Coping with Dating Violence as a Function of Violence Frequency,

Severity, Gender Role Beliefs and Solution Attribution: A Structural

Modeling Approach

by

Mona Bapat

A Dissertation Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

ARIZONA STATE UNIVERSITY

August 2011

Coping with Dating Violence as a Function of Violence Frequency,

Severity, Gender Role Beliefs and Solution Attribution: A Structural

Modeling Approach

by

Mona Bapat

has been approved

June 2010

Graduate Supervisory Committee:

Terence J. G. Tracey, Chair
Bianca Bernstein
Samuel Green

ACCEPTED BY THE GRADUATE COLLEGE

ABSTRACT

This study presents a structural model of coping with dating violence. The model integrates abuse frequency and solution attribution to determine a college woman's choice of coping strategy. Three hundred, twenty-four undergraduate women reported being targets of some physical abuse from a boyfriend and responded to questions regarding the abuse, their gender role beliefs, their solution attribution and the coping behaviors they executed. Though gender role beliefs and abuse severity were not significant predictors, solution attribution mediated between frequency of the abuse and coping. Abuse frequency had a positive effect on external solution attribution and external solution attribution had a positive effect on the level of use of active coping, utilization of social support, denial and acceptance.

ACKNOWLEDGMENTS

TABLE OF CONTENTS

Chapter 1

Introduction

The International Dating Violence Survey yielded figures that

suggest that, on a worldwide scale, 17% to 45% of university students

had physically assaulted their intimate partners (Straus, 2004).

Nabors, Dietz and Jasinski (2006) summarize that rates of dating

violence in United States colleges range from 20% to 50%. In a survey

of 863 college females between the ages of 18 and 25 that Amar and

Gennaro (2005) conducted at two different American colleges, 48%

were targets of some form of dating violence. Further, of those 412

women that Amar and Gennaro surveyed, 60% reported more than one

form of violence and almost one-third of those victims reported

physical injury with some of the most common being scratches, sore

muscles, sprains, strains, bruises, welts, black eyes, and swollen or

busted lip. Amar and Gennaro's analyses also yielded significantly

higher scores for targets of dating violence on measures of

somatization, interpersonal sensitivity, depression, and anxiety and

hostility compared to non-targets. Other impacts of dating violence on

targets include low self-esteem and poor performance in school (Bird,

Stith & Schladale, 1991; Coffey et al., 1996; Fincham et al., 2008;

Waldrop & Resick, 2004).

Any type of intimate partner violence, whether in a dating or marital relationship, includes various forms of abuse such as physical, verbal, emotional, and financial, with the goal of controlling the partner (Wekerle & Wolfe, 1999). The abuse also tends to follow a cycle, as Walker (1984) has theorized from her qualitative and quantitative studies of 403 battered women. The cycle consists of three phases – tension building, explosion and loving-contrition – providing a model that has been the framework in which violent intimate relationships have since been examined. During the tension-building phase, the target of the abuse senses that some form of abuse is soon to be coming. She may feel nervous, scared or uncertain about what her partner is thinking and feeling and what behaviors he will execute. Then during the explosion phase is when some form of abuse occurs. Afterward, there is loving behavior on part of the abuser.

The focus of my research is on physical violence in an intimate relationship in which two individuals are dating, known as dating violence (Cornelius & Resseguie, 2007). Given the prevalence of dating violence and its negative effects, prevention and intervention efforts are needed, particularly in the college population (Cornelius & Resseguie, 2005); the United States Department of Justice has reported that women aged 16-24 are at most risk for nonfatal violence

from an intimate partner (Amar & Gennaro, 2005) and violence in a dating relationship could also be a precursor to violence in a marital relationship (Cornelius & Resseguie, 2005). Though one approach to intervening and preventing dating violence is to work with perpetrators, helping targets to cope with the violence is important so as to minimize the abuse they sustain.

Though men can be the targets of abuse from an intimate partner, the data suggest that women in heterosexual relationships sustain such abuse in much larger numbers, and they tend to seek help for the abuse more than men (Graham-Kevan & Archer, 2005; Koopmans & Lamers, 2006; Mitchell, 1987). Therefore I have measured how undergraduate women cope with abuse from a heterosexual dating partner and elucidated factors that relate to those coping strategies. In order to help targets of dating violence cope, there is first a need to examine targets' current coping strategies. How targets cope could inform intervention and prevention efforts. If targets are taking action to deal with the abuse they are experiencing, then helping professionals may work with them to do so in a safe manner. On the other hand if targets are avoiding taking action to deal with the abuse, that might be an opportunity for helping professionals to provide psychoeducation on the cycle of abuse and the possibility for

the target to experience further abuse if she does not try to end the dating relationship.

There are a number of variables that could impact how a woman chooses to cope with dating violence, some of which are the severity and frequency of the violence, to whom she attributes responsibility for dealing with the violence, and how she views traditional gender roles. A therapist's work with her may differ based on the level of severity of abuse she is experiencing, or the level of frequency of the abuse. More severe abuse may warrant immediate safety planning such that the target is physically safe from further harm. More frequent abuse may also call for safety planning, and imparting coping skills on a day-to-day basis.

To whom the woman attributes responsibility for dealing with the problem of violence in the relationship could impact the way in which she copes as well. If she feels that it is someone else's responsibility for stopping the abuse, she may avoid the problem more, or try to deal with the abuse less actively. However if she believes that the responsibility to stop the abuse is hers, she may take more active steps in either trying to stop the abuse or end the relationship. Another variable that could impact how a woman might choose to cope is how much she subscribes to traditional gender roles. If she

subscribes to the traditional view of relationships, such as it being the woman's responsibility to keep the relationship together, or to defer control and status to her partner, then she may view the abuse differently compared to someone who does not subscribe to traditional gender roles in relationships. Such differing views could impact choice of coping strategies. A woman who subscribes to a more traditional conception of romantic relationships may have more tolerance for the abuse she experiences compared to one who does not have those traditional views and might be more active in dealing with the dating violence. Such cognitions of targets of dating violence are ones with which clinicians might work in therapy; clinicians could challenge notions that contribute to clients keeping themselves from actively avoiding harm.

Given that more information on how targets are coping with dating violence can inform helping professionals' work with them, and that the variables I just discussed could be related to targets' choice of coping strategies, my goal with this research study was to examine how college women cope with abuse from a boyfriend and the variables that might be related to those coping strategies. All of these variables are linked together in Figure 1, which shows the conceptual model I hypothesized.
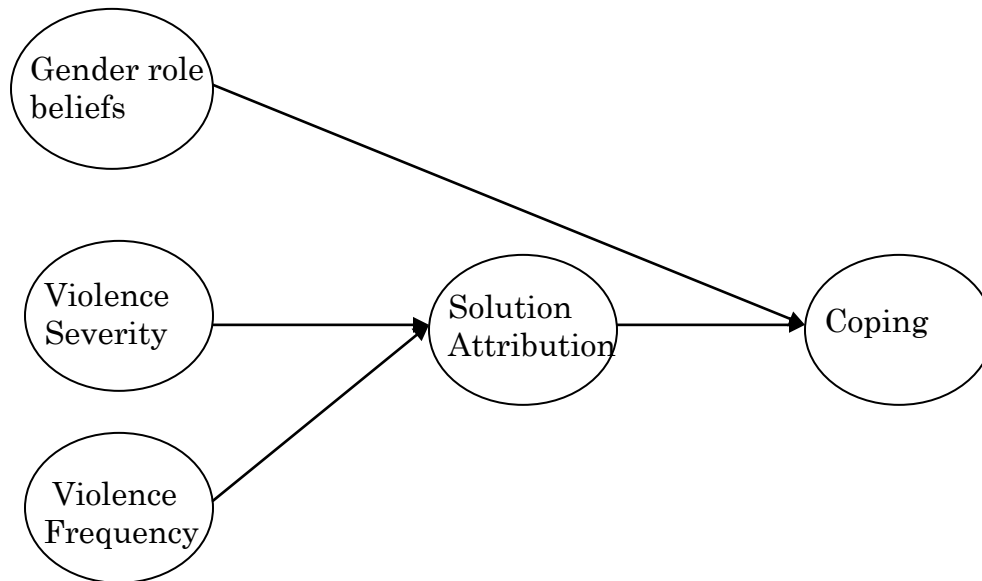
Figure 1. Proposed conceptual model of undergraduate women's coping with dating violence.

This figure shows that in my hypothesized model, solution attribution is the mediating variable between abuse frequency and severity and coping strategy. Solution attribution is defined as assigning responsibility for fixing a problem to either oneself or to individuals other than oneself, and I hypothesize that the variables of abuse severity and frequency can have an effect on whether the target makes an internal or external solution attribution. This in turn could have an effect on coping. In addition, I hypothesize that gender role beliefs could be related to coping.

First, before I present my review of the literature, I will note that I will at times refer to domestic violence, which is the term used in

the literature to describe violence in marriages, families, or romantic

relationships between older adults. Dating violence is used to describe

abusive intimate relationships between adolescents and younger

adults who are not married. Though domestic violence mostly refers to

violence in the home, the dynamics of those relationships are similar to

those of dating relationships; abuse in both is a result of seeking to

control an intimate partner (Carlson, 1987; Walker, 1984; Wekerle &

Wolfe, 1999). Additionally, Carlson (1987) states that dating

relationships are similar to marriage relationships in that both

partners spend a lot of time together, there is a high level of personal

disclosure, there is a high level of emotional investment, and each

partner tends to believe that he or she has a right to influence the

other. Further, the domestic violence literature has for a longer period

of time provided the coping theories and empirical research that I will

examine.

