

DISSERTATION

ANGER AND ANGER EXPRESSION IN RELATIONSHIPS

Submitted by

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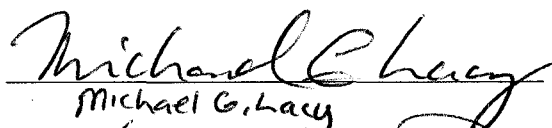
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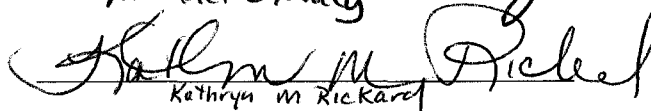
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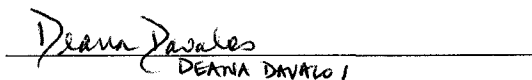
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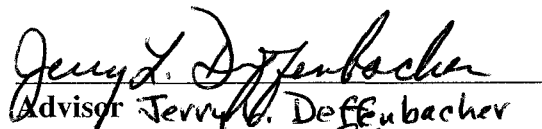
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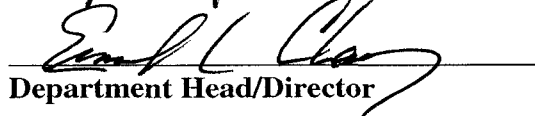
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ABSTRACT OF DISSERTATION
ANGER AND ANGER EXPRESSION IN RELATIONSHIPS

This research investigated two developmental origins of anger and anger expression in partnered relationships. Emotions and behavior in intimate relationships may develop from observing parent behavior in intimate relationships. Such emotions and behaviors may also develop from observing parent behavior toward the child which he/she carries over into later intimate relationships.

Three hundred sixty-one (104 males, 256 females) undergraduates completed measures of trait anger and anger expression regarding their (a) current, partnered relationships, (b) observation of parents/stepparents' anger in their partnered relationships while the student was growing up, and (c) parents/stepparents' anger toward the student growing up.

Student anger in their intimate relationships correlated positively with parent anger both observed in parental relationships and experienced directly. Regression analyses showed paternal anger suppression toward partners was the only significant predictor of student relationship anger. Findings regarding anger expression were mixed. Student relationship anger suppression, negative outward anger expression, and anger-control each related to the respective anger expression styles used by parents towards partners and toward the student as a child. Regression models showed that student

relationship anger expression variables had multiple predictors. For student relationship anger-in, maternal anger suppression with partners and paternal anger-in with students were both predictors. Student relationship anger-out was predicted by paternal anger-out toward students, maternal anger-out with partners and maternal anger-control with students (negative β weight). Student relationship anger-control was predicted by paternal anger-control with partners, maternal anger-control with students, and paternal anger toward the student (negative β weight).

Findings added to the growing body of literature which highlights the importance of parental behavior as a model for children regarding how anger is experienced and expressed in various environments. Specifically, findings suggested that the anger and anger expression children observe in both their parents' intimate relationships and in the parent-child relationship is related to their later experience and expression of anger in their adult partnered relationships. Findings were also consistent with research to date on the effects of parental conflict and anger on childhood development which suggests that the gender of the parent and the child may differentially influence the effect of such observational learning or socialization.

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Chapter 1: Introduction

Although interest in the emotion of anger and its expression was sparked over 100 years ago, and anger was the second agenda topic out of 12 in 1915 at the Sixth Annual Meeting of the American Psychological Association in New York (Sixth Annual Meeting, 1915), compared to other emotions, anger has been relatively neglected by current researchers in the mental health field. “From 1985 until 1997, approximately one tenth as many articles appeared in (psychological) professional journals on anger as did for depression and one seventh as many as for anxiety” (DiGuiseppe, 1999, p. 365). Also, in a recent study of undergraduate introductory and abnormal psychology textbooks, anxiety, depression, and aggression were referenced six to eight times more than anger, and in abnormal psychology text books, anxiety and depression were referenced 20 to 25 times more than anger (Deffenbacher & Deffenbacher, 2003). Nonetheless, anger is an integral part of the human experience with influential consequences, both positive and negative. Anger is experienced by almost every individual, and it is often experienced frequently. According to Averill (1983), most people report experiencing anger several times a week.

Although historically there has been less research on anger than on other emotions, recently anger has been receiving more attention, especially in applied psychology (Deffenbacher et al., 1996). For example, the physiological expression of

anger has become an increasingly popular topic in the research literature due to the current interest in health psychology and the hypothesized relationship between the expression of anger and many physiological symptoms such as coronary heart disease (Forgays, Forgays & Spielberger, 1997). Interestingly, some research has shown that the suppression of anger is also linked to problems, namely mental health problems. For example, Clay, Anderson and Dixon (1993) found that suppressed anger was a predictor of depression. Similar to the current research on anger's correlations with physical and mental health problems, the majority of the other research published on anger also focuses on the negative consequences of the experience and expression of anger, such as violence and aggression; however, there is little information available about the emotion itself (Reiser, 1999). Actually, there is a paucity of information on the more common, non-violent experience of anger that is most likely what people were reporting experiencing several times a week (Averill, 1983). In his book on anger, Averill (1982) states that, "Ultimately...questions regarding the nature and significance of anger must be addressed on the level of everyday experience" (p. 157).

We are beginning to learn more about the different ways anger can be experienced and expressed primarily due to improvements in the measurement of anger. The development of psychometric measures for assessing state and trait facets of anger, such as Spielberger and colleagues' State-Trait Anger Scale (STAS; Spielberger, Jacobs, Russell & Crane, 1983), which is today the State-Trait Anger Expression Inventory (STAXI; Spielberger, Reheiser, & Sydeman, 1995), has helped re-spark interest in the study of anger. State anger is a transitory emotional-physiological state that varies in intensity and occurs in response to a situation, and therefore, is experienced for short

periods. On the other hand, trait anger is considered to be a stable personality characteristic referring to how frequently and intensely one experiences state anger. Deffenbacher and colleagues (1996) found support for this theory in eight different studies. Results from these studies showed that high trait anger individuals were more easily angered, responded with more intense anger, expressed anger in aggressive and less constructive ways, and experienced more negative consequences as a result of their anger. The state-trait anger hypothesis also argues that the experience of anger is influenced by both an individual's stable temperament (or personality) as well as by specific situations and events (Forgays et al., 1998). In addition to these two dimensions of anger experience, Spielberger also noted that individuals vary in their ways of expressing anger, and therefore the STAXI also includes the Anger Expression Scale (AX), which has also sparked research on the different forms of anger expression that are not solely related to the extreme forms such as aggression. The Anger Expression Scale includes three subscales: Anger-In, Anger-Out, and Anger-Control. The Anger-In subscale includes items which describe the suppression of angry feelings (e.g., "I boil inside but do not show it."), the Anger-Out subscale includes items which describe the outward expression of anger toward the environment (e.g., "I do things like slam doors."), and the Anger-Control subscale includes items that describe attempts to reduce angry feelings (e.g., "I try to be tolerant and understanding.").

Anger in Context

The application of the state-trait emotion theory to anger, as well as the development of psychometrically sound measurements of anger and anger expression such as the STAXI, have helped researchers begin to examine an individual's experience

and expression of anger specifically within a certain context. In their article about love, hate, anger, and jealousy, Fitness and Fletcher (1993) point out that, “one important feature of (previous) research endeavors is that emotions are typically analyzed as if they were context free. Subjects are left to imagine whatever contexts they like when considering hypothetical or actual emotion events or answering emotion-related questions” (p. 942). Following this sentiment another author notes, “Measurement of anger feelings should employ multimodal markers including psychological, physiological, and social (context-related) parameters” (Isberg, 2000, p. 132).

Some research supporting the importance of the context of emotional experience has shown that the human experience of emotions tends to be script-like based on the context of the experience. This research found that we tend to create a cognitive script based on our cognitive appraisal of particular events or situations in particular contexts (Fitness & Fletcher, 1993). Social psychologists have also made interesting discoveries regarding the social context effects on different experiences of anger. For example, Jakobs, Manstead and Fischer (1996) found that out of six different emotions, “anger was the only emotion that varied as a function of the manipulation of social contexts (being alone, in the presence of a stranger, or in the presence of a friend) and this effect disappeared when evaluations of social context were controlled” (p. 123).

The expression and experience of anger is currently being studied in a diverse array of contexts. For example, anger is being researched specifically in the contexts of athletic performance (e.g., Leif, 1999), while driving (e.g., Deffenbacher, Huff, Lynch, Oetting, & Salvatore, 2000; Deffenbacher, Oetting, & Lynch, 1994), in the workplace (e.g., Houston & Kelly, 1989), and in public settings versus private (e.g., Jakobs &

Manstead, 1997). In each of these areas, researchers have found support for the notion that the context plays a role in the experience and expression of anger.

Anger in Intimate Relationships

Another common, specific context in which individuals experience anger is in an intimate, partnered relationship. Research continues to highlight the importance of such relationships in our lives, and its relation to both physical and emotional health or distress (Conger, Cui, Bryant, & Elder, 2001). Given the research on the frequency and intensity of the experience of anger within intimate relationships, there is no doubt that the way in which we experience and express anger is an important factor relating to our happiness and satisfaction in these close relationships. However, similar to the research on anger in general, most of the literature about anger in relationships, both popular and empirical, has focused on the possible negative outcomes of anger such as aggressive behavior and violence (Reiser, 1999). There is currently a plethora of research about spousal abuse, sexual harassment, rape, and murder; however, relatively little is known about the common, everyday experience of anger in intimate relationships that is experienced frequently without escalating to severe, physical violence. In fact, Fitness and Fletcher (1993) note that in general, “remarkably little work has examined the nature and function of emotions in close relationships” (p. 942).

Our society is well aware that this context-specific anger exists. Popular literature abounds with books and articles about the struggles in male-female relationships and the anger and hostility couples experience as they battle for intimacy and equality (Reiser, 1999). Some authors argue that *perhaps there is currently even more anger between men and women than ever before due to changing gender roles*. According to Chafetz (1989),

the increasing drive for equality in relationships requires more emotional intimacy, which in turn, calls for more honesty and openness in relationships. This honesty leads to more expression of both disagreement and agreement. Therefore, she argues that if greater intimacy and equality in our relationships is really our society's goal, we must accept the increasing amount of conflict that will inevitably come with it. Averill (1982) states that a person is more likely to become angry with loved ones than with strangers or others they dislike, because anger is primarily an interpersonal emotion. Averill goes on to explain that we become most angry with loved ones for four reasons: we have close and continual contact with them; we are less inhibited with them; their wrong doings are more distressing and cumulative; and we have a strong motivation to change their behavior. Research results, however, are mixed and inconclusive in this area. According to Kassinove, Sukhodolsky, Tsytsarev and Solovyova (1997), anger occurs at home more often than in any other place, and according to Scherer and Wallbott (1994), people believe anger negatively affects their interpersonal relationships more than any other emotion. In addition, problems related to marital and family relationships have been reported as the primary reason for seeking psychological services (Berscheid, 1999). Interestingly, however, a more recent unpublished study (Kocur & Deffenbacher, 2003) found that both college student males and females reported experiencing significantly less anger in their intimate relationships than in general in their daily lives. This finding is contrary to theories mentioned above which hypothesize that we are most easily angered by our loved ones. However, this study also found that the anger that individuals did experience was more likely to be expressed. For example, in this study both men and women reported holding their anger inwardly less in their intimate relationships than in

general. In addition, females reported expressing their anger outwardly more in their intimate relationships than in general. These results are consistent with previous findings that, when angered by their partner, people report wanting to express their anger to their partner (Fitness & Fletcher, 1993). These findings are also consistent with feminist theories mentioned earlier (Reiser, 1999) that point out that as gender roles are changing, our emphasis on open and honest communication is increasing.

Other research on the interactions of couples seems to support the importance of the context of a partnered relationship on the experience of emotions. Gottman (1999) found that, “personality traits do not discriminate distressed from non-distressed couples because people’s interactions with their spouses are not predictive of their interactions with other people” (p. 19). In other words, he has found that the way in which individuals behave within the specific context of their marital relationship differs from the general way they behave with others. Gottman cites other previous studies that support his conclusion as well. For example, Birchler, Weiss and Vincent (1975) found that distressed spouses were more negative to their spouses than non-distressed spouses, but that they reacted the same as non-distressed spouses to a stranger during a conflict resolution task. In another study, Gottman and Porterfield (1981) found that distressed husbands were worse at understanding their wives’ nonverbal behaviors than at understanding those of a married female stranger.

Other research on the non-violent experience of anger in partnered relationships is in the area of marital conflict. However, according to Gottman (1999), “a negative view of anger is quite pervasive in most theories of marital therapies,” and one marital therapy model is even based on the theory that anger is destructive to marital relationships (p.

11). Therefore, much of the research in this area as well has focused on the negative consequences and correlates of anger in relationships and less on the descriptive nature of the experience itself. Interestingly, for example, both anger expression and anger suppression have been linked to negative outcomes. In U.S. couples, anger expression was found to be correlated with marital unhappiness, but anger suppression was found to be correlated with physical violence (Winkler & Doherty, 1983). In addition, Gottman and Krokoff (1989) found that anger expression was associated with lower marital satisfaction, but that over time, anger expression was actually associated with increases in marital satisfaction.

Though some of these results paint a grim picture of the consequences of anger in intimate relationships, there are constructive purposes for anger as well. For example, Tavris (1989) points out that anger can be used in relationships as a message such as “Pay attention to me;” Fein (1993) notes that anger can be a way to influence your partner and establish your independence from them; and Izard (1991) states that anger can mobilize energy and motivate needed change. Similarly, DiGiuseppe (1999) points out that “without anger we would fail to recognize problems and take corrective action” (p. 366). Research on married couples that has attempted to explain some of the reasons for being angry with a loved one is consistent with these constructive purposes of anger. For example, a recent study on married couples found that anger within partnered relationships was related to a perception of inequity and unfairness in their marriage (Sarampote, 2000). Fitness and Fletcher (1993) found similar results. Their study showed that within married couples, “unlike love, hate, or jealousy, anger tended to be elicited by the perception of having been treated unfairly by their partner” (p. 945).

