Note: *** $p < .001$, ** $p < .01$, * $p < .05$; _a = coded -1 = females and 1 = males

Table 6: Regressions examining parent-youth relationship quality and sex as moderators in the link between couple discord and adolescent adjustment

Step	Predictors	Youth Antisocial Behavior		Youth Depressive Symptoms		Youth Prosocial Behavior		Youth School Grades	
		Std. β	ΔR^2	Std. β	ΔR^2	Std. β	ΔR^2	Std. β	ΔR^2
1	Youth Age	.19*	.07*	.15	.03	-.16	.14***	-.21*	.13***
	Youth Sex _a	.16		.10		-.32***		-.27**	
2	Couple Discord	.15	.02	-.01	.00	-.15	.02	-.26**	.07**
3	Parent-Youth Relationship Quality	-.25**	.05**	-.24**	.05**	.18*	.03*	.25**	.06**
4	Couple Discord X Relationship Quality	-.18*	.06*	-.17	.03	.11	.02	.14	.02
	Couple Discord X Youth Sex	.16		-.01		-.11		-.04	
	Relationship Quality X Youth Sex	-.08		-.05		-.03		.08	
5	Couple Discord X Relationship Quality X Sex	-.01	.00	.03	.00	-.11	.01	-.01	.00

Note: *** $p < .001$, ** $p < .01$, * $p < .05$; _a = coded -1 = females and 1 = males

Table 7: Regression slopes examining link between couple discord and adolescent adjustment at different levels of the moderators

Independent Variable	Dependent Variable	Level of Moderator	
		Low Parent-Youth Relationship Quality	High Parent-Youth Relationship Quality
Couple Discord	Youth Antisocial Behavior	.09*	-.04
		Girls	Boys
Couple Discord	Youth Antisocial Behavior (positive affect regression)	.00	.12*
Couple Discord	Youth Antisocial Behavior (anger affect regression)	.00	.12*
Couple Discord	Youth Antisocial Behavior		
	Low Sadness	-.005	-.009
	High Sadness	-.014	.199**
Couple Discord	Youth Prosocial Behavior		
	Low Sadness	-.04	.00
	High Sadness	.02	-.12*

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

VITA

Antoinette Marie London-Johnson

Candidate for the Degree of

Master of Science

Thesis: LINK BETWEEN COUPLE DISCORD AND ADOLESCENT ADJUSTMENT: AN EXAMINATION OF DIRECT AND MODERATING EFFECTS

Major Field: Human Development and Family Science

Biographical:

Education:

Completed the requirements for the Master of Science in Human Development and Family Science at Oklahoma State University, Tulsa, Oklahoma in December, 2014.

Completed the requirements for the Bachelor of Science in Psychology Honors at Wayne State University, Detroit, Michigan in May, 2010.

Experience:

July, 2010 – December, 2014: Work in Community Mental Health, Research Coordinator, Graduate Research/Teaching Assistant, Department of Human Development and Family Science, Oklahoma State University, Tulsa, Oklahoma