Chapter 2

Review of the Literature

The domestic violence and dating violence literature has mostly described coping as targets deciding whether to stay or leave the relationship (Choice & Lamke, 1997; Rusbult & Martz, 1995; Strube, 1988). Such a model provides a very narrow aspect of coping, only addressing the stay-leave decision and does not address how targets cope if they decide to stay in the relationship. Abuse toward an intimate partner is in most cases rooted in the goal to control the partner in various ways. Leaving an abusive intimate relationship can be the most dangerous time because if the perpetrator knows or senses that the target is planning to leave, the abuse could escalate in attempt to further control. For instance, the 2000 and 2001 domestic violence fatality review of Arizona conducted by the Arizona Coalition Against Domestic Violence (2002) yielded that 50% of the domestic violence-related murders in the state occurred when the targets were in the process of leaving the relationship.

The theory that intimate partner violence is an issue of control of the partner has some empirical support. Prospero (2008) found in his survey of 167 students that their level of controlling behaviors (e.g. controlling partner economically, trying to control partner's time such

that she cannot see her family/friends) was a significant predictor of their amount of physical, sexual and psychological abuse of the partner. Graham-Kevan and Archer (2008) found similar results; 60% of the variance of use of physical aggression by the 108 male prisoners they surveyed was explained by the controlling behaviors of emotional control and isolation. Lastly, Simmons, Lehmann and Collier-Tenison (2008) surveyed 2135 women in domestic violence shelter programs and found from their reports that the partners from whom they were fleeing had used similar controlling behaviors, and the researchers' analyses yielded that those controlling behaviors predicted the physical abuse the men used against the women.

The scale used to measure abuse in an intimate partner relationship is predominantly the Conflict Tactics Scale (CTS) (Bird et al., 1991; Coffey et al., 1996; Cunradi et al., 2008; Jones et al., 2002; Koziol-McClain et al., 2001). Straus (1979) developed the CTS under the theoretical premise that there are three ways in which conflict in a relationship is handled: 1) use of rational discussion, 2) use of verbal and nonverbal acts which hurt the partner and 3) use of physical force against the partner. As such the CTS has three scales: Reasoning scale, Verbal Aggression scale and Violence scale. The CTS includes a wide range of items from calmly discussing a disagreement in the

relationship to using a weapon, and the acts become more severe as the person completing it progresses down the questionnaire. Factor analysis yielded a higher order factor structure of the three factors of reasoning, verbal aggression and violence (Straus, 1979). Participants rate the various items on a 7-point Likert-type scale ranging from 0 (*never*) to 6 (*more than once a month*), thus the scale measures the frequency of abuse in the relationship. CTS score reliabilities (Cronbach's alpha) have been reported are between the range of .61 to .92. Jones et al. (2002) found convergent validity of the CTS with the Abusive Behavior Checklist (ABC).

Given that the controlling behaviors of their partners could escalate and become more severe if the women try to leave or retaliate, very few women may decide to end the relationship immediately after sustaining abuse. This leaves unexamined other coping strategies being used. Further, given that the abuse in an intimate relationship tends to follow a cycle including a phase in which the partner displays loving behaviors, a woman may try to give her partner another chance, or not be able to see the cycle unfolding, especially at the beginning of the relationship. Another possibility is that the woman leaves her partner but finds that she does not have the wherewithal to care for herself; Raja (2001) found that many women experience stigmatization

for being abused and may have a lack of resources in order to be on their own. Social pressures to keep a family together can also keep a woman from leaving an abusive relationship (Rianon & Shelton, 2003), or lack of resources or other options for income and shelter can keep a woman in her marriage, probably being the best option for her for a time being (Anderson et al, 2003). Similarly with dating violence, targets do not leave the relationships as often as one might expect (Carlson, 1987). For adolescents, there can exist the peer pressure to engage in sexual activity (Bradford, 1982) so they may feel pressure to stay in a relationship even though it is abusive.

Given that leaving an abusive relationship is not easy and may take some time for the target to plan and execute, less active coping strategies such as denial or acceptance of the abuse can serve a purpose in their own right until the woman is ready to take active steps to leave (Lazarus & Folkman, 1984). However for this study I am making the assumption that actively trying to deal with the abuse is a more desirable way of coping because that is more likely to lead to the target of the abuse to be removed from the abuse (Coffey et al., 1996). A woman who is married or is older and has children may have more of an investment in the relationship to try to make it work, but I am assuming that a college woman could have an easier time leaving the

relationship because she may not have as much invested in it, may not live with her partner, might have more social supports around her such as other students in a dormitory, and she may have more instrumental support from family to help make leaving her partner more possible. Roberts (2006) found that of the 500 intimate partner violence targets he surveyed, 96 were high school or college students who were able to leave their partners early on in the relationship, and had supports such as family members to help them do so, in comparison to the other women in his sample. Another study by Dienemann et al. (2007) found that for the 162 women who participated in their survey of readiness for staying away from their perpetrators, the factors of abuse severity, abuse frequency, economic dependence on the perpetrator, and having children under the age of 18 accounted for 10% of the variance in readiness.

Empirical studies on coping with dating violence are limited in number as well as in the range of coping behaviors that they examine. The few studies do not examine the various types of coping such as dealing with the emotions in a healthy way or talking with others about their options but rather, simply whether the women coped or not. For example, Coffey et al. (1996) examined 974 undergraduate women's coping strategies with dating violence and how they relate to

their psychological adjustment, but they only examined coping in terms of engagement versus disengagement and do not examine more specific types of coping. Coffey et al. used the Coping Strategies Inventory (CSI); a factor analysis of the CSI yielded eight primary subscales, four secondary scales and two tertiary subscales (Coffey et al., 1996). Coffey et al. chose to analyze their participants' coping styles at the broadest, tertiary, level, which provides little information on how they coped. Engagement included problem solving, cognitive-restructuring, using social support and expressing emotions. Disengagement included problem avoidance, wishful thinking, social withdrawal and self-criticism. Problem solving and cognitive restructuring are very different and expressing emotions is not necessarily active, yet all of those fall under one type of coping in their study.

There are two variables in an abuse target's environment that could be related to how she might cope: frequency and severity of the abuse (Waldrop & Resick, 2004). It stands to reason that a woman may be more inclined to take more active approaches to dealing with the abuse from a partner if the abuse is occurring more frequently. In other words she may have a greater desire to get away from her partner or get help for the abuse if he is harming her more often (e.g.

every day) than less often (e.g. once a month). However, some studies on dating violence thus far have not adequately addressed abuse frequency. Coffey et al. (1996) did not ask their study participants at the beginning of the questionnaire to fill it out with respect to one romantic relationship but rather, any physical violence they may have experienced after the age of 16. In effect, they used the CTS as a screening tool only and if the participants responded as having experienced at least one type of violence, they were asked to fill out the scale again, this time with an open ended question on the frequency of the abuse experienced. Coffey et al. then put the frequency responses into three categories of one time, two to five times, and six or more times, rather than the broader 7-point scale for frequency of the original CTS, reducing the predictive power of the frequency variable. As such the researchers did not find a relationship between frequency of abuse and coping strategies for their participants.

Bird, Stith and Schladale (1991) also examined coping of college women with a violent dating relationship. They analyzed self-esteem, negotiation styles and coping styles of 401 women to determine the factors that predicted whether or not they were in abusive relationships. Their analysis does not account for abuse frequency for

they asked participants to complete the CTS with a yes-no response format.

Though frequency of abuse could impact how an abuse target copes, the studies that adequately measure it present conflicting information on the relationship between abuse frequency and coping strategies of women (Waldrop & Resick, 2004) and thus it is a variable that still needs to be included when studying coping. For example, Goldolf and Fisher (1988b) had found that in surveying over 6,000 women in Texas that those who utilized shelter services experienced abuse more frequently than those who did not seek shelter. In contrast, Mitchell and Hodson (1983) found in their sample of 60 women that their use of avoidance coping strategies was positively related to the level of frequency of the abuse; they found no relationship with active forms of coping. However, the types of active behaviors that Mitchell and Hodson had as dependent variables in their study were actions such as talking with a friend and trying to find out more about the situation. And, the avoidance behaviors for which Mitchell and Hodson assessed were ones which could be used in parallel active strategies (e.g. "Kept my feelings to myself", "Prepared for the worst"). Thus the discrepancies between the studies could be due to differences in the way active coping was defined; it is possible that active strategies such

as leaving or shelter use may have different predictors than active strategies such as talking with a friend about the problem (Waldrop & Resick, 2004).

Similar conflicting findings exist with regard to the relationship between severity of abuse and coping strategies. Walker (1984) found in her survey of about 400 women that severity was positively related to their level of use of shelter. In contrast, Mitchell and Hodson (1983) found in their sample of 60 women who had experienced abuse from an intimate partner that higher severity of the violence was related to more avoidance coping. These equivocal findings could again be explained by the studies measuring different types of coping. Walker (1984) measured seeking shelter services whereas Mitchell and Hodson measured use of general active strategies (e.g. "taking steps to deal with the problem"). Therefore perhaps severity becomes a predictor when shelter use is of question, but not other types of active strategies. Further, the avoidance strategies that Mitchell and Hodson examined included tension reduction, which could be used in parallel with other active strategies.