Much of the negative views of anger's effect on a relationship stem from the theory that somehow love and anger are two emotions on one continuum and therefore more anger indicates less love. In a recent study, however, Ellis and Malamuth (2000) found that love and anger were in fact two independent systems, which affect different behaviors in a relationship. For example, individuals who experienced more anger during conflicts with their partners were more likely to express their anger (shouting or throwing objects), but were not less likely to express their love (propose marriage or maintain dating exclusivity). Their research was consistent with previous research that suggests that positive and negative emotions sometimes co-occur and therefore are not dependent systems (Diener & Emmons, 1984; Watson & Clark, 1997; Watson & Tellegen, 1985; Zevon & Tellegen, 1982).

Anger in Relationships: Possible Contributors

Due to both the frequency of anger in intimate relationships, and its impact on most people's lives including both positive and negative consequences, more empirical research about this very common context of anger experience and expression is greatly needed. Conger et al. (2001) point out that "despite the recognized importance of competence in close relationships, very little is known about the developmental roots of the ability to successfully initiate and sustain such unions" (p. 2). For example, what do we know about why we feel angered toward our romantic partners and why we react and express our anger toward them in various ways?

As with many psychological constructs, and specifically the study of emotional experiences, research in this area highlights the interwoven effects of both biological/genetic factors and environmental/contextual factors, more commonly referred

to as “nature” and “nurture”. Research on the experience and expression of anger specifically supports the importance of both physiological and environmental factors. For example, in a recent study, Wang, Trivedi, Treiber and Sneider (2005) examined the genetic and/or environmental origin of anger expression (during stressful life events) and concluded that individual differences in coping styles (including types of anger expression including anger-out, anger-in, and anger-control) can be explained by “moderate” genetic and “substantial” environmental influences.

In regard to “nature,” researchers believe that a genetic predisposition to hormonal (e.g., testosterone), neurobiological, or physiological factors impacts expression of emotions, including anger (Huesmann, 1988). For example, several studies comparing monozygotic to dizygotic twins have supported the existence of a genetic influence on hostility (e.g., Cates, Houston, Vavak, Crawford & Uttley, 1993). However, as pointed out by McGonigle, Smith, Benjamin and Turner (1993), these studies examined twins raised together and therefore in similar environments. Results from another study on adopted twins reared in separate environments, found significant effects of both shared and nonshared environments (Pedersen et al., 1991). Research on Type A behavior (commonly associated with greater anger experience) has also found some support for the influence of heredity (Meininger, Hayman, Coates & Gallagher, 1988).

While biological and genetic factors clearly play a role in the experience and expression of emotions such as anger, the research in this area also indicates that environmental factors unmistakably play a key role as well. Several learning theories attempt to explain the various ways in which children are influenced by their environments. One such theory is Albert Bandura’s social learning theory (Bandura,

Ross & Ross, 1961; Bandura, 1973), which suggests that individuals learn from their environment via observational learning (also known as modeling), and social reinforcement. Observational learning refers to the process whereby individuals witness certain behaviors in others and then imitate them, while social reinforcement refers to learning through the social reinforcement or punishment which follows the individual's behavior (Kandel & Andrews, 1987). Huesman (1993) also adds to these learning theories by suggesting that while observing others, individuals create cognitive scripts which act as a guide for behavior in certain social situations.

Research has demonstrated that compared to other environmental influences, parent socialization is critical in affecting children's anger expression (Lemerise & Dodge, 1993). In her book entitled *Emotional Development in Young Children*, Susanne Denham (1998) reports that parents are their children's primary emotion "socializers", and that close contact with parents is key for fostering or impeding the development of emotional competence. Research indicates that parental behavior begins to shape our emotional experiences as early as infancy (Malatesta-Magai, 1991). For example, Malatesta, Culver, Tesman and Shepard (1989) investigated the development of the expression of emotion over the first two years of life and found that a "mother's expressive behavior has a material effect on the course of infant affect development" (p. 71). In regard to anger specifically, this study found that maternal behavior (ignoring child's sadness and pain) was associated with more anger (during a reunion with the mother) when the child was two years old. Research has also found that we imitate the negative emotional expressions of others, such as angry facial expressions, as early as infancy (Malatesta-Magai, 1991). Other research also indicates that toddlers imitate the

angry behavior of their parents, and that frequent exposure to anger in the home is associated with heightened expression of anger in children (Radke-Yarrow & Kochanska, 1990). Similarly, Crockenberg (1985) found that mothers who expressed anger toward their children were more likely to have children who more frequently displayed “angry defiance toward others,” and who were less empathic to the distress of others. Multiple studies have also demonstrated that parents affect the experience and expression of their children’s anger by providing emotional labels and language with which to communicate anger (Denham, 1998).

Research in the areas of Type A behavior (often associated with greater levels of anger experience), hostility (often includes a cognitive predisposition to anger), and aggression (one form of anger expression) also highlight the importance of the relationship between parental behavior and that of their children. For example, Matthews and Jennings (1984) found a relationship between the Type A behavior of parents and their children, Keltikangas-Jarvinen and Heinonen (2003) found that parental Type A behavior predicted their children’s adulthood hostility, and Raikkonen, Katainen, Keskivaara and Keltikangas-Jarvinen (2000) found that mothers’ hostile child-rearing attitudes were a significant predictor of their child’s subsequent hostile attitude as an adolescent. Research also consistently shows that physical abuse and corporal punishment increase the likelihood of aggressiveness among adolescents (e.g., Widom, 1989).

It is important to note that these relationships between parent and child experience and expression of anger may still be in part explained by heredity. Therefore, McGonigle, Smith, Benjamin and Turner (1993) aimed to examine the relative influence

of nature versus nurture on the experience of hostility by studying monozygotic twins. Results from this study indicated that the twin who described their parents as exhibiting a greater degree of hostile control exhibited more hostile behaviors than the other twin. This study revealed that “nongenetic variance” was associated with (perceived) differences in early environments in regard to hostility.

In summary, research supports the influence of both biological and environmental factors in shaping an individual’s experience and expression of anger. Specifically in regard to “nurture’s” influence, research highlights the importance of parental behavior, as a model to children for how anger is experienced and expressed in various environments.

Cross-Gender Influences: Mother-Son, Mother-Daughter, Father-Son and Father-Daughter Differences

In addition to examining the relationship between aggregate parental behavior and children’s behavior, studies on parental and child anger have examined the gender of the parent and the gender of the child separately. For example, Forgays and Forgays (1992) studied Type A behavior and Anger-In and Anger-Out expression styles in university undergraduates and their parents and found a “cross-gender” pattern in their results. In other words, they reported “many more significant findings for cross- than for same-gender relationships” (p. 333). Specifically, findings indicated that the Type A behavior and Anger-Out expression of fathers was related to Type A behaviors and Anger-Out expression in their daughters, and Type A behavior and Anger-Out expression in mothers was related to Type A behavior in sons. In addition, this study found no interrelationship between fathers’ and mothers’ Type A behavior, Anger-In or Anger-Out expression

styles, which “suggests independent contributions of each parent to the child” and highlights the importance of examining parental influences separately by gender.

Gender-specific effects have also been found in studies on aggression. It is important to note here the difference between the concepts of anger and aggression. While related, aggression is a harmful behavior directed against something or someone whereas anger is an emotion that is experienced within an individual (Lewis, 1993). Results from a study by Bjorkqvist and Osterman (1992) indicated that the aggressive behavior of mothers and fathers affected their sons’ and daughters’ aggressive behavior differently. Similar to the results from Forgays and Forgays (1992) on Type A behavior, this study found that mothers’ aggressive behavior had a stronger impact on sons and fathers’ aggressive behavior had a stronger impact on daughters. Interestingly, this study also found that the specific parental behaviors which most influenced their sons or daughters also differed for mothers versus fathers. For example, in the case of fathers, hitting was the strongest predictor of the child’s aggression, while for mothers shouting was the most typical predictor. In addition, different behavior exhibited by mothers had different effects on their sons and daughters. For daughters, maternal shouting had the greatest affect as compared to other maternal behavior, while for sons a negative emotional relationship with their mother had the greatest affect (Bjorkqvist & Osterman, 1992). It is interesting to note that in this study, in addition to imitating the negative behaviors of their parents (e.g., aggression), results indicated that children also imitated the “constructive problem solving” skills (e.g., trying to settle things by talking) demonstrated by their parents, as well as the suppression of anger expression (e.g., trying to hide anger).

A study by Dreman, Spielberger and Fried (1999) investigated the effect of maternal anger on children's behavior problems and also found gender-specific effects. Results indicated that daughters' behavior problems increased as mothers' state anger increased, while son's behavioral problems were highest at medium levels of maternal anger (versus high or low). A study by Cummings, Ballard, and El-Sheikh (1991) also demonstrated that girls and boys respond to parental anger differently. Specifically, these researchers found that girls reported more anger in response to adult anger, while boys reported experiencing more sadness. Interestingly, these results are in direct contrast to the commonly-held stereotypes about gender differences in emotional experience, thus highlighting the need for more research in this area.

Lastly, Renk, Phares and Epps (1999) examined the relationship between parental anger and children's behavior problems and found different results for father-son versus mother-daughter dyads. Their results indicated that for internalizing behaviors, inward anger expression and trait anger served as mediators for father-son dyads, whereas outward anger expression served as the mediator for mother-daughter dyads. For externalizing behavior, inward anger expression was a mediator for father-son dyads whereas outward anger expression was for mother-son dyads (Renk et al., 1999).

Parental Relationship Anger

In summary, research indicates that parents are instrumental in the development of the experience and expression of anger in children. Much of this research, however, has examined parental anger either in an undetermined context or toward the child. As previously discussed, research suggests that the experience and expression of anger is affected by the context, such as within an intimate relationship. If our own experience

and expression of anger is affected by the context in which we experience it, is the context equally important as we learn about anger's experience and expression? Some research suggests that the context does make a difference. For example, Renk et al. (1999) compared parental behavior with the behavior of children in the home as well as with their friends, and found that daughters imitated their parent's hitting behavior more at home than with their friends.

What is the effect of witnessing parental anger specifically within intimate, partnered relationships? This topic has become increasingly popular over the last several years specifically within the marriage and family literature. Findings indicate that while over 90% of adults eventually marry, at least 50% of these marriages will end in divorce or continuous conflict (Conger et al., 2001). Like the research on anger in general, however, the research on anger in the context of intimate parental relationships tends to focus on extreme and negative situations or outcomes (e.g., divorce). For example, there is a plethora of research on the negative impact on children of witnessing parental aggression and domestic violence (Widom, 1989).

Cummings and Davies reviewed ten years of research aimed at understanding the effects of marital conflict (and divorce) on the development of children. According to their review, research indicates that children are clearly responsive to marital conflict, and also have the ability to differentiate between child-related and non-child related conflicts and between marital and parent-child conflicts (Cummings & Davies, 2002). They point out that research has also revealed that children are affected by many different kinds of conflict, including physical, verbal, and nonverbal expressions of parental anger and interparental conflict. In addition, interestingly, recent studies investigating the

impact of divorce on children have discovered that many of the psychological and/or behavioral symptoms seen in children of divorce can be accounted for by the familial situation in the years before the divorce, and not solely the divorce itself (Kelly, 2000).

Research on the effects of marital conflict yields a consistent finding that marital conflict increases the probability for both externalizing and internalizing problematic behaviors in children (Cummings & Davies, 2002). In addition, Kennedy, Bolger and Shrouf (2002) reported that there is a more general phenomenon that boys are more influenced by marital discord than girls, especially in terms of developing externalizing behavior (e.g., Emery & O'Leary, 1984; Jouriles et al., 1988, Rutter & Giller, 1984). Cummings and Davies (2002) indicate, however, that recent research has also demonstrated that different forms of marital conflict have differing effects on children, ranging from negative to constructive. For example, behaviors such as interparental aggression or violence, nonverbal conflict, withdrawal during conflict, interparental verbal aggression or hostility, conflicts involving threats to the intactness of the family, and conflicts about child-related themes have been shown to have destructive effects, while successful conflict resolution, any progress towards the resolution of conflict, explanations by parents to children regarding how conflicts had been resolved, and explanations that conflicts are not a threat and will be eventually worked-out, have been shown to be constructive (Cummings & Davies, 2002). In other words, research indicates that in addition to being negatively impacted by negative forms of parental conflict, children also learn the positive, effective coping strategies from observing their parents' use of such skills.

After years of documenting the correlations between marital conflict and child adjustment problems, researchers in this area are beginning to focus on examining the factors which determine how children are affected by marital conflict (Cummings & Davies, 2002). Given the fact that some amount of conflict is generally believed to be unavoidable in marital relationships, examining what specific factors might determine when such conflict is detrimental is essential. For example, recent research has highlighted the importance of the child's perception of the interparental conflict, and not solely the existence of such conflict, in determining how the conflict affects the child (Cummings & Davies, 2002). Similarly, Grync and Fincham (1990) suggested that children are affected by marital conflict via their own cognitive evaluation of the interparental conflict and their interpretations of its meaning (e.g., as a stressor). Harold and Conger (1997) found support for this theory in their study which found that adolescents' perception of interparental hostility was directly associated with internalizing and externalizing symptoms in the future.

In summary, like the research on anger in general, the research on anger in the context of intimate parental relationships has focused on extreme and negative situations or outcomes (e.g., divorce). This research has found that witnessing such conflict can have negative implications on children's development. Much less, however, is known about the effect of the more general experience of anger that nearly all couples experience, and that does not necessarily escalate to severe marital discord, divorce, or domestic violence. The research that has been done suggests that children learn both positive and negative behaviors from observing their parent's use of such behaviors while angered in their partnered relationships.

Predicting Anger in Relationships

As reviewed above, the majority of the research examining the effect of witnessing parental anger, hostility, and aggression both in general and within parental relationships has focused on the effect that this observation plays on childhood or adolescent development and behavioral problems. Research specifically examining how witnessing parental interpersonal anger as a child affects the individual's experience and expression of anger within their own intimate adult relationships is extremely limited.