These equivocal findings regarding the relationship between abuse frequency and coping, and abuse severity and coping, demonstrate the importance of clearly defining and operationalizing

coping in a research study. Both the definition and operationalization of coping have evolved over times. Some theorists have given significant attention to psychodynamic processes of coping (e.g. denial) whereas others have focused on conscious efforts (Matheny et al., 1986). Some also may define coping as all efforts in responding to a stressor whereas others define it only as healthy efforts (Matheny et al, 1986). I am interested in examining all forms of coping that a target of dating violence might use, cognitive and behavioral. Cognitions are something with which a clinician can work when helping a target and the target's cognitive efforts can have an impact on the behaviors she chooses to take. In turn, those behaviors could influence the amount of abuse she subsequently experiences. Therefore I will adopt a component of Matheny et al.'s definition of coping as "any effort conscious or unconscious, to prevent, eliminate, or weaken stressors, or to tolerate their effects in the least hurtful manner" (p.509).

Haan (1977) summarizes that what Freud called defense mechanisms were actually forms of coping though coping was not the term he used to describe them. She views Freud's intrapsychic focus as ignoring the importance of external factors on an individual's process of responding to demands. For instance she states that people "have a limited number of general ego strategies available to them: make

discriminations, detach themselves from the problem, engage in means-end reasoning and focus their attention" and "if they fail to arrive at a solution with the use of these strategies, about all they can do is delay their responses and live with uncertainty" (p.61). She acknowledges some theorists such as Mechanic (1974) and Lazarus (1966) for recognizing instrumental activities as being important dealing with stress but also that they do not include both cognitive and behavioral efforts in their overall conceptualization of coping. Accordingly, Haan is not only one of the first to stress the importance of including both cognitive and behavioral efforts in the conceptualization of coping, but she is also the first to acknowledge the challenges and inequities that society presents to certain individuals that hinder their coping, and recognizes that more passive forms of coping are at times needed. Her work is particularly relevant to dating violence; targets of intimate partner violence have dealt with stigmatization from society for a long time (Gondolf & Fisher, 1988b; Raja, 2001) and given the cycle that violence from a partner can undergo, often need to wait until a safer time to take action to get help.

Just as the definitions of coping have evolved in the literature, ideas for the process with which individuals choose coping strategies have also evolved. There are two major theoretical frameworks for the

process of choosing coping strategies: dispositional theories and transactional theories. Dispositional theories explain coping in terms of the person's natural style in dealing with stressors, whereas transactional theories posit that a person chooses a coping strategy by taking into consideration environmental factors related to the stressor at a certain moment in time. One example of a dispositional theory is that of Antonovsky (1979) who presents the construct Sense of Coherence (SOC). He describes the SOC as the tendency to view a stressor as a worthwhile experience and having the willingness to cope with it in a healthy way. An individual with a strong SOC is able to confront problems and is therefore assessed as healthy whereas a person with a weak SOC tends to avoid problems (Pallant & Lae, 2002).

Another example of a dispositional theory is Scheier and Carver's (1985) unidimensional model of optimism and pessimism. According to their theory, those who have an optimistic style tend to have positive expectations about life and those with a pessimistic style tend to have negative expectations about life (Thompson & Gaudreau, 2008). There has been some controversy in the literature about whether optimism and pessimism are on one dimension or if they are in fact two independent factors; there has been some support for a 2-

factor structure and optimism and pessimism have been shown to be related to different indicators of psychological adjustment (Thompson & Gaudreau, 2008). Thus a unidimensional model of how people respond to life stressors may be too simplistic. Rather than having an attributional style of coping, people may respond differently to different types of situations.

Folkman and Lazarus (1984) present a transactional theory of coping that takes both situational and personal determinants of coping into consideration. They define coping as all cognitive and behavioral efforts in dealing with demands and posit that because the demands and the level of the demands can be different from one situation to the next, that coping behaviors will also be different from situation to situation. They assert that these coping behaviors are dependent on how the person cognitively appraises the stressor. This view of the process of coping allows the individual more agency in dealing with the stressor because it is assumed that the individual will actively assess each stressful situation and tailor her or his behavioral efforts accordingly.

Folkman and Lazarus (1984) established two main types of coping: problem-focused coping and emotion-focused coping. Problem-focused coping involves taking direct steps to solve the problem

whereas emotion-focused coping involves taking steps to manage the negative emotions that result from the problem. The researchers assert that people may utilize both forms over time rather than picking just one or the other for a particular stressor. Folkman and Lazarus (1984) found in their study of 100 middle-aged adults coping with daily living that they generally used both forms of coping to deal with stressful situations. Another example of people utilizing both problem and emotion-focused coping concurrently is Matheson et al.'s (2007) survey of 409 university freshman females on how they coped with dating violence. Matheson et al. (2007) utilized the survey of coping profiles endorsed (SCOPE) and found that their confirmatory factor analysis actually yielded three different types of coping: a problem-focused coping component, an emotionally-avoidant coping component, and an emotionally-engaged coping component.

With this theoretical framework of emotion and problem-focused coping, Folkman and Lazarus (1984) developed the Ways of Coping Scale (WOCS); they generated items that would be considered emotion-focused (e.g. "Turned to work or substitute activity to take my mind off things.") or problem-focused (e.g. "Just concentrated on what I had to do next-the next step."). The WOCS is a commonly used measure in the literature related to coping with various types of stressors, including

intimate partner violence (Bird et al., 1991; Coffey et al., 1996). Some
other ways it has been used is to examine coping of adults with ADHD
(Young, 2005), adolescent coping with neighborhood violence
(Rasmussen et al., 2004), coping with epilepsy (Mirnics et al., 2001),
women's coping with recovery from addiction (Weaver et al., 2000) and
has long been used to examine the relationship between coping and
depression (Kolenc et al., 1990; Kuiper et al., 1989) and overall mental
health (Aldwin & Revenson, 1987). Typical score reliabilities
(Cronbach alpha values) have ranged from .60 to .75 (Rexrode et al.,
2008). The WOCS was intended by Folkman and Lazarus to be used
with the assumption that coping is a transactional process: when
administering the questionnaire, the researcher is to ask study
participants to think about a particular situation or point in time with
regard to the stressor, not the entire length of time that the stressor
was experienced.

However a main weakness of the WOCS is that it has a weak 2-
factor structure (Rexrode, 2008) even though that is how Folkman and
Lazarus intended it. In fact, subsequent research has shown that
categorizing coping strategies as either emotion-focused versus
problem-focused is over-simplified and that there are subcomponents
of both (Carver, Scheier & Weintraub, 1989). Matheny et al. (1986)

developed a taxonomy of coping behaviors through their review of the coping literature and found 12 distinct behaviors that have been examined: cognitive restructuring, problem solving, tension reduction, use of social skills, self-disclosure/catharsis, structuring (i.e. planning and assembling resources), seeking information, stress monitoring, assertive responses, avoidance/withdrawal, suppression/denial, and self-medication.

Later, Carver, Scheier and Weintraub (1989) theoretically define 14 distinct types of coping: active coping, planning, suppression of competing activities, restraint coping, seeking social support for instrumental reasons, seeking social support for emotional reasons, positive reinterpretation and growth, acceptance, turning to religion, focus on and venting of emotions, denial, behavioral disengagement, mental disengagement and alcohol use (drug disengagement). Carver et al. (1989) posit that this is a comprehensive list of various ways in which a person might deal with a stressor. The first type of coping, active coping, involves taking steps to reduce effects of the stressor, circumvent the stressor, or remove the stressor altogether. The second type they identify is planning, or thinking about how to cope with the stressor. It involves thinking about what steps to take next. The third form of coping that Carver et al. posit is suppression of competing

activities, in other words making room in one's schedule to deal with the stressor by delaying work on other activities. The fourth is restraint coping, or holding off on taking action until the time is ideal.

Utilizing two types of social support are also identified by Carver et al. (1989) as distinct forms of coping: seeking social supports for instrumental help and seeking them for emotional support. In other words one may seek a friend for help such as getting a room in which to sleep for a weekend versus support such as having a person with whom to talk about the problem. A seventh coping strategy that the researchers identify is focusing on and venting of emotions; venting of emotions can serve the purpose of releasing tension to feel better in the short-term. The eighth and ninth coping strategies identified by Carver et al. are mental disengagement and behavioral disengagement. Mental disengagement is avoiding thinking about the problem. Behavioral disengagement is avoiding any action to reduce the stressor, even so much as giving up other goals that with which the stressor is interfering. The tenth coping strategy Carver et al. identify is acceptance, meaning the person accepts the stressor and chooses to just live with it. The eleventh strategy is turning to religion, and the twelfth is using alcohol or drugs.

Carver et al. (1989) also include a two other forms of coping that they themselves did not generate theoretically but rather, they are scales that were derived empirically by Lazarus and Folkman (1984) that Carver et al. recognize as having theoretical validity. These are denial, and positive reinterpretation and growth. Denial can serve the important purpose of protection from self-harm in cases such as the death of a loved one or finding out that one has a terminal illness. However denial can be maladaptive in situations where one has control to eliminate or reduce the stressor. Positive reinterpretation and growth involves viewing the stressful situation in a positive light or acknowledging lessons-learned the person could gain from the situation.

Carver et al. developed the Coping with Problems Experienced (COPE) inventory using these theoretical constructs that they posit. The items are derived from these constructs and are worded to reflect them, giving the inventory face validity. For example, some items for active coping are "I concentrate my efforts on doing something about it", and "I do what has to be done, one step at a time." For suppression of competing activities some examples are "I put other activities aside in order to concentrate on this", "I keep myself from getting distracted by other thoughts or activities" and "I focus on dealing with this

problem, and if necessary let other things slide a little." Sample items

for seeking social support for instrumental reasons and "I asked people

who have similar experiences what they did" and "I try to get advice

from someone about what to do" and for seeking social support for

emotional reasons some examples are "I talk to someone about how I

feel" and "I get sympathy and understanding from someone."

Carver et al. (1989) tested the COPE on 978 undergraduate

students and found a very strong loading of factors on the a priori

assignments of the items to the 14 scales, with just two exceptions.

First, the active coping and planning scales loaded on one factor.

Similarly, the items reflecting seeking social supports and expression

of emotions loaded on a single factor as well. These items in effect

loaded on a single factor in theoretically meaningful ways: taking, or

planning to take, steps to solve the problem, and seeking help (both

instrumental and emotional) from others. Carver et al. also found that

the factors correlated in theoretically meaningful ways. First, active

coping and planning were associated with suppression of competing

activities, restraint coping, positive reinterpretation and growth, and

seeking social supports. Second, positive reinterpretation and growth

was correlated with acceptance. Third, denial, behavioral

disengagement, mental disengagement, focus on and venting of

emotions and alcohol use were all moderately interrelated. These correlations were all fairly weak, which have two implications. First, they show that people can use a wide variety of coping mechanisms in dealing with a stressor and second, it should be possible to study their use separately (Carver et al., 1989).

Carver et al. (1989) also found that seeking social support was associated with planning and active coping, but also with focus on and venting of emotions, and focus on and venting of emotions was linked to denial and disengagement strategies. Thus to explore these associations further, Carver et al. conducted a second-order factor analysis that resulted in four factors, each encompassing three scales. The first factor was composed of active coping, planning and suppression of competing activities. The second factor was composed of both social support scales (instrumental and emotional support) and focus on emotion. The third factor was composed of denial and both mental and behavioral disengagement and fourth factor consisted of acceptance, restraint coping and positive reinterpretation and growth. Turning to religion was the only scale that failed to load on any of these factors.

The COPE is still very prominent in the literature. For instance Greer (2007) tested the COPE for an African American sample and

found the internal consistency (Cronbach's alpha) values for the original scales to be strong, ranging from .74 to .88. The COPE has also been used recently to examine coping with stress at work (Muhonen & Torkelson, 2008) mothers' coping with suicidal adolescent children (Israelashvili et al., 2006), the role of coping in stress and sleep (Avi et al., 2004), college students' coping after the September 11th terrorist attacks (Liverant et al., 2004), and how coping relates to depression in heart transplant candidates (Burker et al., 2006).

For this study I integrated Folkman and Lazarus' (1984) transactional conceptualization of coping with the coping behaviors identified by Carver et al. (1989). I used the COPE to measure how targets of dating violence coped with violence in one dating relationship and took into consideration the personal variable of gender role beliefs, and the environmental variables of frequency and severity of the violence. I modeled solution attribution as an appraisal of the situation in determining a coping strategy.

Since the factor analysis conducted by Carver et al. (1989) yielded scales loading together in theoretically meaningful ways into four factors, these are the four factors that I used as outcome variables in my study. For the purpose of brevity, I call the first outcome variable active coping, associated with the first factor including the

Carver et al. scales of active coping, planning and suppression of competing activities. The second outcome variable I call seeking social support, as a way to briefly denote the factor that included the scales of seeking social support for emotional and instrumental reasons, and focus on emotion. Again for brevity I call the third variable denial, which encompasses the scales of denial and mental and behavioral disengagement, as they loaded onto one factor in the Carver et al. study. Finally, my fourth outcome variable I call acceptance, which is the fourth factor found by Carver et al. including their scales of acceptance, restraint coping and positive reinterpretation and growth. Since each scale has just four items, utilizing the four factors that Carver et al. derived will yield 12 items in each outcome measure, strengthening the reliability of each measure. Below I show in Figure 2 my revised hypothesized model that includes these four distinct types of coping.
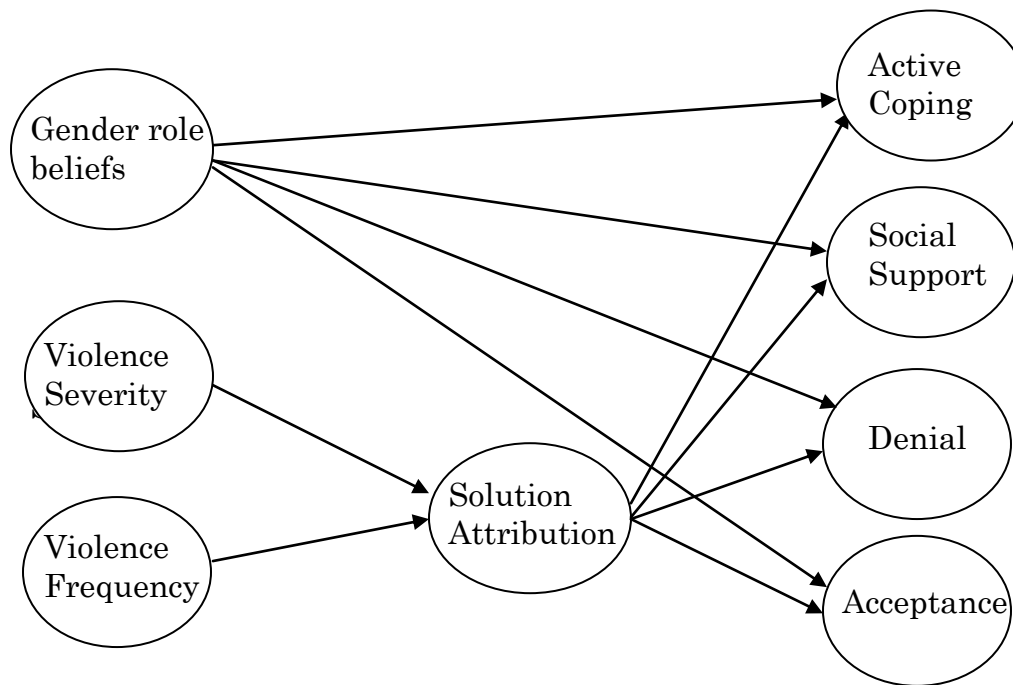
Figure 2. Revised hypothesized model of undergraduate women's coping with dating violence.

In comparison to denial, mental or behavioral disengagement, and acceptance, active coping and seeking social support have shown to be most helpful in alleviating stressful situations and for long-term mental health. Meaning, a person has a greater chance of healing from the stressor if he or she carries out activities such as taking steps to try to overcome the stressor, or seeking guidance, information or support from other people. This has been shown in coping with trauma (Bjorck & Klewicki, 1997; Schnider et al., 2007), coping with substance

abuse (Avants et al., 2000; Kohn et al., 2002; Timko et al., 2000) and

coping with depression (Cronkit et al., 1998; Krantz & Moos, 1988;

Parker et al., 1986).

The literature on intimate partner violence has yielded similar

results. Depression is a common result of intimate partner violence

and has thus far been shown to be positively related to use of denial on

part of targets (Matheson et al., 2007; Mitchell & Hodson, 1983;

Waldrop & Resick, 2004), which could lead the targets to continue to be

in the relationships in turn further subjugating them to more abuse.

Bird, Stith and Schladale (1991) found that the college women in their

study who were less likely to be in an abusive relationship were those

who coped by asking others for advice in dealing with the problem.

Thus it is important to further examine factors that could predict use

of active coping and social support. I next present the theories that

have been used in the literature to explain how women cope with

abuse from an intimate partner.

Learned Helplessness

Learned helplessness has been one of the first theories used to

explain why women stay in abusive relationships (Overholser & Moll,

1990). The theory is rooted in behaviorism, that a living being becomes

conditioned to feel helpless and depressed in the face of continual

adversity; animal experiments have shown that the research subjects began to submit to repetitive punishments or abuse (Seligman, 1972). Given that abuse from an intimate partner tends to follow a repetitive cycle, feelings of helplessness can also develop for the targets (Overholser & Moll, 1990). The repetitive abuse also can lead to self-blame; targets may begin to believe that they are at fault if their partners continue to harm them. (Gondolf & Fisher, 1988b; Overholser & Moll, 1990). According to the learned helplessness explanation of coping, from the self-blame women might try to appease their partners but as the cycle continues, they continue to sustain abuse despite their efforts, leading to more feelings of helplessness (Gondolf & Fisher, 1988b).

The way to overcome learned helplessness is for the subject to be exposed to situations in which the repetitive adversity does not exist. For instance, Seligman (1972) provides the example of dogs in an experiment that are subjected to continual electric shocks in a compartment of a box; eventually, the dogs begin to submit to the shocks. However, the dogs learned to not submit to shocks after they were forcibly pulled with long leashes to other compartments in the box in which they were not exposed to shocks.

Though Learned Helplessness is one explanation for women continuing to remain in abusive relationships, I am not incorporating the theory in this study because I am concerned with variables that have more direct implications in providing therapy to women. The Learned Helplessness theory is not useful in that it does not provide an intervention that is conducive to therapy. That is, it is not feasible to have a woman unlearn her helplessness of an abusive intimate relationship through forcibly experiencing a healthy intimate one in a therapy relationship. Thus I am concerned with her cognitions as they are related to her choices of coping. Challenging unhelpful cognitions might help the woman take appropriate action to safeguard herself from harm.

Attachment Theory

Attachment Theory is another way in which the dynamics of intimate partner violence have been explained (Gormley, 2005). According to this theory, an individual seeks to maintain a closeness with another individual who can meet basic needs, usually someone who is stronger and/or wiser (Bowlby, 1978). As Bowlby (1978) explains, this attachment behavior begins in infancy; the infant becomes attached to a parental figure, usually the mother since women tend to provide most primary care giving needs such as feeding and

bathing. Healthy attachment is developed by meeting the child's basic

needs in a timely manner and providing the child a safe base from

which she or he can explore the world (Bowlby, 1978). The child then

can return to the parents when he or she begins to feel unsafe through,

or unsure about, the explorations. This need to be attached to another

individual is characteristic of human beings and continues into

adulthood; adults do not have the same needs they did as children but

still have emotional needs, such as comfort during times of sadness

(Bowlby, 1978).