Research thus far supports the importance of a developmental approach to understanding our behavior in romantic relationships (Conger, Cui, Bryant & Elder, 2001). For example, Bradbury, Cohan and Karney (1998) found that characteristics learned early in life affect the way we interact with our romantic partners. Similarly, Tallman, Burke and Gecas (1998) found that characteristics of an individual's family of origin have direct and indirect effects on their experience in romantic relationships in the future. Research has also found that "several behaviors, beliefs, and emotional characteristics found to be predictive of marital outcomes actually are present in couple relationships before marriage" and that "specific skills in intimate communication (e.g., problem solving, affect regulation, conflict management) that relate to success or failure in romantic relationships may be significantly influenced by the family of origin" (Conger et al., 2001, p. 3). For example, research on parenting styles consistently shows that authoritative parenting, characterized by warmth, support for autonomy, and moderate control, is associated with good interpersonal skills in children and adolescents. Such research suggests that these parenting behaviors help children develop the skills necessary to be successful in their relationships (Feldman, Gowen, & Fisher, 1998). One

study by Feldman, Gowen and Fisher (1998) investigated young adults in romantic relationships and found that their reports of characteristics of their family's interactions during their adolescence significantly predicted their reports of happiness or problems in their romantic relationships as adults. Specifically, this study found that flexible family control and family cohesion predicted "happiness in love" in young adult relationships, and mothers' marital satisfaction predicted intimacy in young adult relationships. This study also found differing effects for men and women. For example, results indicated that the influence of familial factors on adulthood intimacy was stronger for women than for men. In addition, family respect for privacy predicted more happiness in love for women but less for men. In another study, Kim, Conger, Lorenz and Elder (2001) found that adolescents' reciprocal negativity in their family of origin predicted more negativity in their early adult social relationships. In order to guide future research in this area, Bryant and Conger (2002) created a model which describes the development of early adult romantic relationships (the DEARR model). This model suggests a set of constructs for predicting how certain behavioral, cognitive, and emotional characteristics in the family of origin may promote particular ways of relating to romantic partners.

Numerous studies also support the presence of an intergenerational continuity of parenting behaviors, or, in other words, a relationship between individual's parenting styles and that of their own parents when they were children (e.g., Caspi & Elder, 1988, Chassin et al., 1998, Chen & Kaplan, 2001). For example, Conger, Neppl, Kim and Scaramella (2002) conducted a prospective longitudinal study which examined parenting styles across three generations. Specifically, this study investigated the effect of angry, aggressive parenting on both the angry, aggressive behavior of children, as well as on the

children's later angry, aggressive parenting toward their own children. Based on a social learning perspective, these researchers predicted that "to a significant degree, children and adolescents learn how to raise their children from their parents (and) this learning should occur both by observing parental behaviors and through the direct training that results from thousands of parent-child interactions across time" (p. 146). Results from this study were consistent with this hypothesis and indicated that first generation parenting was directly related to second generation parenting.

Research to date on the "intergenerational transmission" of behavior in adult intimate relationships is limited, and research specifically examining the experience and expression of anger in intimate relationships is nearly nonexistent. Research consistently shows that parental divorce increases the likelihood of adult children's divorce, and this "intergenerational transmission of divorce" appears to occur more often for women than for men (Feng, Giarrusso, Bengston & Frye, 1999). However, like the research on the effects on children's adjustment to divorce, further research in this area has found that marital quality prior to divorce plays a significant role in determining the effects of divorce on the children's future adult relationships. For example, Amato, Loomis and Booth (1995) found that in families where conflict was high prior to divorce, children had higher levels of well-being if their parents divorced than if they stayed together.

Research in the area of marital quality yields consistent findings in support of the intergenerational transmission of certain marital characteristics. For example, Booth and Edwards (1989) found a positive relationship between adult's marital quality and their perceptions of their parent's marital quality and Amato and Booth (1997) found a positive relationship between the marital quality across generations, but did not explore

or study the specific emotions, qualities, competencies, or characteristics involved. Feng, Giarrusso, Bengston and Frye (1999) aimed to examine this concept further by using longitudinal data to examine the long-term effects of parental marital quality, stability and divorce on children's marital quality and marital instability as adults. However, results from this study were complex and inconclusive. The findings indicated that parents' negative sentiment in their marital relationship was negatively correlated with their son's marital satisfaction in adulthood. The study did not, however, find support for their hypothesis that parents' positive interactions in their marriage would be related to their offspring's marital satisfaction, nor did they find a significant relationship between parent's negative sentiment and their daughter's marital quality.

Research has also examined the intergenerational transmission of marital aggression. One study by Boye-Beaman (1995) found that growing up in aggressive families with parental marital aggression affected the children's later adulthood marital aggression. Similar to research discussed previously on the effect of general parental anger, findings from this study revealed different effects for husbands and wives. For wives, experiencing aggression in their family of origin directly affected their own aggressive behavior in their marriage, whereas for husbands, childhood experience of aggression indirectly influenced marital aggression by influencing hostility and depression (Boye-Beaman, 1995). In another study, Sanders, Halford and Behrens (1999) examined the effect of exposure to parental divorce on the children's later adult relationships. These researchers hypothesized that "on the basis of social learning analysis...a history of parental divorce would predispose partners to difficulties in managing conflict" (p. 60). These researchers found that couples in which the woman's

parents had divorced showed more negative verbal and nonverbal communication and less positive, problem-focused cognitions and behavior during conflict than did couples whose parents had not divorced. Interestingly, contrary to their prediction, this difference was not found for couples in which the man's parents had divorced, again highlighting the different affects of marital conflict on girls and boys.

In a study on the effects of witnessing interparental psychological aggression in childhood on intimate relationships in adulthood, Kennedy, Bolger and Shrout (2002) sampled couples and obtained retrospective reports from each partner regarding the interparental psychological aggression they witnessed as a child. The couples then tracked their daily occurrences of conflict and their reactivity to the conflict in a diary for 28 days. These researchers hypothesized that "witnessing interparental psychological aggression in childhood would influence daily conflict processes in adult intimate relationships" (p. 1070). Results from this study were complex. Significant "reactivity effects" were found for males only. The authors referred to "reactivity effects" as an increase in the reaction of anger on days of marital conflict related to witnessing parental psychological aggression as a child. Their findings indicated that for males having witnessed the same-sex parent's (i.e., father) psychological aggression as a child was related to greater levels of anger on days when they experienced their own marital conflict, whereas having witnessed the opposite-sex parent's (i.e., mother) psychological aggression was related to a decrease in the anger experienced on days of marital conflict. Kennedy et al. (2002) indicate that these findings suggest a "gender-role identification process" for males with their fathers. They explain that the findings may suggest that "fathers who become psychologically aggressive during marital conflict are displaying

poor models of emotional and behavioral control to their sons, and as a result these boys may internalize the notion that men react to marital conflict with anger and aggression” (p. 1071). Additionally, they suggest that the findings regarding males and their mothers suggest a “desensitization process” in which “boys who witness their mothers behaving aggressively in the marital relationship may come to assume that aggression in significant others is normal and not indicative of the need to respond angrily. By the same token, boys with mothers who did not behave aggressively may have their expectancies violated during conflicts (with their partner) and may react more angrily” (p. 1071). Kennedy et al. also indicate that these results could alternately suggest an “internalized reaction process” whereby “boys whose mothers were classified as “attacking” during marital conflict are more prone to internalizing problems such as depression or anxiety”. Dadds, Atkinson, Turner, Blums and Lendich (1999) found support for this process and reported that boys whose mothers were “attacking” during marital conflict were “more prone to internalizing problems and reported avoidant resolution styles during sibling conflict” (p. 1071, as cited in Kennedy et al, 2002).

Research has also begun to examine the way in which such marital competencies and characteristics are passed through generations. For example, in their prospective longitudinal study on the developmental perspective of competence in adult romantic relationships, Conger et al. (2001) hypothesized that parents’ competency skills in their interpersonal relationships will be passed to their children through two pathways. First, these researchers proposed that “according to the (DEARR) model and the observational learning perspective, behaviors between parents which demonstrate competence in marital interactions should be emulated by their early adult children in their close

relationships” (p. 6). Secondly, these researchers also suggested that parents would affect their early adult children’s relationship competency via the “parental socialization process” which posits that children learn conflict management and negative affect regulation skills through their interactions with their parents as children. This study directly compared these two developmental learning pathways and found the most support for the parent socialization process. Results from this study indicated that the quality of interpersonal behaviors in early adult romantic relationships were most directly affected by the parenting behaviors in the family of origin (i.e., the parents interactions with the child), rather than by the parents’ marital interactions. In fact, they found that parenting behaviors “were the only significant family-of-origin predictors of later interpersonal competence” (p. 17).

In conclusion, research thus far supports a developmental perspective on the behaviors in intimate relationships. Research in the area of interpersonal competence indicates that parents model interpersonal skills in both their marital relationship and in their direct relationship with their children. However, this researcher could not find any studies to date which have specifically addressed the effect of observing a parent’s experience and expression of anger within their partnered relationships, or the effect of a witnessing a parent’s anger and anger expression within the parent-child relationship, on the individual’s experience and expression of anger within their adult intimate relationships.

Purpose of Present Study

Anger in the context of close relationships is an important social topic. The purpose of the present research is to address possible developmental origins of anger and

anger expression in partnered relationships. The research on emotions in general, and on anger specifically, indicates that observational learning and modeling is one possible avenue through which we learn various emotions, cognitions and behaviors. The research on intergenerational marital quality also lends support to a second developmental avenue, the parent socialization process, which emphasizes the importance of the parents behavior with the child on the child's later behavior in intimate relationships. Thus, these two possible avenues for the observational learning of anger experience and expression within intimate relationships will be examined in the present study. First, the present study will examine the observational learning hypothesis by investigating the relationship between individual's anger and anger expression in their partnered relationships and the anger and anger expression they observed their parents/stepparents express toward each other in their childhood. Although there is some concern regarding retrospective reports rather than direct observation, research on the effect of marital conflict on children emphasizes the importance of the child's perception of the conflict, and therefore this study will use individuals' reports of their parents' behavior during their childhood.

Secondly, to address the "parent socialization" hypothesis, the present study will examine the relationship between individual's anger and anger expression in their partnered relationships and the anger and anger expression they experienced from their parents/stepparents as a child.

Finally, given the fact that the research to date on the effects of parental conflict and anger on childhood development suggests that the gender of the parent and the child

impacts the affect of such observational learning or socialization, the present study will examine the gender of parents and children to explore this process further.

Chapter 2

Method

Participants

Participants included 361 (104 males, 256 females) university undergraduates enrolled in personality, abnormal and child psychology courses at Colorado State University (25.5% personality psychology students, 39.3% abnormal psychology, 35.2% child psychology students). These courses were chosen based on the year in school of the students in the course (sophomores and above) in order to increase the likelihood of the students having had a long-term, partnered relationship (defined for this study as a three or more months duration). These classes were also chosen because other extra credit options were already incorporated by professors into their course and thusly, the research would not be coercive (i.e., other equal weight options were available for extra credit). Participants ranged from 18 to 50 years of age ($M = 21.22$, $SD = 3.55$) and represented all class levels (freshmen, sophomore, junior, and seniors). Subjects were primarily white Caucasian (90.0%); however, the sample also included African Americans (1.9%), Native Americans (1.4%), Asian Americans (1.9%), Hispanic/Latinos (6.1%), as well as other ethnicities (4.2%). Of these, 98.1% of the sample reported being in or having been in a relationship for three months or more (61.2% reported about their current relationship, 34.6% reported about a previous relationship), and the majority (78.9%) reported about a person they were dating, but not married to or living with (2.8% reported about a person

they were married to and living with, 13.3% reported about a person they were living with but not married to). The average length of the relationships reported was 22.67 months ($SD = 32.53$ months).

Instruments

Demographic information questionnaire. The demographic information questionnaire asked participants to indicate their age, gender, year in school (freshman, sophomore, junior, senior, or other), and ethnicity (Native American, African American, Asian American, Hispanic/Latino, White non-Hispanic, or other).

Trait Anger Scale. The Trait Anger Scale (TAS) is part of the State-Trait Anger Expression Inventory (STAXI; Spielberger, 1988). It consists of 10 questions designed to measure general anger. It asks people to rate how often they experience each statement using a 4-point Likert-type scale, ranging from 1 = Almost Never to 4 = Almost Always. Higher total scores indicate that those individuals are more likely to experience state anger and are more likely to perceive situations as anger provoking. The TAS has good reliability, with alpha coefficients ranging from .81 to .91 (Haines, 2000; Spielberger, 1988). Jacobs and colleagues measured test-retest reliability over a two-week span and reported alpha coefficients ranging from .70 to .77 (Jacobs, Latham, & Brown, 1988). The TAS also has good concurrent validity. It correlates strongly with the Buss-Durkee Hostility Inventory (BDHI) and the Symptom Checklist-90-Revised Hostility Scale (Deffenbacher et al., 1996; Spielberger, 1988). The TAS also has good discriminant validity. For example, it does not correlate with the Eysenck Personality Questionnaire Extraversion scale (Spielberger & Snyderman, 1993). It also has a stronger correlation with state anger than with anxiety and depression (Deffenbacher, 1992).

For the present study, the directions of the scale were changed to instruct participants to answer the questions regarding anger in various relationships. Participants completed the TAS regarding: (a) their experience with anger within their partnered relationship, (b) the anger they witnessed each parent (rated separately) experiencing with their intimate partner/spouse while the child was growing up, and (c) the anger they witnessed each parent (rated separately) experiencing toward them as a child. The directions read as follows:

a) Directions: A number of statements which people have used to describe themselves **in their partnered relationships** are given below. Read each statement and then fill in the circle indicating how you **generally feel in your partnered relationship**. There are not right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe how you **generally feel in your partnered relationship**.

b) Directions: A number of statements which people have used to describe themselves are given below. Read each statement and then fill in the circle indicating how the **male care-giver** that you spent the most time with growing up (e.g., **father/stepfather**) **experienced and expressed his anger toward his partner** (e.g., mother/stepmother). There are not right or wrong answers. Do not spend too much time on any one statement.

Directions: A number of statements which people have used to describe themselves are given below. Read each statement and then fill in the circle indicating how the **female care-giver** that you spent the most time with growing up (e.g., **mother/stepmother**) **experienced and expressed his anger toward her partner** (e.g., father/stepfather). There are not right or wrong answers. Do not spend too much time on any one statement.

c) Directions: A number of statements which people have used to describe themselves are given below. Read each statement and then fill in the circle indicating how the **male care-giver** that you spent the most time with growing up (e.g., **father/stepfather**) **experienced and expressed his anger toward you**. There are not right or wrong answers. Do not spend too much time on any one statement.

Directions: A number of statements which people have used to describe themselves are given below. Read each statement and then fill in the circle indicating how the **female care-giver** that you spent the most time with growing up (e.g., **mother/stepmother**) **experienced and expressed his anger toward you**. There are not right or wrong answers. Do not spend too much time on any one statement.

A previous, unpublished study (Kocur & Deffenbacher, 2003), using similar relationship-context directions, found that this change to the directions did not significantly affect the alpha reliability of the scale, which was again found to be very high ($\alpha = .85$).

Anger Expression Scale. The Anger Expression Scale (AX) is also part of the STAXI (Spielberger, 1988). This questionnaire is made up of 24 questions designed to measure how people react to anger experiences or how they express anger. The AX asks people to rate how often they experience each statement using a 4-point Likert-type scale, ranging from 1 = Almost Never to 4 = Almost Always. This questionnaire yields three 8-item subscales: Anger-in (suppression of angry feelings and harboring grudges), Anger-out (outward expression of anger toward the environment), and Anger-control (attempts to reduce angry feelings). The AX has good reliability with alpha coefficients ranging from .73 to .84 (Spielberger et al., 1985). Jacobs and colleagues reported three-week test-retest reliabilities from .64 to .86 (Jacobs et al., 1988). Anger-in and Anger-out subscales tend not to correlate, or correlate minimally, for either men or women, and Anger-control negatively correlates with Anger-out ($r_s = -.47$ to $-.60$) (Deffenbacher, 1992). The AX subscales have good convergent and discriminant validity. For example, the Anger-out subscale correlates positively with assertiveness ($r = .34$) (Spielberger et al., 1988) and also has a strong correlation ($r_s = .44$ to $.56$) with the BDHI Overt Hostility Scale (Schill, Ramanaiah & Conn, 1990). The Anger-in subscale correlates negatively with assertiveness (Spielberger et al., 1988) and has a strong correlation with the BDHI

Covert Hostility Scale ($r_s = .57$ to $.72$). Anger-control correlates negatively with the BDHI Covert Hostility Scale and the BDHI Overt Hostility Scale (Schill et al., 1990).

As with the TAS, for the present study the directions for the scale were changed to instruct participants to answer the questions regarding the anger expression in various relationships. Participants completed the AX regarding: (a) their anger expression within their partnered relationship, (b) each parent's (rated separately) anger expression within their parents' intimate relationship, and (c) each parent's (rated separately) anger expression with them as a child. The directions read as follows:

a) Directions: Everyone feels angry or furious from time to time in their partnered relationships, but people differ in the ways that they react when they are angry. A number of statements are listed below which people have used to describe their reactions when they feel angry or furious in their partnered relationships. Read each statement and then fill in the circle to the right of the statement indicating how often you generally react or behave in your partnered relationship in the manner described. There are no right or wrong answers. Do not spend too much time on any one statement.

b) Directions: Everyone feels angry or furious from time to time, but people differ in the ways that they react when they are angry. A number of statements are listed below which people have used to describe their reactions when they feel angry or furious. Read each statement and then fill in the circle to the right of the statement indicating how often your female caregiver (e.g., mother/stepmother) reacted or behaved in the manner described when she was angry with her partner. There are no right or wrong answers. Do not spend too much time on any one statement.

Directions: Everyone feels angry or furious from time to time, but people differ in the ways that they react when they are angry. A number of statements are listed below which people have used to describe their reactions when they feel angry or furious. Read each statement and then fill in the circle to the right of the statement indicating how often your male caregiver (e.g., father/stepfather) reacted or behaved in the manner described when he was angry with his partner. There are no right or wrong answers. Do not spend too much time on any one statement.

c) Directions: Everyone feels angry or furious from time to time, but people differ in the ways that they react when they are angry. A number of statements are listed below which people have used to describe their reactions when they feel angry or furious. Read each statement and then fill in the circle to the right of the statement indicating how often your female caregiver (e.g., mother/stepmother) reacted or behaved in the manner described when she was angry with you. There are no right or wrong answers. Do not spend too much time on any one statement.

Directions: Everyone feels angry or furious from time to time, but people differ in the ways that they react when they are angry. A number of statements are listed below which people have used to describe their reactions when they feel **angry** or **furious**. Read each statement and then fill in the circle to the right of the statement indicating how often **your male caregiver** (e.g., **father/stepfather**) reacted or behaved in the manner described **when he was angry with you**. There are no right or wrong answers. Do not spend too much time on any one statement.

A previous, unpublished study (Kocur & Deffenbacher, 2003), using similar relationship-context directions, found that this change to the directions did not significantly affect the alpha reliability of the scales, which were again found to be high. Specifically, this study found alpha reliabilities of .82 for Anger-in, .70 for Anger-out, and .87 for Anger-control in intimate, partnered relationships.

Relationship questionnaire. The relationship questionnaire (Kocur & Deffenbacher, 2003) (see Appendix B) was created by the authors in order to inform the participants which relationship they should consider while completing the version of the Trait Anger Scale and Anger Expression Scale regarding their own intimate relationship. If the participant was currently in a partnered relationship that they had been in for three months or more, the relationship questionnaire instructed them to answer the questions as they applied to their experience in that relationship. If the participant has not been in a partnered relationship for at least the last three months, they were asked to think back to the last such relationship they had and to answer the questions as they applied to their experience in that relationship. If the participant has never been in a partnered relationship for three months or more, they did not complete the versions of the TAS and AX regarding their own intimate relationship.

The relationship questionnaire asked participants to indicate how long the relationship had lasted and the nature of that relationship (married to and living with this

person, married to but not living with this person, not married to, but living with this person, or dating, but not living with this person). The relationship questionnaire also asked the participant to indicate how emotionally close he/she felt to the person using a 10-point Likert-type scale ranging from 1 = very distant to 10 = very close, and how satisfied they are/ were with their relationship using a 10-point Likert-type scale ranging from 1 = very dissatisfied to 10 = very satisfied.

Procedure

Participation in the study was offered as one of many options for extra credit in abnormal, personality and developmental psychology courses at Colorado State University. The study was introduced to students in class. For three consecutive days, the professor explained to the students that participation in this study was one of the options for extra credit points toward their final grade (1% or less of their final grade). The professor emphasized that participation was completely voluntary, anonymous, and confidential. Interested students picked up a packet at the end of class. These packets were completed at home and returned at the beginning of the next class. The top sheets of the packet contained two informed consent forms (see Appendix A). If the student chose to participate, they kept one for their records and returned the other signed informed consent form to class. This was kept by the researchers and used to document extra credit. The demographic information questionnaire was next in the packet, followed by the relationship questionnaire. The relationship questionnaire explained to the participants which of their current or previous relationships to refer to while answering the next anger questionnaires. Students then completed the 10-item Trait Anger Scale and 24-item Anger Expression Inventory (Spielberger, 1988, 1999) five

times. The first time, instructions referred to the person's experience and expression of anger in their long-term (a relationship of three or more month's duration) partnered relationship, as specified by the relationship questionnaire. The second and third times, students completed these two instruments as they applied to their observation of their parents/stepparents' anger in their partnered relationships while the student was growing up. Students completed separate measures for their male and female primary caregivers. Students also specified on each measure whether they were reporting regarding their parent, stepparent, or other male/female caregiver. The fourth and fifth times, they completed these two instruments as they applied to their parents/stepparents' anger in relation to the student growing up.

Participating students completed the materials at home and brought the completed consent form and questionnaires to the next class meeting. At the next class, students placed their signed informed consent form into a box marked "Informed Consent Forms." They then placed the completed packet of questionnaires in a different box marked "Questionnaires." Therefore, no identifying information other than age, gender, ethnicity, and year in school accompanied the responses. This assured complete anonymity and confidentiality for the student, while still providing an opportunity for participants to receive extra credit. A graduate student attended the end of each class and collected both boxes. The instructor did not have direct access to either the informed consent forms or the questionnaires. This ensured that the professor did not have access to the data which could have violated confidentiality. In order to document extra credit, the researcher gave the instructor a list of names based on the signed informed consent forms. When students turned in their completed materials, they were given a debriefing

statement that briefly reiterated the purpose of the study and gave the student the contact information for both the primary investigator and the co-primary investigator in the event that they had questions or concerns regarding the study (see Appendix C).

Chapter 3

Results

Reliability Analyses

Alpha reliabilities of the TAS and AX were conducted to ensure that the instructions to complete the scales regarding anger experienced and expressed in various close relationships did not significantly affect the reliability of the scales. The alpha reliability of the TAS with the relationship instructions was .79. Alpha reliabilities for the AX subscales with the relationship instructions were .74 for Anger-in, .67 for Anger-out, and .81 for Anger-control. In addition, alpha reliabilities of the TAS and AX were conducted to ensure that changing the instructions to instruct subjects to respond regarding what they witnessed of their parent's anger experience and expression also did not significantly affect the reliability of the scales. The alpha reliabilities of the TAS for fathers' and mothers' anger toward their partners were .91 and .92, respectively, and for fathers' and mothers' anger toward the student were .94 and .91, respectively. The alpha reliabilities of the AX for fathers' and mothers' anger-in toward their partners were .80 and .81, respectively, and .80 and .86, respectively, toward the student. Alpha reliabilities for fathers' and mothers' anger-out toward their partners were .87 and .87, respectively, and .86 and .86, respectively, toward the student. Alpha reliabilities for fathers' and mothers' anger-control toward their partners were .82 and .82, respectively,

and .82 and .81, respectively, toward the student. Thus, various instructions did not appreciably change the reliability scales.

Current versus Previous Relationships

In order to determine whether the experience and expression of anger differed for students reporting about current versus previous relationships, a 2 (Gender) x 2 (Relationship-type) MANOVA was conducted for the relationship anger variables. Results indicated effects for relationship type, gender, and the interaction were not significant, $F_s(4, 332) = 2.26, 2.27, \text{ and } 0.30$, respectively. Therefore, data for subsequent analyses were collapsed across relationship type.

Gender Differences in Anger and Anger Expression in Intimate Relationships

A one-way (Gender) MANOVA was conducted to determine whether there were gender differences among the student anger variables and relationship descriptor variables (Table 1). Results indicated that the multivariate gender effect was not significant, $F(7, 331) = 1.71$. Thus, there did not appear to be gender differences in anger and anger expression in intimate relationships.

Correlations between Student Intimate Relationship Variables

Pearson correlations were conducted to examine the relationship between the TAS and AX variables for students in their relationships (Table 2). For both men and women, anger in intimate relationships correlated positively with anger suppression and outward negative expression and negatively with attempts to control anger within relationships. Anger-in within relationships was unrelated to anger-out in relationships and correlated negatively with anger-control, although the correlation between anger-in and anger-control for men was not significant. Outward negative expression of anger within

relationships (anger-out) correlated negatively with anger-control within relationships for both genders.

Correlations between relationship descriptor variables and anger variables (Table 2) showed that relationship satisfaction, closeness, and length were positively correlated, except for the relationships between length and satisfaction for women. These relationship variables tended to be unrelated to relationship anger and anger expression. Exceptions were that relationship satisfaction and closeness correlated negatively with anger suppression for both genders, and for women only, relationship satisfaction correlated negatively with anger and positively with anger-control.

Correlations between Parental and Student Relationship Anger Variables

Pearson correlations were conducted to examine the relationship between the TAS and AX variables for parents (in their intimate relationships and in their relationship with the student as a child) and for students (in their intimate relationships). Only students reporting relationship data were used in these correlations.

Correlations between student relationship anger and parent anger toward their partners (Table 3) indicated that for both genders student relationship anger correlated positively with parental anger, anger-in, and anger-out toward their partners and negatively with parent anger-control with their partner. The only two exceptions were that the relationships between males' anger and mothers' anger-in and fathers' anger-control did not reach significance. For both genders, student relationship anger-in correlated positively with parent anger and anger-in toward their partners. The only exception was the relationship between anger-in and father-to-partner anger for males. In addition, for females, relationship anger-in correlated positively with mothers' anger-out

toward their partner and negatively with mothers' anger-control with their partner. Student relationship anger-out correlated positively with parent anger and anger-out toward their partners. Interestingly, student relationship anger-out correlated positively with fathers' anger-in with their partners, but showed no relationship with mothers' anger-in. In addition, student relationship anger-out correlated negatively with parent anger-control with their partner; however, these relationships only reached significance for males. Student relationship anger-control correlated negatively with parent anger-in toward their partner and positively with parent anger-control toward their partner. The only exception was that the correlation between males' anger-control and mothers' anger-in did not reach significance. In addition, for females, relationship anger-control correlated negatively with parent anger-out toward their partner and mothers' anger toward their partner. The relationships with males' anger-control showed similar patterns but did not reach significance.