If healthy attachment is made with a parental figure early in

life, a person is able to have healthy attachments to others in

adulthood, known as secure attachment. Such a person has a more

integrated ego (Bowlby, 1978) and is therefore able to identify the

boundary between herself and others. She is more able to understand

what consequences are her faults and what consequences are the

responsibilities of others, because her caregiver was consistently

reliable and also allotted her autonomy to carry out her own choices.

On the other hand, if a person did not have a healthy attachment with

a caregiver early in life, such as the caregiver not meeting basic needs

in a consistent manner or being abusive at intermittent moments, she

may develop a fragmented ego (Bowlby, 1978). That is, she interjects

the message "I am bad" when the caregiver is neglectful or abusive and "I am good" when the caregiver is responsible and loving, holding these two conceptions of herself at the same time.

The type of attachment that develops in adulthood as a result of such introjections in childhood is called anxious attachment. With anxious attachment the person fears that the adult relationship will come to an end and is willing to violate her own boundaries to keep the relationship in-tact. Bowlby believed that the attachment style learned in childhood eventually becomes more of an attribute of the individual, and this style is the one with which she operates in her romantic relationship as an adult (Daniel, 2006).

The literature has shown some empirical evidence for a correlation between experience with domestic violence in childhood and being in an abusive relationship as an adult (Arriaga & Foshee, 2004; Marshall & Rose, 1988). A woman who learns to develop anxious attachment and finds herself in an abusive relationship may experience that relationship as very similar to her relationship with her parental figures. The cycle of violence in the relationship would then be congruent with how she views herself. The abusive times of the cycle are familiar to her and she views them as her fault, or identifies with the "bad" side of herself. The time of the cycle when her partner is

loving is when she identifies with the "good" side of herself. Her operating from such a fragmented ego that developed from early anxious attachment with caregivers can be what leads her to stay in the relationship and attribute fault for abuse to herself. As an adult she still seeks the companionship of her partner and her fear of losing her partner leads her to try to make the relationship work despite the abuse she sustains.

However, limited empirical support exists for Attachment Theory. Substantial data do not exist on whether attachment style as an infant is directly related to attachment style as an adult in relation to an intimate partner. In fact, some studies have shown that the relationship is an indirect one and that other relationships such as those with friends and peers in school are more closely linked to attachment security (Dinero et al., 2008). Dinero et al. (2008) conducted a study in which they examined and coded parent-child interactions when the children were 15 and 16 years of age, and then assessed attachment security those same children were 25 and 27 years of age. The researchers found that family interactions at age 15 significantly predicted attachment security at age 25. However, Daniel et al. state the caveat that this relationship cannot be interpreted as solely based on the child's attachment behavior (as Bowlby theorized)

since the significant correlations were between parents' behavior when the children were 15 and children's attachment style when they were 25.

Another limitation of Attachment Theory is that it allots the individual limited agency in responding to abuse from an intimate partner. It assumes that the target's responses would be from her fragmented ego, something that would take a very long time in therapy to overcome, and as such I am interested in factors useful in therapy. Second, the theory also does not account for environmental variables such as level of frequency and severity of the abuse or level of gender role beliefs. Thus both Learned Helplessness and Attachment Theory not only assume limited agency on part of the individual to cope, but also do not include environmental variables or social structures that could impact coping strategies (Chung, 2005). The domestic violence and dating violence literature has shown that targets often do in fact use various coping strategies such as social support or even shelter services (Bird, Stith & Schladale, 1991; Coffey et al., 1996; Mitchell & Hodson, 1986; Mitchell & Hodson, 1983; Walker, 1984) and lack of social support or community resources may lead them to return to those abusive relationships (Raja, 2001; Waldrop & Resick, 2004). Gender Role Theory and Attribution Theory overcome these

weaknesses by providing more useful mechanisms in therapy that could help targets cope in a way that is in within their control. I will review these theories next.

Gender Role Theory

In the field of psychology behaviors of men and women used to be considered to be effects of innate differences between the sexes, however the feminist movement in the 1960's fueled the incorporation of gender roles as explanations for behavior (Walker, 1989). Some psychologists view gender as not only sex differences but also differences created by society; confirmatory bias of gender differences occurs in social interactions such that evidence for differences is created and perpetuated (Stewart & McDermott, 2004). Erikson (1968) assumed that both the body and gender roles make up gender identity and that social structures fostered these identities (Stewart & McDermott, 2004). Mainstream media and entertainment can often be a reflection of society's values, helping to perpetuate those values. Views of romantic relationships are not exempt from this reciprocal relationship between messages in the media and societal values. Rivadeneyra and Lebo (2008) found a relationship between watching romantic television and more traditional gender role attitudes in dating situations among the 200 high school students they surveyed.

It is not merely a difference between the genders that exists but rather, inequity (Stewart & McDermott, 2004) and these inequities have existed in the working world as unequal pay (England, Allison & Wu, 2007; Fuller, 2008; Gibelman, 2003; Hamilton, Goldsmith & Darity, 2008; Joshi, Liao & Jackson, 2006), discrimination (Alksnis, Desmarais & Curtis, 2008; Avery, McKay & Wilson,2008; Estrada & Harbke, 2008; Ryu & Larkin, 2007), sexual harassment (Lonsway, Cortina & Magley, 2008; Miner-Rubino & Cortina, 2007) and less regard for women in high status positions such as academe and law (Abel & Meltzer, 2007; Cortina et al., 2002; Leavitt, 2008).

Intimate relationships are not an exception to gender inequities, nor are they an exception to how an individual's identity within them is shaped by societal expectations. Horney (1967) posited that many women find their value through intimate relationships with men as a result of perceiving rejection from their fathers. Since then, others have also argued that women's role in society became to foster intimate relationships with men (Gilligan, 1982; Miller 1976; Wood, 2001) and this dependence on intimate relationships is also an explanation for greater rates of depression among women compared to men (Nolen-Hoeksema, 1987). In other words, being in an intimate relationship is more a part of women's identities in comparison to men's and therefore

women take on more responsibility than their male partners to keep their relationships together; so "when a love relationship fails, a woman loses her self-definition" (Nolen-Hoeksema, 1987, p.272). In contrast, it is theorized that men's identities are not as affected by failed intimate relationships.

Therefore it can be reasoned that women tend work harder than men to cater to needs of the relationships and utilize more passive behavior than men, in turn giving men more control in those relationships. In the past women were considered to be their husbands' property and it was therefore not considered to be wrong for a husband to physically abuse his wife if she was not a "good" wife. In fact, the phrase "rule of thumb" has its origin in English common law: a man was actually permitted to beat his wife using an object no wider than his thumb (Carlson, 1987). And Snell et al. (1964) concluded from their study that wives who were beaten by their husbands were not desirable wives.

Over time the notion that wives are their husbands' property became less acceptable yet there still exists the idea that the male-female intimate relationship is hierarchical and that "entirely compatible with the fairy tale view of romance, the primary gender narrative casts men as domineering, superior, and aggressive and

casts women as subordinate, forgiving, loyal and accommodating"
(Wood, 2001, p.243). Further, if traditional gender roles give men more
control in romantic relationships, it is plausible that men subscribe to
those gender roles more than women. Jackson, Hodge and Ingram
(1994) found that of the 996 male and female students in college and
high school they sampled, males did hold more traditional gender role
beliefs than females with regard to appropriate behavior in dating
relationships. Examples of items used in their survey are "The man
should be in charge in a dating relationship" and "Women should have
the same sexual freedom as men." Regarding level of dominance in
romantic relationships, Sellers, Woolsey and Swann (2007) tested
undergraduate reactions to two different video scenarios: one in which
the woman in the relationship was more passive about verbalizing
conflict, and one in which the man was more passive in verbalizing
conflict. They found that their study participants viewed the couple
with the man as more passive than the woman as the less likeable
couple. Thus, it is plausible that a woman who holds traditional gender
role beliefs will act more passively than a woman who does not. This
could lead the woman with more traditional gender role beliefs to react
to abuse in a romantic relationship more passively, with more denial
and acceptance of her situation.

Wood (2001), through her qualitative study of women who had been abused by intimate partners, provides explanations for women tolerating abuse that are rooted in the traditional gender role conceptions of romantic relationships. She asserts that people try to make sense of their lives and justify their coping decisions through narratives, particularly with experiences that are difficult to comprehend. This is particularly relevant to the traumatic stressor of intimate partner violence; abuse by a dating partner does not make sense to the woman because the abuse is being inflicted by someone whom the target expects to love her and there are in fact times when the partner displays loving behaviors. Wood (2001) posits that such conflicting experiences of the relationship are reasoned by the target through distinct narratives that girls in our society are taught about romance.

Wood (2001) found that all the 20 women she interviewed described the beginning of their relationships with fairy tale narratives. Meaning, "their partners had courted them with gifts and made them feel special" (p.249). Women described the actions of their partners specifically as "he swept me off my feet", "he gave me flowers with a sweet note" and "he was Prince Charming" (p.249). As the abuse from their partners started, women started to, as Wood said, bolster

the fairy tale romance by thinking in at least one of four ways: 1) that the abuse was not as bad as it could have been, 2) that the good behaviors of the partners outweighed the bad, 3) she was able to stop the abuse or 4) it was not the "real him." Majority of the women also used the "dark romance" narrative to explain the abuse, stating that they deserved the abuse or they did not have any other options for a relationship.