Correlations between student anger variables and parental anger toward the student (Table 4) showed that student relationship anger correlated positively with parent anger toward the student. In addition, for females, relationship anger correlated positively with parent anger-in and anger-out toward the student, and negatively with parental anger-control toward the student. Males showed a similar pattern; however, these relationships did not reach significance. Student relationship anger-in correlated positively with parent anger and anger-in toward the student; however, the relationship between males' anger-in and fathers' anger did not reach significance. In addition, for both males and females, relationship anger-in correlated negatively with fathers' anger-out toward the student, but positively with mothers' anger-out toward the student;

however, only the relationship for females reached significance. For females, relationship anger-in correlated negatively with parent anger-control toward the student. In regard to student relationship anger-out, both males' and females' outward expression correlated positively with parent anger and anger-out, and negatively with anger-control toward the student, although the relationship between females' anger-out and fathers' anger-control did not reach significance. In addition, student relationship anger-out correlated positively with fathers' anger-in toward the student, but not with mothers' anger-in. In regard to student relationship anger-control, both genders had a positive correlation with parent anger-control toward the student. Student relationship anger-control correlated negatively with parent anger, anger-in, and anger-out toward the student; however, only the correlations for females reached significance for each of these variables.

An analysis of significant differences between dependent correlations was then used to determine whether there were significant differences between the correlations between student relationship anger and parent anger toward their partners versus toward the student. No significant differences were found.

Multiple Predictors of Student Relationship Anger and Expression

Regression analyses were conducted in order to further explore the relationship between student relationship anger and the anger of their parents. In an attempt to determine the best predictors of student relationship anger, regression equations were conducted for each of the relationship anger variables (relationship anger, relationship anger-in, anger-out, and anger-control). In order to examine cross-gender effects, parent anger variables were entered separately by gender. To be included in regression models,

it was required that variables be significant at $p < .05$ and account for at least 1% of the variance. The latter criterion was included to reduce potentially significant variables due to large sample size from being interpreted as meaningful when they had a very small effect size. That is, to be interpreted as meaningful, a variable had to meet at least the lower limit of a small effect size (Cohen & Cohen, 1988). Interactions were entered after main variables. Variables were centered and multiplied to create interaction terms. Additionally, when the interaction term was significant and accounted for more than 1% of variance, individual interactions were explored. Significant individual interactions were entered alone on Step 3 to assess variance accounted for. Only individual interactions contributing more than 1% of variance were interpreted.

First, regression models were generated in order to determine how well parent anger toward their partners predicted student anger in their relationships (Table 5). Student gender was unrelated to their relationship anger. Mother-to-partner anger and father-to-partner anger-in were significant positive predictors of student relationship anger. In addition, the interaction term was significant and the individual interactions between student gender and father-to-partner anger, father-to-partner anger-control, and mother-to-partner anger-control were significant. Further analysis revealed that only the interaction between father-to-partner trait anger and student gender accounted for greater than 1% of the variance, $F(10, 324) = 7.42$, $p < .01$, $\Delta R^2 = 0.015$, and therefore the other interactions were not explored further. The relationship between student relationship anger and father-to-partner anger was greater for males than for females, $r_s = .34$ and $.15$, respectively.

Models for relationship anger suppression (Table 6) showed that student gender was not a factor. However, father-to-partner anger and anger-in and mother-to-partner anger-in were significant positive predictors and father-to-partner anger-out was a significant negatively weighted predictor. The interaction term was also significant and the individual interaction between student gender and mother-to-partner anger-out was significant; however, this interaction did not account for 1% of the variance and therefore was not interpreted, $F(10, 325) = 8.03, p < .01, \Delta R^2 = 0.008$.

For student relationship anger-out (Table 7), father-to-partner anger-in and anger-out, and mother-to-partner anger-out were significant positive predictors. In addition, student gender was a significant predictor. Male students reported more anger-out in their partnered relationships ($M = 15.56$) than female students ($M = 14.63$); however, as previously reported, this difference was not statistically significant. The interaction term was also significant and the individual interaction between student gender and father-to-partner anger was significant due to the fact that the relationship between student relationship anger-out and father-to-partner anger was greater for males than for females, $r_s = .36$ and $.09$, respectively. Alone, this interaction accounted for almost 4% of the variance, $F(10, 324) = 8.02, p < .01, \Delta R^2 = 0.035$.

For student relationship anger-control (Table 8), father-to-partner anger-in was a significant negative predictor and father-to-partner and mother-to-partner anger-control were significant positive predictors. In addition, the interaction term was significant, but there were no significant individual interactions.

Second, regression models were generated in order to determine how well parent anger toward the student predicted student anger in their relationships. Findings for

student gender on Step 1 are not presented because they were presented in previous models. For student relationship anger, both father-to-student anger and mother-to-student anger were significant positive predictors (Table 9). In addition, the interaction term was significant, and the individual interaction between student gender and father-to-student anger was significant due to the fact that the relationship between student relationship anger and father-to-student anger was greater for males than for females, $r_s = .31$ and $.21$, respectively. This interaction accounted for 1% of the variance, $F(10, 314) = 6.43, p < .01, \Delta R^2 = 0.012$.

For student relationship anger-in (Table 10), father-to-student anger and anger-in, and mother-to-student anger-in were significant positive predictors and father-to-student anger-out was a significant negative predictor. In addition, the interaction term was significant, and the individual interaction between student gender and mother-to-student anger-in was significant. This interaction accounted for 1% of the variance and was therefore explored further, $F(10, 314) = 8.37, p < .01, \Delta R^2 = 0.013$. The relationship between student relationship anger-in and mother-to-student anger-in was greater for males than for females, $r_s = .45$ and $.31$, respectively.

For student relationship anger-out (Table 11), father-to-student anger-in and anger-out and mother-to-student anger-out were significant positive predictors and mother-to-student anger-in was a significant negative predictor. In addition, the interaction term was significant and the individual interaction between student gender and mother-to-student anger-control was significant, but did not account for 1% of the variance and therefore was not interpreted, $F(10, 313) = 7.06, p < .01, \Delta R^2 = 0.008$.

For student relationship anger-control (Table 12), mother-to-student anger-control was a significant positive predictor. In addition, the interaction term was significant, but there were no significant individual interactions.

For the third set of regression models, all parent relationship anger variables (i.e., parent-to-partner and parent-to-student anger) were entered into the regression equations. The only significant predictor of student relationship anger (Table 13) was father-to-student anger-in, which was a positive predictor. In addition, the interaction term was significant and the individual interaction between student gender and mother-to-student anger was significant; however, this interaction accounted for less than 1% of the variance and was therefore not interpreted, $F(18, 298) = 4.38, \Delta R^2 = 0.003$.

In regard to student relationship anger-in (Table 14), mother-to-partner anger-in, and father-to-student anger and anger-in were significant positive predictors. In addition, the interaction term was significant, but none of the individual interactions were significant.

For student relationship anger-out (Table 15), father-to-partner anger-in, mother-to-partner anger-out, and father-to-student anger-out were all significant positive predictors, and mother-to-student anger-control was a significant negative predictor. In addition, the interaction term was significant and the individual interactions between student gender and father-to-partner anger and father-to-partner anger-control were significant. Both interactions accounted for greater than 1% of the variance (.040 and .010) and were therefore explored further, $F_s(18, 298) = 5.73$ and 4.83 , and ΔR^2 s = 0.040 and 0.010 , respectively. As previously mentioned, the relationship between student

relationship anger-out and father-to-partner anger and anger-control were both greater for males than for females, $r_s = .36$ and $-.27$, and $.09$ and $-.08$, respectively.

For student relationship anger-control (Table 16), father-to-partner and mother-to-student anger-control were significant positive predictors and father-to-student anger was a significant negative predictor. In addition, the overall interaction term was significant, but none of the individual interactions were significant.

Chapter 4

Discussion

Anger in the context of intimate relationships is an important social topic due to both the frequency of anger in intimate relationships, and its impact on most people's lives including both positive and negative consequences. The current study contributed information to the limited and inconsistent findings in the current literature on the developmental origins of the experience and expression of anger specifically within this context. Previous research supports the influence of both biological and environmental factors in shaping an individual's experience and expression of anger in general and in intimate relationships. In regard to "nurture's" influence, the research on emotions in general, and on anger specifically, indicates that observational learning and modeling is one possible avenue through which we learn various emotions, cognitions and behaviors. Research thus far indicates that parents are instrumental in this development and that parents model interpersonal skills in both their marital/partnered relationship and in their direct relationship with their children. However, this researcher could not find any studies to date which have specifically addressed the effect of observing a parent's experience and expression of anger within their partnered relationships, or the effect of witnessing a parent's anger and anger expression within the parent-child relationship, specifically on the individual's experience and expression of anger within their adult intimate relationships. Therefore, the primary goal of the present research was to address

these two possible developmental origins of anger and anger expression in partnered relationships.

Limitations of Current Research and Suggestions for Future Research

The current study has some methodological issues that limit its conclusions, and therefore the current findings should be interpreted within these limitations. First, all data are self-report in nature. The study relied solely on student reports regarding their own anger experience and what they had observed from their parents, and these reports are not corroborated by anyone else.

Secondly, the current findings reflected the student's report of their parents' experience and expression of anger in their relationships in general throughout their childhood. Instructions were created in this manner based on the theory that children are most likely to model behavior that they see repeated over time. However, this methodology did not address whether a few specific events or critical incidents (e.g., loud threatening arguments at a period of relationship strain) might have had a larger influence on the child's repertoire of angry emotionality and forms of expression in relationships than their parent's general behavior over time. Thus, the current study's findings are limited to relationships between student relationship anger and parental relationship anger in general.

Thirdly, the measures completed by students regarding their own anger and anger expression, and that of their parents/stepparents used similar instructions and had the same items. While there is an asset in that it standardizes instruments and enhances interpretation, it is important to note that this commonality in the instruments creates

some method variance. In other words, the parallel nature of the instruments may have increased the likelihood of similar responding across instruments.

Fourth, the current sample included college students who were primarily Caucasian men and women (90.0%). In addition, the majority of the sample (78.9%) reported about a dating relationship (versus someone they were married to or living with). It is unclear how the results of the current study may or may not generalize to other populations that include participants from different age ranges, various ethnic and SES backgrounds, or married/co-habiting relationships. Although the current study contributes information regarding the developmental origins of anger in relationships of college students, future research should include a more diverse sample to investigate whether or not the current findings generalize to other populations.

Lastly, the current study the current sample included many more females than males (256 and 104, respectively). This difference in sample sizes creates differential statistical power for the two genders. Thus, there was a greater chance of finding statistical significance for women. For example, some correlations that were not significant for men were significant for women, when their magnitudes were the same. Future research in this area should attempt to include a more equal gender balance.

While it is important to review the current results in light of the aforementioned limitations, some of these measurement issues may also be viewed as strengths. For example, although there is some concern regarding retrospective reports rather than direct observation (of parental behavior) or parental report to corroborate student reports, research on the effect of marital conflict on children (Cummings & Davies, 2002; Grynych & Fincham, 1990; Harold & Conger, 1997) emphasizes the importance of the child's

perception of the conflict, which supports this study's use of student reports regarding their perception of parental behavior during their childhood.

Secondly, although the use of a common set of instruments may have introduced some method variance, it also lends consistency to the data and adds to the validity of comparing student and parent data, given the fact that the same constructs were measured in both contexts. In addition, findings indicate that the changes made to the instructions from the original versions of the STAXI measures (to report regarding anger in the context of relationships and to report regarding either themselves or a parent) did not significantly alter the reliability of the measures. Current findings indicated that all anger measures maintained good reliability.

Lastly, although the current sample did not include an equal gender balance or significant variability in terms of relationship length or status (e.g., married or co-habiting), the current study's total sample size was large and the vast majority (98.1%) of the sample reported being in or having been in a relationship for three months or more, with an average length of nearly two years (22.67 months). Therefore, the current results do appear to reflect anger and anger expression in long-term relationships, when a more consistent pattern of relating to a partner is more likely to have been established.

Possible Influence of Observing Partnered Relationships

Findings contributed to the growing body of evidence related to observational learning. In order to address the context-specific observational learning hypothesis, the present study directly examined the relationship between individual's anger and anger expression in their partnered relationships and the anger and anger expression they observed their parents/stepparents express toward each other in their childhood.

Research on the “intergenerational transmission” of behavior in adult intimate relationships is limited; however, findings thus far in the area of marital quality support the theory for certain marital characteristics (e.g., Amato & Booth, 1997). Results regarding student relationship anger experience lend support for the context-specific observational learning hypothesis. Student’s experience of anger in their intimate relationships was correlated with the anger they observed their parent’s experiencing in their intimate relationships. These positive relationships were found for both male and female students with both mothers and fathers, and were among the strongest relationships found across all student and parent anger variables. As previously mentioned, it is possible that, given the common set of instruments used, these relationships may have been partly affected by method variance. Nonetheless, these findings suggest that students who observed their mothers and/or fathers experiencing more anger and perceiving more situations as anger provoking in their partnered relationships were more likely to report greater anger experience in their own intimate relationships. In addition, when covariance with other measures was controlled, the current study found that mother’s, but not father’s, anger experienced in intimate relationships was the only significant predictor of student relationship anger experience. These findings are consistent with the context-specific observational learning hypothesis.

Consistent with previous research on the effects of parental conflict and anger on childhood development which suggests that the gender of the parent and the child impacts the affect of observational learning of emotions and emotional expression, the current study also found differences based on the gender of the student and parent. For example, father’s (but not mother’s) anger suppression with their partner predicted student

relationship anger. In other words, students who observed their fathers holding their anger inside in their partnered relationships were more likely to experience anger more frequently and intensely in their adult intimate relationships. In addition, the current study found that the relationship between student relationship anger and father-to-partner anger was greater for males than for females. However, the interaction effect size was small. These findings in regard to fathers are not directly in support of the observational learning hypothesis, but rather suggest that students are more likely to experience relationship anger if they observed this anger being suppressed. For males, these results are somewhat opposite to previous research (Kennedy et al., 2002) which found that males experienced anger more frequently in their marriages if, as a child, they had witnessed interparental psychological aggression from their fathers. However, anger suppression and psychological aggression may also not be correlated. These findings highlight the complicated nature of the impact that parental behavior in intimate relationships has on their children's later adult intimate relationships and emphasize the need for further research in this area.