These studies conducted thus far suggest that a relationship between responding to intimate partner violence and level of traditional gender role beliefs is plausible. A woman who subscribes to traditional gender roles may highly value being in a relationship because it is her role as a woman. This could then lead her to accept the relationship as it is, avoid the problem of abuse, not seek help with the abuse, or take steps to appease her partner. As such there is some evidence that higher masculine traits are associated with more problem-focused coping (Long, 1989), suggesting that higher feminine traits could be related to problem avoidance.

Despite such expectations and pressure to perform according to gender roles, Sanchez and Crocker (2005) posit that girls' attempts to perform accordingly had negative impacts on their self-esteem and that such a negative impact is not experienced by boys who try to

conform to societal expectations of them. In their study of 794 male and female college freshmen, Sanchez and Crocker found that subscription to gender stereotypes predicted lower self-esteem and disordered eating. Therefore it is important to study the relationship between gender role beliefs and coping with dating violence and that has not yet been empirically tested. The advantage of examining the relationship between these two variables is that it could provide information and support for prevention and intervention efforts on college campuses; for example there could be the opportunity to inform undergraduate women on healthy versus unhealthy relationships, how to identify if behaviors could escalate into abuse (e.g. use of control tactics or male privilege on part of partners), and safe ways in which to respond. Below I show the again my conceptual model and highlight these relationships between gender role beliefs and coping; I expect traditional gender role beliefs to be negatively related to use of active coping and social supports, and positively related to denial and acceptance.
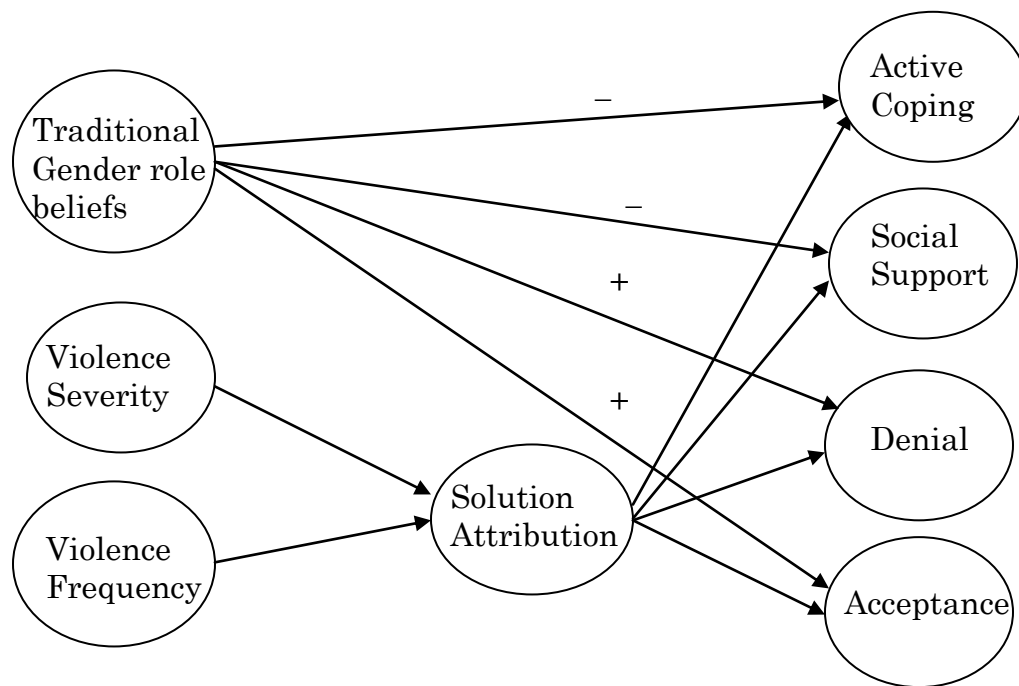
Before the relationship between gender role ideas and coping with dating violence can be examined, gender role beliefs need to be measured in a valid and reliable manner. There are some validity and reliability concerns with the measures used by Sanchez and Crocker (2005) and Long (1989). Sanchez and Crocker (2005) measured the level of gender ideals with a 2-item measure, asking the participants to rate on Likert-type scale "How important is it for you to be similar to the ideal woman?" and "To what extent is being similar to the idea woman an important part of who you are?" This is not a reliable measure given that it has just two items and further, the questions

about gender ideals are broad and do not measure them with specific

expectations of women.

Long (1989) utilized the Bem Sex Role Inventory (BSRI) to

measure gender traits and how those traits relate to coping styles.

However, not only does the BSRI not measure beliefs regarding gender

roles (the variable in which I am interested) but it is also not an

accurate measure of what it purports to measure: masculinity and

femininity. The BSRI items were developed by generating 200

personality traits and asking individuals to categorize those as either

being masculine or feminine. The inventory has participants respond

with a Likert-type scale to items such as "I'm willing to take risks" "I'm

willing to take a stand" and "I consider others' feelings when making

decisions" so in effect, the inventory is really measuring personality

characteristics (Choi & Fuqua, 2003). However because women tend to

score more highly on the more "feminine" items (e.g. I consider others'

feelings when making decisions) and men on the more "masculine"

items (e.g. I'm willing to take a stand), the BSRI has been used to

measure sex roles without attention to its weakness with validity. Choi

and Fuqua (2003) found in their review of 34 studies that used the

BSRI that in 23 of the studies, half of the feminine items did not load

on that factor, evidence that operationalization of the feminine

construct was not adequate in development. Additionally, Choi and

Fuqua found in their review that the masculinity factor was in fact

found to be multiple factors.

Therefore while the construct of gender role belief appears

straight forward, it has proven difficult to measure. Two additional,

most common, measures of it are the Attitudes Toward Women Scale

(ATWS) and the Sex Role Ideology Scale (SRIS). Spence and Helmreich

(1972) developed the ATWS to measure attitudes regarding the rights

and roles of women in six areas of society: vocational, freedom and

independence rights, dating and etiquette behaviors, acceptability of

swearing and drinking, premarital sex and marital relationships and

obligations (Loo & Thorpe, 2005). There are a total of 55 items that are

scored on a scale from 0 to 3 and higher scores reflect more liberal

attitudes toward women. The ATWS has been widely used in the

literature; in addition to it being used in intimate partner violence

studies, it has been used in examining women's body image (Forbes et

al., 2007), beliefs about rape and sexism (Aosved & Long, 2006; White

& Kurpius, 2002), relationship between beliefs in traditional gender

roles and critical thinking skills (Loo & Thorpe, 2005), perceptions of

sexual harassment (Terrance, Logan & Peters, 2004), sexist attitudes

(Hong, 2004) and the relationship between gender attitudes and

attitudes toward lesbians and gays (Whitley & Egisdottir, 2000). The internal consistency estimates (coefficient alpha values) have ranged from .57 to 93.

To my knowledge, no factor analysis on the structure of the ATWS is available. In development of the scale Spence and Helmreich (1972) used the criterion groups of college students and those students' parents. A number of the items in the ATWS are outdated; examples are "It is an insult to a woman to have to promise to 'love, honor and obey' her husband in the marriage ceremony when he only promises to 'love and honor' her", and "Girls nowadays should be allowed the same freedom as boys, such as being allowed to stay up late."

The development of the SRIS was based on the criterion groups of feminist and traditional groups of people; Kalin and Tilby (1978) included as participants in their scale development individuals from various women's liberation organizations and for those representing traditional ideology, people who belonged to groups who stressed traditional values of home and family, membership of traditional churches, and those who were old. The SRIS measures beliefs along the traditional-feminist continuum (Cota & Xinaris, 1993) and they adapted and updated the items from the ATWS. It is a 30-item measure with each item rated on a 7-point scale and higher scores

reflect a feminist orientation whereas lower scores reflect a traditional orientation. Sample items are "A woman should have exactly the same freedom of action as a man," "Marriage should not interfere with a woman's career anymore than it does with a man's," and "The first duty of a woman with young children is to home and family." The SRIS however has some items that are outdated as well, such as "A man should be wary of a woman who initiates courtship" and "A woman should be careful of the way she looks so that others don't think a certain way about her husband."

The SRIS is widely used in the literature to test the relationship between female response to sexual coercion and gender role beliefs (Faulker, Kolts & Hicks, 2008), the relation between psychological well-being of mothers and their gender role beliefs (Kim, 1997), the relation between gender role beliefs, sexual experience and judgments of relationship desirability (O'Sullivan, 1995), relationship between gender ideology and self-esteem (Yoo, 1994), counselors' attitudes toward incest (Adams & Betz, 1993), and relationship between subscription to traditional gender roles and eating disorder behaviors (Brown, Cross & Nelson, 1990; Johnson, Brems & Fisher, 1996; Srikameshwaran, Leichner & Harper, 1984). The internal consistency values (Cronbach's alpha) have ranged from .65 to .90. The factor

structure of the SRIS has been under some scrutiny; it was proposed to be a unidimensional scale but Milo et al. (1983) found a 2-factor solution encompassing scales of family/domestic relationships and the other being women's political rights.

Yet another measure of gender role beliefs is the Gender Role Beliefs Scale (GRBS) created by Kerr and Holden (1996). They used a criterion group check and measures of item quality to obtain the final scale. Their criterion groups were feminist, undifferentiated (those whose position on feminism was unknown) and traditional. Kerr and Holden recruited their participants from feminist organizations or those taking feminist university courses, and organizations that they considered to have traditional ideologies. The researchers created their initial pool of 150 items by borrowing items from previously-established scales such as the ATWS and SRIS. However, they excluded items for reasons such as 1) having outdated wording ("A married woman should feel free to have men as friends."), 2) no longer being meaningful ("For the good of the family a wife should have sexual relationships with her husband whether she wants to or not.") and 3) they reflected gender stereotypes rather than prescriptive beliefs about gender ("Men make better leaders.").