Results regarding student relationship anger expression lend some support to the observational learning hypothesis as well. Student relationship anger suppression, negative outward anger expression, and anger-control were each related to the respective anger expression styles used by parents in their partnered relationships (e.g., student relationship anger-out correlated with parent anger-out with their partner). These positive relationships were found for both male and female students with both mothers and fathers, and were among the strongest relationships found across all student and parent gender variables. These results indicate that students who perceived greater parental

anger suppression, outward anger expression, or anger control techniques, were more likely to also express anger in this manner in their adult partnered relationships. In addition, when covariance with other measures was controlled, parental anger suppression with their partner predicted student anger suppression in relationships, parental outward anger expression toward their partners predicted student outward anger expression in relationships, and parental anger-control with their partners predicted student anger-control in relationships. In other words, the way that students observed their parents expressing their anger to their partner appears to have affected or at least to be correlated with the student's later anger expression in their adult intimate relationships. Thus, findings suggest that students may have modeled the behavior they witnessed in their parent's intimate relationships.

These findings are mixed in relationship to previous research regarding the effect of observing parental marital aggression as a child on aggressive behavior in later marriage (Boye-Beaman, 1995). Current findings are consistent with the previous research for women only, which indicated that for wives, observing parental marital aggression as a child increased the likelihood of their own aggressive behavior in marriage. Interestingly, the current findings are inconsistent with the same study's findings for men, which indicated that husbands who observed parental marital aggression as a child were more likely to experience more internalized emotions (specifically hostility and depression). Again, these findings highlight the complicated nature of the potential impact that parental behavior in intimate relationships has on their children's later adult intimate relationships and emphasize the need for further research in this area.

The current study also found that the gender of the parent and the child impacted the potential effect of the observational learning of anger expression styles as well. Specifically, student anger expression styles were more often predicted by father's anger and anger expression in intimate relationships than by mother's. For example, father's (but not mother's) anger suppression with their partner predicted student relationship outward anger expression and was a negative predictor of student relationship anger-control. In other words, students who observed their fathers suppressing their anger in their partnered relationships were more likely to express their own anger outwardly and less likely to use anger-control techniques (e.g., "try to calm down") to cope with their feelings. These findings are somewhat consistent with the observational learning hypothesis in the sense that students were less likely to use more positive coping strategies if they had witnessed their father suppressing their anger internally. However, they also suggest that students may not directly model the type of anger expression (inward or outward), and are more likely to use different behaviors to express their anger than those they observed their fathers using.

In addition to these differences between fathers versus mothers anger expression styles and students in general, the current findings also suggested some differences for male and female students. For example, the relationship between father's anger experience with their partner and student outward anger expression in relationships was greater for males than for females. The effect size for this interaction was small to moderate (4%). Interestingly, this finding and the abovementioned finding regarding father's relationship anger and student relationship anger, which found greater relationships between father's and son's anger experience, are inconsistent with previous

research on anger expression which has found more cross-gender effects (i.e., greater similarities between mother-son and father-daughter dyads) (Bjorkqvist & Osterman, 1992, Forgays & Forgays, 1992). These current findings are also inconsistent with previous research (Feldman et al., 1998; Feng et al., 1999) suggesting that familial factors are more influential on females' development than males'. Again, these inconsistencies highlight the need for more research in this area.

Possible Influence of Direct Relationships with Parents

The current study also addressed the "parent socialization" hypothesis by examining the relationship between individual's anger and anger expression in their partnered relationships and their parents'/stepparents' anger and anger expression in their relationship with the student as a child. The research on parenting and social competence (Feldman et al., 1998) lends support to this second developmental avenue, which emphasizes the importance of the parent's behavior with the child on the child's later behavior in intimate relationships. Results from the current investigation lend some support to this hypothesis as well.

Students whose parents experienced anger more frequently and more intensely in their relationship with them as a child were more likely to experience more anger in their own adult intimate relationships. Similar to results regarding parental behavior with their partners, these positive relationships were found for both male and female students with both mothers and fathers, and were among the strongest relationships found across all student and parent anger variables. In addition, both mother's and father's anger experience with the student as a child predicted student intimate relationship anger. These results are consistent with the parent-socialization hypothesis.

Differences regarding the gender of the parent and the child were again found. Interestingly, like the relationship between father's anger experience with their partner, the relationship between father's anger experience with the student as a child and the student's relationship anger was greater for males than for females. Again, this finding is inconsistent with previous research (Bjorkqvist & Osterman, 1992; Forgays & Forgays, 1992) which has found more cross-gender effects. In regard to differences based on student gender, females', but not males', anger experience was positively related to both parental anger suppression and outward anger expression with them as child, and negatively related to parental anger-control with them as a child. These results are consistent with the previous research mentioned earlier (Feldman et al., 1998; Feng et al., 1999) which has suggested familial factors have a greater impact on daughters than sons.

Current findings regarding student anger expression also lend support to the parent-socialization hypothesis. Student relationship anger suppression, negative outward anger expression, and anger-control each correlated with the respective parental behaviors in their relationships with the student. These positive relationships were found for both male and female students with both mothers and fathers. In other words, students who experienced their parents expressing their anger internally, externally, or via anger-control techniques were more likely to later do the same with their partners. In addition, when covariance with other measures was controlled, parental anger suppression with the student predicted student relationship anger suppression and parental anger-out with the student predicted student relationship anger-out.

Again, consistent with previous research (Boye-Beaman, 1995, Feldman et al., 1998; Feng, et al., 1999), results of this investigation also found different results based on

the gender of the parent and student. These results were mixed in regard to support for the parent-socialization hypothesis. For example, student relationship anger suppression was negatively related to father's anger-out with the student, indicating that students who experienced more outwardly expressed anger from their fathers were less likely to suppress their own relationship anger. In addition, mothers' anger-control with the student (but not father's) was a significant predictor of student relationship anger-control. These results both suggest that students may model the behavior they see from their parents during their parents interactions with them as a child. On the other hand, like some results regarding modeling parental behavior in intimate relationships, some of the findings regarding the potential impact of the parent's behavior with the child suggest that students' anger expression styles are sometimes different than what they observed as a child from their parents. For example, students whose fathers used more anger-in behaviors reported greater outward anger expression.

In regard to the gender of the student, overall, there were more significant relationships between student relationship anger and anger expression and parental anger and anger expression toward the student for females than for males. Although similar patterns were found, many of the relationships did not reach significance for males, perhaps due to statistical power in several cases. These results are consistent with previous findings (Feldman et al., 1998; Feng et al., 1999) that familial factors (e.g., parental aggression, marital quality, divorce) have a greater impact on females than males. However, these results must be qualified by the fact that the current study's sample had more women than men, thus making it more likely to find significance for women. Future research should have a greater gender balance in order to examine this

gender difference more adequately. A few relationships were greater for males than females. As previously mentioned, the relationship between father toward student anger and student relationship anger was greater for males than females. In addition, the relationship between mother toward student anger suppression and student relationship anger suppression was also greater for males.

Combination of Factors

In addition to examining the two possible developmental pathways separately, the current study also compared the contributions of both parent-to-partner and parent-to-student variables, thus comparing the observational learning and parent-socialization variables. Again, results were mixed. For student relationship anger, parental behavior with their partner was the better predictor. Specifically, in regression models including both sets of variables, the only significant predictor of student relationship anger was father's anger suppression with their partners. Although this finding suggests that student relationship anger was most related to the behavior observed in a parental relationship, it also does not suggest a clear modeling relationship. Rather, students reported experiencing more relationship anger if they had observed their fathers suppressing such relationship anger in his intimate relationship.

Student relationship anger expression variables yielded multiple predictors. In regard to anger-in, anger suppression by mothers with their partners and by fathers with the student both predicted student relationship anger suppression. These results support the hypothesis that students may be modeling their parent's anger expression style, and suggest that student behavior is related to parental behavior in both partnered relationships and the parent-child relationship. In addition, fathers' anger experience

with the student was a predictor of student relationship anger suppression. This result does not suggest a clear modeling relationship, but rather indicates that students who experience their father feeling angry more frequently and intensely are more likely to suppress their anger in their intimate relationships.

Student outward relationship anger expression yielded slightly more complicated results. Fathers anger-out with the student, and mother's anger-out with their partner predicted student relationship anger-out. In addition, mother's anger-control with the student was a negative predictor of student relationship anger-out, indicating that students were less likely to express anger outwardly if they experienced their mother using anger-control techniques in their parent-child relationship. These findings again appear to support a general modeling hypothesis and the importance of parental behavior in both contexts. Interestingly, father's anger suppression with their partners was also a predictor of student relationship anger-out, indicating that students were more likely to engage in different behaviors if they witnessed their fathers holding anger inside with their partners.

In a similar pattern, student relationship anger-control was predicted by father's anger-control with their partner and mother's anger-control with the student. In addition, father's anger experience with the student was a negative predictor, indicating that students who experienced more anger from their father as a child were less likely to use anger-control techniques in their intimate relationships. Again, these findings appear to support a general modeling hypothesis and the importance of parental behavior in both contexts.

In summary, findings added to the growing body of literature which highlights the importance of parental behavior as a model to children for how anger is experienced and

expressed in various environments. Specifically, findings suggested that the anger and anger expression children observe in both their parents' intimate relationships and in the parent-child relationship is related to their later experience and expression of anger in their adult partnered relationships. These findings, which lend support to both the context-specific observational learning hypothesis and the parent-socialization hypothesis, are inconsistent with previous research on the quality of interpersonal skills in early adult romantic relationships (Conger et al., 2001), which found the most support for the parent socialization hypothesis. Specifically, this previous study found that, parenting behaviors with the child were the only significant predictors of later interpersonal competence (when compared to parents' interactions with their partners).

It is important to note that the current study's findings are also consistent with the previous research which suggests that, in addition to modeling negative behavior (e.g., yelling, aggressive behavior), children also model the positive, coping skills (e.g., anger-control techniques such as "trying to calm down") they observe their parents using in their relationships both with their partners and with the child.

Appendix A- Consent Form

Consent to Participate in a Research Study Colorado State University

TITLE OF RESEARCH: Anger and Anger Expression in Relationships

PRINCIPAL INVESTIGATOR: *Jerry L. Deffenbacher, Ph.D. (970-491-6871)
jd6871@lamar.colostate.edu*

WHY AM I BEING INVITED TO TAKE PART IN THIS RESEARCH? We are interested in how young adults experience and express anger in relationships. Since you are in advanced classes, you are more likely to be in or have been in a partnered relationship.

WHAT PROCEDURES/METHODS WILL BE USED? This study involves completing short questionnaires about anger, anger expression, and relationships. Questionnaires will take most people 20 minutes. For your participation, you will receive the amount of extra credit described by your instructor.

WHO IS DOING THE RESEARCH? Jerry L. Deffenbacher, Professor in the Department of Psychology, is conducting this research.

WHAT IS THE PURPOSE OF THIS RESEARCH? This research addresses possible origins of anger and anger expression in partnered relationships. Students will not only report on their anger and anger expression in those relationships, but also the anger and anger expression they observed their parents/stepparents express toward each other and toward the student. This will allow us to better understand possible ways people learn anger and forms of anger expression in partnered relationships.

WHERE IS THE RESEARCH GOING TO TAKE PLACE AND HOW LONG WILL IT LAST?

You will receive a packet of questionnaires and two informed consent forms in class. You will complete them at your convenience at home and turn them in a coming class.

WHAT WILL I BE ASKED TO DO? You will be asked to complete five questionnaires that about anger and anger expression in your partnered relationship, between your parents/stepparents when you were growing up, and in how your parents/stepparents dealt with you when you were growing up.

ARE THERE REASONS WHY I SHOULD NOT TAKE PART IN THIS RESEARCH? If you should happen to be under the age of 18, contact Dr. Jerry L. Deffenbacher and arrangements will be made for your parents to review the project and provide their consent for you to be involved, if they give their permission to participate. If you are not interested in the project, then simply choose not to participate.

WHAT ARE THE POSSIBLE RISKS AND DISCOMFORTS? Risks are minimal. All questionnaires are your reports of anger and anger expression, are voluntary, and may be terminated at any time. On some of the questionnaires, we may be asking you to admit to aggressive anger expression. We do not want our research to put you at risk. In fact, our research depends on honest, truthful responses. We protect you by the way the questionnaires are completed and materials are turned in. Do not put your name anywhere on the questionnaires so that they are anonymous. Put the informed consent form in the box marked "Informed Consent Forms." Put your questionnaires in the box marked "Questionnaires." Since your name is on the Informed Consent Form, we can provide your name back to your instructor to document that you completed the extra credit project, but since your name is not on the questionnaires, we cannot connect your name to your questionnaires. We think these procedures protect you and minimize risk so that it should not be a problem to respond openly and truthfully. It is not possible to identify all potential risks in research procedures, but the researcher(s) have taken reasonable safeguards to minimize any known and potential, but unknown, risks.

WILL I BENEFIT FROM TAKING PART IN THIS RESEARCH? There are no known benefits for participating; however, participants in similar research in the past have reported that it was interesting to think about their reactions and they learned something about themselves.

DO I HAVE TO TAKE PART IN THE RESEARCH? Your participation in this research is voluntary. If you decide to participate in the study, you may withdraw your consent and stop participating at any time without penalty or loss of benefits to which you are otherwise entitled.

WHAT WILL IT COST ME TO PARTICIPATE? There are no known costs to participating, except for the time you take completing the questionnaires.

Page 1 of 2 Participant's initials _____ Date _____

WHO WILL SEE THE INFORMATION THAT I GIVE? This study is anonymous. Since your name or other personally identifying information are not on the questionnaire, this means that no one, not even members of the research team, will know that the information you give comes from you. Your information will be kept in locked, secure areas and will be seen only by research staff. We will keep private all research records that identify you, to the extent allowed by law. Your information will be combined with information from other people taking part in the study. When we write about the study to share it with other researchers, we will write about the combined information we have gathered. You will not be identified in these written materials. We may publish the results of this study; however, we will keep your name and other identifying information private.

CAN MY TAKING PART IN THE RESEARCH END EARLY? Your participation in this research is voluntary. If you decide to participate in this study, you may withdraw your consent and stop participating at any time without penalty or loss of benefits to which you are otherwise entitled. For example, if after picking up the materials, you decide you do not want to participate, just throw away the questionnaires, or if you completed them but decide you do not want to turn them in, again just throw them away.