Kerr and Holden had in their study 102 women and 16 men in the undifferentiated group. There were 40 women in the feminist group and no men, from volunteers at a university-based birth control center, volunteers at a community sexual assault center, staff of a women's shelter, students taking women's studies courses and graduate students in English taking a course in feminist literature. There were 35 participants in the traditional group who were female volunteers at a local hospital. In order to conduct a criterion group check, Kerr and Holden developed two vignettes, one describing a traditional woman and one describing a feminist woman. Participants then responded to statements describing their reactions to the women in the vignettes. Their one-way analysis of variance of the scores on these statements yielded significant differences between their three criterion groups, as did their one-way ANOVA of the total scores of the 150 items. The undifferentiated group scored significantly higher on the GRBS than the traditional group, and the feminist group scored significantly higher than the undifferentiated group.

Kerr and Holden used three measures of item quality – item-total scale correlation, item-criterion correlation, and item-criterion group discrimination – to develop a composite measure of item quality. They calculated the composite measure for each item by standardizing

and summing the values of the three measures of item quality for the item. Finally, they selected 20 items for the final scale that had the highest composite scores. All items are answered on a 7-point scale where 1=*strongly agree*, 4=*undecided* and 7=*strongly disagree,* and total scores can range from 20 to 140. Higher scores indicate a feminist orientation. Examples of items in the final scale are "Women should not expect men to offer them seats on buses," "Homosexual relationships should be as socially acceptable as heterosexual relationships," "It bothers me more to see a woman who is pushy than a man who is pushy" and "Women with children should not work outside the home if they don't have to financially."

For the final GRBS, Kerr and Holden found the coefficient alpha of the scale to be a high value of .89. To establish validity of the final scale, they conducted a one-way ANOVA of the final GRBS scores and found a significant difference between their three criterion groups. Kerr and Holden conducted a second study to further evaluate the validity and reliability of the GRBS. Forty-eight women and nine men enrolled in undergraduate psychology classes volunteered to participate in the study. The participants completed the scale on two occasions, with the interval between the test times being four weeks. Kerr and Holden found the test-retest reliability to be .86, and the

alpha reliability coefficient to be .83 for the first testing and .87 for the second testing. Finally, with both test times, women scored significantly higher than men.

Given that the GRBS has shown to have strong validity based on their criterion groups, and test-retest reliability and internal consistency, in addition to having been updated with regard to wording, this is the scale I used to measure gender role ideology of my study participants. I also reworded the items such that "lady" is replaced with "woman" and "gentleman" is replaced with "man", so that the items are even more relevant to today. I did not expect the GRBS to have high internal consistency for my sample given that like the AWS and SRIS, it is measuring gender role attitudes on various domains (career, daily convention, romantic relationships, etc.). However, I was interested in the average of participants' attitudes regarding traditional gender roles in general.

I have discussed Gender Role Theory and how subscribing to traditional gender role beliefs could relate to coping with dating violence. This is one relationship that I will seek to test. I will next discuss Attribution Theory and how it could explain coping with intimate partner violence.

Attribution Theory

  Attributions are our continual judging of our surroundings to determine if the cause for a situation is within or outside ourselves. These judgments occur spontaneously and subconsciously as a way to better understand and have control over our environments (Harvey & Weary, 1984). Kelley and Michela (1980) propose a model of the overall attribution process; according to their model our personal determinants (beliefs, information, motivation) influence how we attribute the causes of a situation, and those causal attributions impact our responses. According to the Kelley and Michela model, there are different attributional theories that exist within this model to explain relationships between variables, as shown in Figure 3.
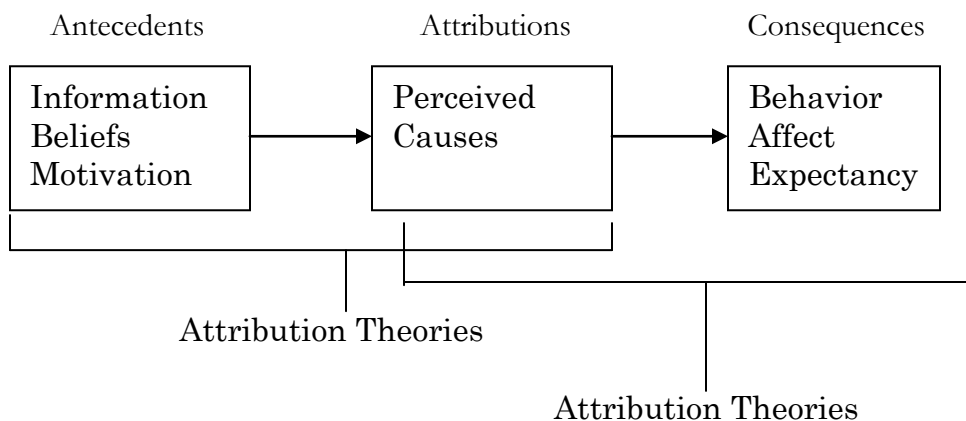
Figure 3. Model of the attribution field from Kelley and Michela (1980).

In other words, some theories explain how the antecedents are related to attributions and different theories that explain how the attributions impact response. It is important to note that the attributional process is not linear; as we experience a situation and make attributions related to it, our experiences of it will impact our attributions of, and response to, a similar situation in the future. For instance, if I have a negative encounter with an individual because he says something to hurt my feelings, I might attribute his behavior to his rudeness. This attribution then shapes my attributions of his behavior in the future; I store away in my memory his rudeness and this can impact my attributions toward, and response to, him in a future situation rather than starting from no information at all in that future situation. Nevertheless, the above model provides a starting point with which to examine factors that impact attributions and how those attributions can impact behavior.

One key situational characteristic that Kelley (1972) theorized as important is the extremity of a situation; the more extreme an effect is, the more likely the person is to attribute the effect to multiple causes rather than just one (Harvey & Weary, 1984). In a same manner, Taylor and Thompson (1982) posit that the more prominent a situational factor is, the more directly it gets encoded at the

information processing stage, hence it is then easier to recall and gets taken into consideration when making similar subsequent attributions (Harvey & Weary, 1984). In addition, Ferguson and Wells (1980) found that attributions are related to the person's access to information. Meaning, the person's attributions will change depending on the information on the situation that is available to him or her (Harvey & Weary, 1984).

One attribution model that integrates different sources of information is that by Abramson, Seligman and Teasdale (1978), which explains attributions on three different dimensions: internal versus external causes, stable versus unstable causes, and global versus specific situations. Along the first dimension, locus of causality, a person may view him or herself as being the cause of a situation or problem (internal cause) or that the cause of the problem lies outside of themselves (external). In general, people make situational attributions for their behavior and dispositional attributions for others' behavior (Overholser & Moll, 1990). Meaning, if we act in a way that is generally held in low regard, we attach that behavior to the situation at-hand and reason that the situation brought out that aspect of us rather than it being an inherent quality. However, if we recognize a similar flaw in another, we attribute that flaw as being internal, or

inherent, to that person. In situations where the outcome is positive, people tend to give credit to themselves (internal) and blame external factors when the outcome is negative (Overholser & Moll, 1990). For example, students who do well on an exam may attribute that success to studying hard or being good at the subject and if they do poorly on the exam, they may attribute that failure to a poorly written exam (external, environmental).

These attribution theories are limited in that they only provide explanations for how people might attribute causes of problems. They do not explain how people attribute responsibility for fixing problems, which would be more closely related to how people choose to cope with the problems. Holtzworth-Munroe (1988) called for an examination of other dimensions other than just causality when examining coping with intimate partner violence, particularly attribution of responsibility, which can overcome the lack of agency in dealing with challenges. As such the attributional model proposed by Brickman et al. (1984) divides the attributional process into two dimensions: assigning responsibility for the cause of the problem, and assigning responsibility for the solution of the problem. The first involves identifying a subject or subjects whose actions led to the situation and the latter involves identifying the subject or subjects who must take

action to remedy the situation. Cause responsibility and solution

responsibility are orthogonal, or independent of each other, according

to this model (Stepleman et al., 2005). Figure 4 below shows the

Brickman et al. model of attribution.
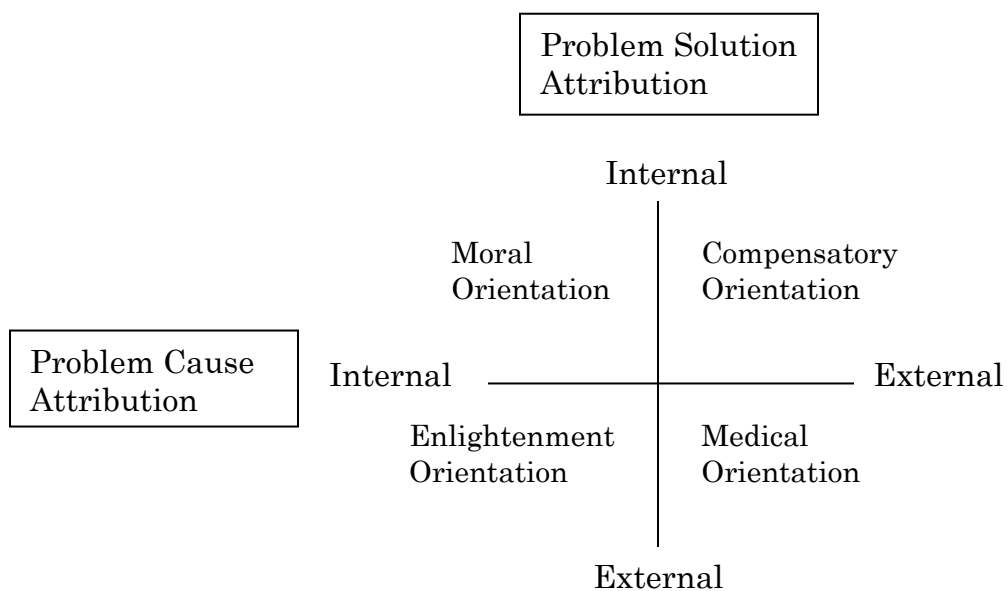
*Figure 4.* Brickman et al.'s (1982) attributional structure.