WILL I RECEIVE ANY COMPENSATION FOR TAKING PART IN THIS STUDY? This research is being offered as an extra credit option in your class. We will provide your instructor with a list of names of students turning in informed consent forms. This will document that you completed the research, and you will receive the amount of extra credit your instructor described.

WHAT HAPPENS IF I AM INJURED BECAUSE OF THE RESEARCH? The Colorado Governmental Immunity Act determines and may limit Colorado State University's legal responsibility if an injury happens because of this study. Claims against the University must be filed within 180 days of the injury.

WHAT IF I HAVE QUESTIONS? Before you decide whether to accept this invitation to take part in the study, please ask any questions that might come to mind now. Later, if you have questions about the study, you can contact the investigator, Dr. Jerry L. Deffenbacher at 970-491-6871 or jld6871@lamar.colostate.edu. If you have any questions about your rights as a volunteer in this research, contact Celia Walker, Director of Regulatory Compliance, at 970-491-1553. We will give you a copy of this consent form to take with you.

WHAT ELSE DO I NEED TO KNOW? Hopefully, we have answered all of your questions, but if you have any questions, ask the research assistant or contact Dr. Jerry L. Deffenbacher.

Your signature acknowledges that you have read the information stated and willingly sign this consent form. Your signature also acknowledges that you have received, on the date signed, a copy of this document containing two pages.

Signature of person agreeing to take part in the study _____ Date

Printed name of person agreeing to take part in the study

Name of person providing information to participant _____ Date

Signature of Research Staff

Page 2 of 2 Participant's initials _____ Date _____

Appendix C- Debriefing Statement

Debriefing Statement for Anger and Anger Expression in Relationships

Anger and how it is expressed in intimate relationships is an important topic. This study involved completing questionnaires regarding your own experience and expression of anger in intimate relationships and your parents/stepparents' experience and expression of anger both in their partnered relationship and in their relationship with you. Responses will help us understand how anger and anger expression in relationships may be learned and may inform anger reduction interventions.

We truly appreciate your involvement in this research and hope it has been an interesting experience. If you have any questions or if completing the questionnaires caused you any distress, please feel free to contact Dr. Jerry L. Deffenbacher, Department of Psychology (970-491-6871) or jld6871@lamar.colostate.edu or the University Counseling Center.

Table 1.
Gender Differences for Anger and Anger Expression in Intimate Relationships

Measure	Gender			
	Male		Female	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Trait Anger	17.42	4.47	17.11	3.98
Anger-In	15.47	3.73	15.40	3.88
Anger-Out	15.56	3.41	14.63	3.04
Anger-Control	25.01	4.46	24.82	4.13
Relationship Closeness	8.17	1.64	8.26	1.65
Relationship Satisfaction	7.52	2.11	7.62	2.10
Relationship Length	19.10	19.51	24.02	36.28

Table 2.
Correlations Between Student Intimate Relationship Variables

Measure	2	3	4	5	6	7
1. Anger	.27** (.40**)	.64** (.55**)	-.51** (-.48**)	.15 (-.19**)	-.05 (-.00)	-.03 (-.07)
2. AX-In		.04 (-.03)	-.18 (-.27**)	-.32**(-.28**)	-.32**(-.23**)	-.16 (-.10)
3. AX-Out			-.40** (-.50**)	.13 (-.02)	.09 (-.00)	-.01 (-.03)
4. AX-Con				.15 (.20**)	.14 (.11)	-.12 (.10)
5. Relationship Satisfaction					.50** (.61**)	.31** (.11)
6. Relationship Closeness						.47** (.20**)
7. Relationship Length						

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

Note. Correlations for men are outside the parentheses; correlations for women are inside the parentheses. Anger = Trait Anger; AX-In = Anger-In; AX-Out = Anger-Out; AX-Con = Anger-Control.

Table 3.
Correlations Between Parent Toward Partner Anger Variables and Student Anger Variables for Males and Females Separately

Measure	Anger	Student Relationship Anger		
		AX-In	AX-Out	AX-Control
<i>Toward Partner</i>				
Father Anger	.34** (.15*)	.10 (.16*)	.36** (.09)	-.19 (-.12)
Mother Anger	.35** (.26**)	.22** (.18**)	.29** (.14*)	-.20 (-.17**)
Father AX-In	.30** (.36**)	.29** (.30**)	.41** (.21*)	-.22* (-.21**)
Mother AX-In	.06 (.25**)	.35** (.36**)	.09 (.11)	-.14 (-.20**)
Father AX-Out	.22* (.15*)	-.01 (.08)	.36** (.18**)	-.18 (-.15*)
Mother AX- Out	.21* (.27**)	.10 (.16*)	.31** (.28**)	-.07 (-.16*)
Father AX-Con	-.09 (-.14*)	-.04 (-.14)	-.22* (-.10)	.34** (.23**)
Mother AX-Con	-.25* (-.18**)	-.10 (-.18**)	-.25* (-.14)	.35** (.28**)

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

Note. Correlations for men are outside the parentheses, correlations for women are inside the parentheses. Some correlations are significant for women, but not men, due to the larger number of females in the sample. Anger = Trait Anger; AX-In = Anger-In; AX-Out = Anger-Out; AX-Con = Anger-Control.

Table 4.
Correlations Between Parent Toward Student Anger Variables and Student Anger Variables for Males and Females Separately

Measure	Anger	Student Relationship Anger		
		AX-In	AX-Out	AX-Control
<i>Toward Student</i>				
Father Anger	.31** (.21**)	.19 (.21**)	.27** (.16*)	-.12 (-.22**)
Mother Anger	.34** (.31**)	.23* (.18**)	.24* (.18**)	-.11 (-.15*)
Father AX-In	.03 (.26**)	.34** (.31**)	.24* (.17**)	-.03 (-.23**)
Mother AX-In	.05 (.20**)	.45** (.31**)	-.00 (.11)	-.18 (-.17**)
Father AX-Out	.15 (.18**)	-.07 (-.16*)	.29** (.25**)	-.07 (-.19**)
Mother AX-Out	.17 (.32**)	.17 (.17**)	.23* (.34**)	-.10 (-.22**)
Father AX-Con	-.04 (-.14*)	.09 (-.14*)	-.27** (-.08)	.28** (.24**)
Mother AX-Con	-.18 (-.22**)	-.03 (-.18**)	-.28** (-.16*)	.29** (.31**)

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

Note. Correlations for men are outside the parentheses, correlations for women are inside the parentheses. Some correlations are significant for women, but not men, due to the larger number of females in the sample. Anger = Trait Anger; AX-In = Anger-In; AX-Out = Anger-Out; AX-Con = Anger-Control.

Table 5.
 Hierarchical Regressions on Student Anger with Student Gender on Step 1, Parent-to-Partner Anger/Anger Expression on Step 2, and Interactions on Step 3

Step	Variables Entered	β on Step	t for β on Step	F to Enter Step	ΔR^2 for Step
Regression Model for Predicting:					
<i>Student Relationship Anger</i>					
1	Student Gender	-.57	-1.13	1.28	.00
2	Father-to-Partner Anger	.07	1.27	7.46**	.17
	Mother-to-Partner Anger	.13	2.16*		
	Father-to-Partner Anger-In	.23	4.15**		
	Mother-to-Partner Anger-In	.03	0.56		
	Father-to-Partner Anger-Out	-.02	-.25		
	Mother-to-Partner Anger-Out	-.00	-.06		
	Father-to-Partner Anger-Control	.04	.61		
	Mother-to-Partner Anger-Control	-.03	-.47		
3	Father-to-Partner Anger x Gender	-.41	-3.28**	5.55**	.06
	Mother-to-Partner Anger x Gender	-.08	-.65		
	Father-to-Partner AX-In x Gender	.10	.72		
	Mother-to-Partner AX-In x Gender	.18	1.55		
	Father-to-Partner AX-Out x Gender	-.02	-.10		
	Mother-to-Partner AX-Out x Gender	.29	1.89		
	Father-to-Partner AX-Cont x Gender	-.35	-2.55**		
	Mother-to-Partner AX-Cont x Gender	.31	2.18*		

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

Table 6.
 Hierarchical Regressions on Student Anger-In with Student Gender on Step 1, Parent-to-Partner Anger/Anger Expression on Step 2, and Interactions on Step 3

Step	Variables Entered	β on Step	t for β on Step	F to Enter Step	ΔR^2 for Step
Regression Model for Predicting: <i>Student Relationship Anger-In</i>					
1	Student Gender	-.13	-.28	0.08	.00
2	Father-to Partner Anger	.11	2.10*	8.79**	.20
	Mother-to-Partner Anger	.02	.27		
	Father-to-Partner Anger-In	.20	3.92**		
	Mother-to-Partner Anger-In	.25	5.33**		
	Father-to-Partner Anger-Out	-.16	-2.24*		
	Mother-to-Partner Anger-Out	-.06	-.89		
	Father-to-Partner Anger-Control	.04	.71		
	Mother-to-Partner Anger-Control	-.08	-1.30		
3	Father-to-Partner Anger x Gender	-.05	-.42		
	Mother-to-Partner Anger x Gender	-.16	-1.33		
	Father-to-Partner AX-In x Gender	-.03	-.28		
	Mother-to-Partner AX-In x Gender	-.08	-.74		
	Father-to-Partner AX-Out x Gender	.01	.08		
	Mother-to-Partner AX-Out x Gender	.30	2.07*		
	Father-to-Partner AX-Cont x Gender	-.11	-.86		
	Mother-to-Partner AX-Cont x Gender	-.03	-.26		

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

Table 7.
 Hierarchical Regressions on Student Anger-Out with Student Gender on Step 1, Parent-
 to-Partner Anger/Anger Expression on Step 2, and Interactions on Step 3

Step	Variables Entered	β on Step	t for β on Step	F to Enter Step	ΔR^2 for Step
Regression Model for Predicting: <i>Student Relationship Anger-Out</i>					
1	Student Gender	-.94	-2.49**	6.21**	.02
2	Father-to Partner Anger	-.04	-.94	7.06**	.15
	Mother-to-Partner Anger	-.06	-1.39		
	Father-to-Partner Anger-In	.14	3.36**		
	Mother-to-Partner Anger-In	-.02	-.58		
	Father-to-Partner Anger-Out	.14	2.37**		
	Mother-to-Partner Anger-Out	.19	3.41**		
	Father-to-Partner Anger-Control	.02	.52		
	Mother-to-Partner Anger-Control	-.04	-.91		
3	Father-to-Partner Anger x Gender	-.24	-2.49**	5.20**	.06
	Mother-to-Partner Anger x Gender	-.10	-1.02		
	Father-to-Partner AX-In x Gender	-.09	-.94		
	Mother-to-Partner AX-In x Gender	.10	1.12		
	Father-to-Partner AX-Out x Gender	-.02	-.13		
	Mother-to-Partner AX-Out x Gender	.14	1.19		
	Father-to-Partner AX-Cont x Gender	-.11	-1.10		
	Mother-to-Partner AX-Cont x Gender	.14	1.33		

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

Table 8.
 Hierarchical Regressions on Student Anger-Control with Student Gender on Step 1,
 Parent-to-Partner Anger/Anger Expression on Step 2, and Interactions on Step 3

Step	Variables Entered	β on Step	t for β on Step	F to Enter Step	ΔR^2 for Step
Regression Model for Predicting: <i>Student Relationship Anger-Control</i>					
1	Student Gender	-.09	-.19	0.05	.00
2	Father-to Partner Anger	.04	.72	7.26**	.17
	Mother-to-Partner Anger	-.00	-.07		
	Father-to-Partner Anger-In	-.12	-2.07*		
	Mother-to-Partner Anger-In	-.06	-1.11		
	Father-to-Partner Anger-Out	.01	.09		
	Mother-to-Partner Anger-Out	.08	1.06		
	Father-to-Partner Anger-Control	.19	2.97**		
	Mother-to-Partner Anger-Control	.26	4.06**		
3	Father-to-Partner Anger x Gender	.10	.79	4.21**	.02
	Mother-to-Partner Anger x Gender	.09	.69		
	Father-to-Partner AX-In x Gender	.02	.16		
	Mother-to-Partner AX-In x Gender	.05	.40		
	Father-to-Partner AX-Out x Gender	-.11	-.63		
	Mother-to-Partner AX-Out x Gender	-.23	-1.42		
	Father-to-Partner AX-Cont x Gender	-.11	-.80		
	Mother-to-Partner AX-Cont x Gender	-.14	-.92		

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

Table 9.
 Hierarchical Regressions on Student Anger with Student Gender on Step 1, Parent-to-Student Anger/Anger Expression on Step 2, and Interactions on Step 3

Step	Variables Entered	β on Step	t for β on Step	F to Enter Step	ΔR^2 for Step
Regression Model for Predicting: <i>Student Relationship Anger</i>					
1	Student Gender	-.47	-.93	0.87	.00
2	Father-to-Student Anger	.14	2.28*	6.56**	.16
	Mother-to-Student Anger	.17	2.71**		
	Father-to-Student Anger-In	.10	1.75		
	Mother-to-Student Anger-In	-.04	-.75		
	Father-to-Student Anger-Out	-.03	-.38		
	Mother-to-Student Anger-Out	-.01	-.01		
	Father-to-Student Anger-Control	.04	.56		
	Mother-to-Student Anger-Control	-.04	-.58		
3	Father-to-Student Anger x Gender	-.31	-2.17*	4.50**	.04
	Mother-to-Student Anger x Gender	-.11	-.72		
	Father-to-Student AX-In x Gender	.22	1.37		
	Mother-to-Student AX-In x Gender	.04	.30		
	Father-to-Student AX-Out x Gender	-.15	-.75		
	Mother-to-Student AX-Out x Gender	.35	1.84		
	Father-to-Student AX-Cont x Gender	-.32	-1.90		
	Mother-to-Student AX-Cont x Gender	.20	1.27		

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

Table 10.
 Hierarchical Regressions on Student Anger-In with Student Gender on Step 1, Parent-to-Student Anger/Anger Expression on Step 2, and Interactions on Step 3

Step	Variables Entered	β on Step	t for β on Step	F to Enter Step	ΔR^2 for Step
Regression Model for Predicting: <i>Student Relationship Anger-In</i>					
1	Student Gender	-.06	-.12	0.02	.00
2	Father-to-Student Anger	.19	3.47**	8.70**	.20
	Mother-to-Student Anger	-.05	-.83		
	Father-to-Student Anger-In	.21	3.85**		
	Mother-to-Student Anger-In	.23	4.50**		
	Father-to-Student Anger-Out	-.18	-2.39*		
	Mother-to-Student Anger-Out	.04	.52		
	Father-to-Student Anger-Control	.11	1.70		
	Mother-to-Student Anger-Control	-.04	-.65		
3	Father-to-Student Anger x Gender	-.25	-1.89	5.41**	.03
	Mother-to-Student Anger x Gender	.01	.09		
	Father-to-Student AX-In x Gender	.04	.24		
	Mother-to-Student AX-In x Gender	-.33	-2.46**		
	Father-to-Student AX-Out x Gender	.29	1.56		
	Mother-to-Student AX-Out x Gender	.01	.05		
	Father-to-Student AX-Cont x Gender	-.14	-.89		
	Mother-to-Student AX-Cont x Gender	-.08	-.52		

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

Table 11.
 Hierarchical Regressions on Student Anger-Out with Student Gender on Step 1, Parent-to-Student Anger/Anger Expression on Step 2, and Interactions on Step 3

Step	Variables Entered	β on Step	t for β on Step	F to Enter Step	ΔR^2 for Step
Regression Model for Predicting: <i>Student Relationship Anger-Out</i>					
1	Student Gender	-.93	-2.36*	5.58*	.02
2	Father-to-Student Anger	-.01	-.14	7.45**	.16
	Mother-to-Student Anger	-.04	-.91		
	Father-to-Student Anger-In	.09	2.05*		
	Mother-to-Student Anger-In	-.09	-2.05*		
	Father-to-Student Anger-Out	.17	2.70**		
	Mother-to-Student Anger-Out	.18	2.90**		
	Father-to-Student Anger-Control	.03	.64		
	Mother-to-Student Anger-Control	-.09	-1.71		
3	Father-to-Student Anger x Gender	-.09	-.83	5.29**	.05
	Mother-to-Student Anger x Gender	-.10	-.87		
	Father-to-Student AX-In x Gender	-.19	-1.55		
	Mother-to-Student AX-In x Gender	.13	1.21		
	Father-to-Student AX-Out x Gender	-.08	-.55		
	Mother-to-Student AX-Out x Gender	.23	1.55		
	Father-to-Student AX-Cont x Gender	.05	.41		
	Mother-to-Student AX-Cont x Gender	.25	2.07*		

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

Table 12.
 Hierarchical Regressions on Student Anger with Student Gender on Step 1, Parent-to-Student Anger/Anger Expression on Step 2, and Interactions on Step 3

Step	Variables Entered	β on Step	t for β on Step	F to Enter Step	ΔR^2 for Step
Regression Model for Predicting: <i>Student Relationship Anger-Control</i>					
1	Student Gender	-.41	-.78	0.61	.00
2	Father-to-Student Anger	-.09	-1.40	7.15**	.17
	Mother-to-Student Anger	.12	1.97		
	Father-to-Student Anger-In	-.08	-1.39		
	Mother-to-Student Anger-In	-.02	-.34		
	Father-to-Student Anger-Out	.05	.59		
	Mother-to-Student Anger-Out	-.07	-.82		
	Father-to-Student Anger-Control	.10	1.48		
	Mother-to-Student Anger-Control	.32	4.66**		
3	Father-to-Student Anger x Gender	.01	.08	3.96**	.01
	Mother-to-Student Anger x Gender	.06	.41		
	Father-to-Student AX-In x Gender	-.19	-1.15		
	Mother-to-Student AX-In x Gender	.18	1.19		
	Father-to-Student AX-Out x Gender	-.12	-.58		
	Mother-to-Student AX-Out x Gender	-.11	-.59		
	Father-to-Student AX-Cont x Gender	-.15	-.88		
	Mother-to-Student AX-Cont x Gender	.04	.26		

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

Table 13.
 Hierarchical Regressions on Student Anger with Student Gender on Step 1, Parent-to-Partner and Parent-to-Student Anger/Anger Expression on Step 2, and Interactions on Step 3

Step	Variables Entered	β on Step	t for β on Step	F to Enter Step	ΔR^2 for Step
Regression Model for Predicting:					
<i>Student Relationship Anger</i>					
1	Student Gender	-.49	-.95	0.89	.00
2	Father-to-Partner Anger	.03	.50	4.58**	.20
	Mother-to-Partner Anger	-.02	-.26		
	Father-to-Partner Anger-In	.27	3.49**		
	Mother-to-Partner Anger-In	.15	1.66		
	Father-to-Partner Anger-Out	-.08	-.93		
	Mother-to-Partner Anger-Out	.04	.43		
	Father-to-Partner Anger-Control	-.01	.72		
	Mother-to-Partner Anger-Control	.06	-.08		
	Father-to-Student Anger	.08	1.20		
	Mother-to-Student Anger	.15	1.86		
	Father-to-Student Anger-In	-.10	-1.31		
	Mother-to-Student Anger-In	-.15	-1.70		
	Father-to-Student Anger-Out	.08	.83		
	Mother-to-Student Anger-Out	-.03	-.27		
	Father-to-Student Anger-Control	.08	.94		
	Mother-to-Student Anger-Control	-.09	-1.08		
3	Father-to-Partner Anger x Gender	-.28	-1.81	3.29**	.07
	Mother-to-Partner Anger x Gender	-.02	-.08		
	Father-to-Partner AX-In x Gender	.08	.39		
	Mother-to-Partner AX-In x Gender	.17	.77		
	Father-to-Partner AX-Out x Gender	-.04	-.20		
	Mother-to-Partner AX-Out x Gender	-.23	-1.06		
	Father-to-Partner AX-Cont x Gender	-.20	-.96		
	Mother-to-Partner AX-Cont x Gender	.36	1.54		
	Father-to-Student Anger x Gender	-.14	-.76		
	Mother-to-Student Anger x Gender	-.11	-.49		
	Father-to-Student AX-In x Gender	.22	.92		
	Mother-to-Student AX-In x Gender	.17	.77		
	Father-to-Student AX-Out x Gender	.02	.09		
	Mother-to-Student AX-Out x Gender	.58	2.32*		
	Father-to-Student AX-Cont x Gender	-.14	-.58		
	Mother-to-Student AX-Cont x Gender	-.16	-.72		

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

Table 14.
 Hierarchical Regressions on Student Anger-In with Student Gender on Step 1, Parent-to-Partner and Parent-to-Student Anger/Anger Expression on Step 2, and Interactions on Step 3

Step	Variables Entered	β on Step	t for β on Step	F to Enter Step	ΔR^2 for Step
Regression Model for Predicting: <i>Student Relationship Anger-In</i>					
1	Student Gender	-.14	-.28	0.08	.00
2	Father-to Partner Anger	.03	.42	5.73**	.25
	Mother-to-Partner Anger	.05	.66		
	Father-to-Partner Anger-In	.05	.72		
	Mother-to-Partner Anger-In	.28	3.33**		
	Father-to-Partner Anger-Out	-.14	-1.72		
	Mother-to-Partner Anger-Out	-.08	-.90		
	Father-to-Partner Anger-Control	-.02	-.24		
	Mother-to-Partner Anger-Control	-.09	-1.14		
	Father-to-Student Anger	.21	3.14**		
	Mother-to-Student Anger	-.11	-1.48		
	Father-to-Student Anger-In	.17	2.21*		
	Mother-to-Student Anger-In	.01	.13		
	Father-to-Student Anger-Out	-.11	-1.26		
	Mother-to-Student Anger-Out	.11	1.12		
	Father-to-Student Anger-Control	.14	1.77		
	Mother-to-Student Anger-Control	.03	.44		
3	Father-to-Partner Anger x Gender	.02	.14	3.50**	.04
	Mother-to-Partner Anger x Gender	-.06	-.30		
	Father-to-Partner AX-In x Gender	.12	.64		
	Mother-to-Partner AX-In x Gender	.11	.55		
	Father-to-Partner AX-Out x Gender	-.18	-.99		
	Mother-to-Partner AX-Out x Gender	.30	1.43		
	Father-to-Partner AX-Cont x Gender	-.08	-.44		
	Mother-to-Partner AX-Cont x Gender	.03	.13		
	Father-to-Student Anger x Gender	-.30	-1.81		
	Mother-to-Student Anger x Gender	.06	.26		
	Father-to-Student AX-In x Gender	-.09	-.38		
	Mother-to-Student AX-In x Gender	-.42	-1.90		
	Father-to-Student AX-Out x Gender	.43	1.96		
	Mother-to-Student AX-Out x Gender	-.23	-.97		
	Father-to-Student AX-Cont x Gender	-.09	-.42		
	Mother-to-Student AX-Cont x Gender	-.04	-.19		

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

Table 15.
 Hierarchical Regressions on Student Anger-Out with Student Gender on Step 1, Parent-
 to-Partner and Parent-to-Student Anger/Anger Expression on Step 2, and Interactions on
 Step 3

Step	Variables Entered	β on Step	t for β on Step	F to Enter Step	ΔR^2 for Step
Regression Model for Predicting:					
<i>Student Relationship Anger-Out</i>					
1	Student Gender	-.89	-2.24	5.03**	.02
2	Father-to Partner Anger	-.02	-.34	4.85**	.20
	Mother-to-Partner Anger	-.08	-1.31		
	Father-to-Partner Anger-In	.17	2.83**		
	Mother-to-Partner Anger-In	.03	.39		
	Father-to-Partner Anger-Out	.07	1.06		
	Mother-to-Partner Anger-Out	.16	2.15*		
	Father-to-Partner Anger-Control	.05	.82		
	Mother-to-Partner Anger-Control	.05	.81		
	Father-to-Student Anger	-.05	-.87		
	Mother-to-Student Anger	-.02	-.27		
	Father-to-Student Anger-In	-.04	-.58		
	Mother-to-Student Anger-In	-.09	-1.24		
	Father-to-Student Anger-Out	.19	2.63**		
	Mother-to-Student Anger-Out	.06	.71		
	Father-to-Student Anger-Control	.02	.30		
	Mother-to-Student Anger-Control	-.14	-2.12*		
3	Father-to-Partner Anger x Gender	-.33	-2.77**	3.73**	.09
	Mother-to-Partner Anger x Gender	-.19	-1.25		
	Father-to-Partner AX-In x Gender	.05	.33		
	Mother-to-Partner AX-In x Gender	.04	.25		
	Father-to-Partner AX-Out x Gender	-.09	-.60		
	Mother-to-Partner AX-Out x Gender	-.19	-1.14		
	Father-to-Partner AX-Cont x Gender	-.30	-2.01*		
	Mother-to-Partner AX Cont x Gender	.12	.70		
	Father-to-Student Anger x Gender	.14	1.02		
	Mother-to-Student Anger x Gender	.07	.37		
	Father-to-Student AX-In x Gender	-.16	-.87		
	Mother-to-Student AX-In x Gender	.07	.41		
	Father-to-Student AX-Out x Gender	.10	.33		
	Mother-to-Student AX-Out x Gender	.33	1.75		
	Father-to-Student AX-Cont x Gender	.30	1.69		
	Mother-to-Student AX Cont x Gender	.01	.06		

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

Table 16.
 Hierarchical Regressions on Student Anger with Student Gender on Step 1, Parent-to-Partner and Parent-to-Student Anger/Anger Expression on Step 2, and Interactions on Step 3

Step	Variables Entered	β on Step	t for β on Step	F to Enter Step	ΔR^2 for Step
Regression Model for Predicting: <i>Student Relationship Anger-Control</i>					
1	Student Gender	-.35	-.67	0.44	.00
2	Father-to Partner Anger	.13	1.80	4.37**	.20
	Mother-to-Partner Anger	-.04	-.48		
	Father-to-Partner Anger-In	-.09	-1.15		
	Mother-to-Partner Anger-In	-.13	-1.44		
	Father-to-Partner Anger-Out	.06	.73		
	Mother-to-Partner Anger-Out	.10	1.04		
	Father-to-Partner Anger-Control	.16	2.03*		
	Mother-to-Partner Anger-Control	.06	.67		
	Father-to-Student Anger	-.17	-2.27*		
	Mother-to-Student Anger	.16	1.97		
	Father-to-Student Anger-In	-.01	-.14		
	Mother-to-Student Anger-In	.11	1.17		
	Father-to-Student Anger-Out	-.02	-.21		
	Mother-to-Student Anger-Out	-.14	-1.26		
	Father-to-Student Anger-Control	-.01	-.11		
	Mother-to-Student Anger-Control	.27	3.09**		
3	Father-to-Partner Anger x Gender	.17	1.06	2.62**	.04
	Mother-to-Partner Anger x Gender	.14	.66		
	Father-to-Partner AX-In x Gender	.04	.17		
	Mother-to-Partner AX-In x Gender	-.04	-.16		
	Father-to-Partner AX-Out x Gender	.08	.40		
	Mother-to-Partner AX-Out x Gender	.16	.68		
	Father-to-Partner AX-Cont x Gender	-.14	-.66		
	Mother-to-Partner AX Cont x Gender	-.09	-.39		
	Father-to-Student Anger x Gender	-.11	-.57		
	Mother-to-Student Anger x Gender	-.03	-.13		
	Father-to-Student AX-In x Gender	-.22	-.87		
	Mother-to-Student AX-In x Gender	.23	.91		
	Father-to-Student AX-Out x Gender	-.19	-.78		
	Mother-to-Student AX-Out x Gender	-.33	-1.26		
	Father-to-Student AX-Cont x Gender	.02	.07		
	Mother-to-Student AX Cont x Gender	.10	.41		

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

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