The two dimensional structure of this model yields four

attribution orientations: moral, compensatory, enlightenment and

medical. With a moral attribution orientation, the person considers the

cause of the problem to be internal (themselves) and the responsibility

for the solution of the problem to also be themselves. With the

enlightenment orientation, the person considers the cause of the problem to be themselves, but they believe that the responsibility to solve the problem is outside themselves. Alcoholics Anonymous is well-known for adopting this orientation. With the compensatory model, the individual believes that the cause of a problem is outside themselves, but that the solution for the problem is their responsibility. Finally, the medical orientation posits that the target is not responsible for the problem or the solution to the problem.

The importance of attributions for solutions of problems being included in an attributional model lies in its implication for responsibility for action. With various stressors there can be various causes, and though many of those causes may lie outside of the individual facing the stressor, it is often up to him or her to take steps to alleviate the stressor. This can especially be the case with dating violence; the target is the victim of abuse from the perpetrator so the perpetrator is responsible for causing the stressor to the target, yet given that perpetrators rarely seek help in changing their behavior the target often has to take direct action to avoid further abuse. Given that I am interested in examining coping with the abuse, I examined the solution attributions of my participants only, and how they related to their coping.

Under their framework of survivor theory, Gondolf and Fisher (1988a) summarize that with regard to causal attribution, the targets in their research were more likely to blame themselves after the first abusive incident and thus change their behavior to appease their partners to try and prevent more abuse. However they observed that as the relationship continued and the cycle of violence repeated, the targets started to see that the cause for the abuse can be attributed to their partners. And in the studies reviewed by Holtzworth-Munroe (1988) researchers found that the majority of the women did not blame themselves for their husbands' violence but rather for their lack of assertiveness in dealing with the violence, taking on a compensatory attribution orientation. These findings suggest that the targets saw the cause of the abuse being their partners but that the responsibility for coping with the abuse they assigned to themselves. I therefore expect that an external solution attribution (i.e. holding others responsible for solving the problem) will be negatively related to use of active coping and social supports and positively related to denial and acceptance. Here I show the figure of my conceptual model to highlight this relationship I am expecting.
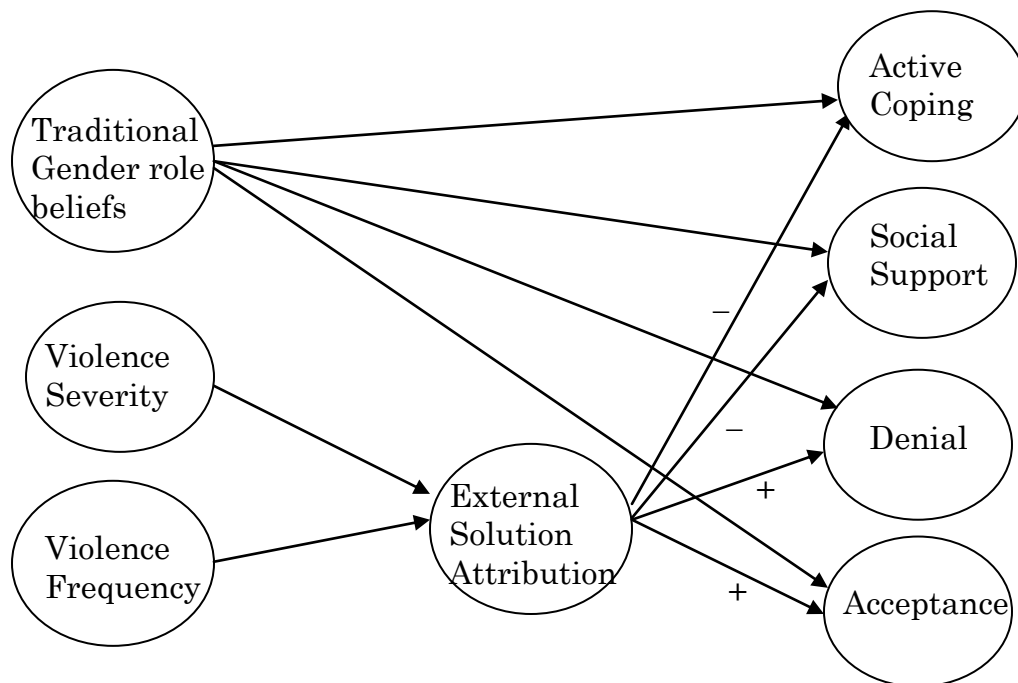
Using the Folkman and Lazarus (1984) transactional theory of coping, I also expect that frequency and severity of the abuse to be negatively related to external solution attribution, which in turn can have an effect on coping. In other words, the target of the abuse will appraise her situation based on the environmental variables of abuse frequency and severity to determine her level of responsibility for dealing with the abuse. It is plausible that the greater the frequency with which a woman has to endure physical abuse, the more she feels she needs to take it upon herself to save herself from sustaining further abuse. I particularly expect this since some research has shown

that women have blamed themselves for their lack of assertiveness in responding to abuse (Hultzworth-Munroe, 1988). Similarly with severity, the more severe the abuse done to her is, she might feel a greater personal responsibility to save herself from further abuse. I highlight the portion of my model that includes these relationships below:
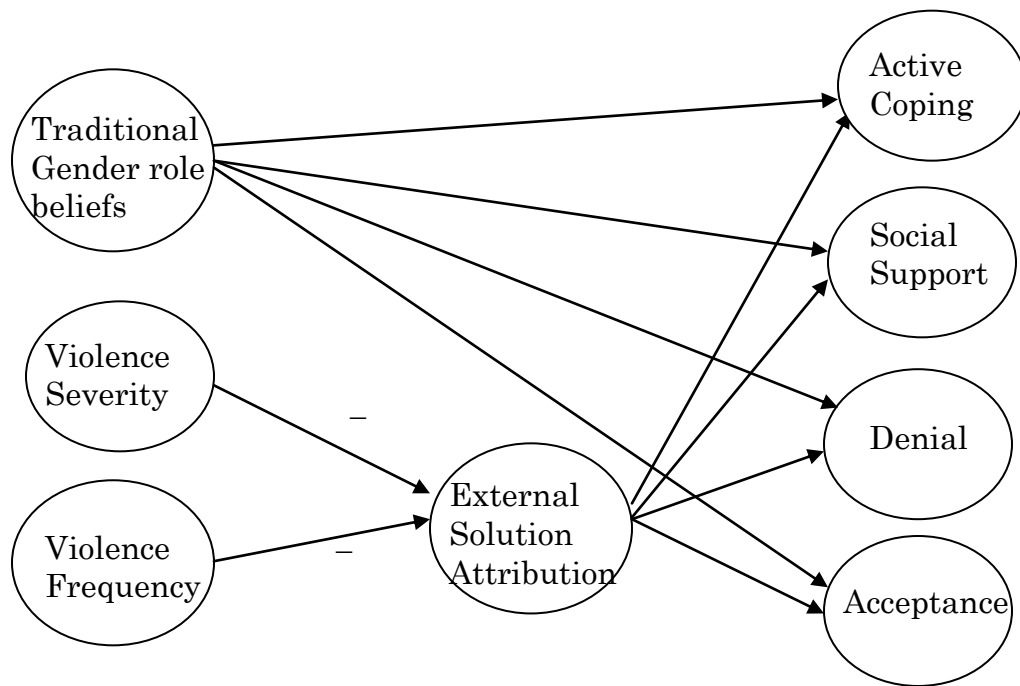
With regard to measurement of attributions, the literature has mostly measured causal attributions, not solution attributions (Bower et al., 2000; Cutrona, 1983; Hill & Larson, 1992; Howard, 1987). However Stepleman et al. (2005) sought to measure both causal and solution attributions and found support for Brickman's theory that

both are two separate entities. They developed the Attribution of

Problem Cause and Solution Scale (APCSS) based on Brickman et al.'s

(1982) theory. They initially generated items based on Brickman et

al.'s definitions, and then revised their list of items after finding from

the preliminary factor and item analysis that some of the items did not

relate as they desired. This resulted in a total of 55 items and found

convergent validity for their scale for it correlated strongly with

another causal scale (Causal Dimensional Scale II), and the APCSS

responsibility for problem cause scale correlated with the APCSS

responsibility for problem solution scale. Sample items for problem

cause include "Other people are responsible for the cause" and "It is

not my fault" and sample items for problem solution are "Solving this

problem is my responsibility" and "Others are responsible for changing

the situation." Given that I am interested in solution attributions, I

utilized the solution scale of the APCSS.

In sum, the literature has provided little empirical information

on coping strategies of targets of dating violence, along with little

information on how frequency and severity of abuse, targets' gender

role beliefs, and targets' attributions for the solution of the abuse

predict those forms of coping. Many targets may not even be at the

stage of viewing their relationship as being threatening enough to end

it, but could just seek counseling to cope with the distress experienced (Rosen & Stith, 1993). They may also view the abuse as their fault or that it is something they have to endure in a romantic relationship. The role of the clinician would then be to work with the client on a target's thoughts about, and attributions for, the abuse such that she can become more ready to take more active steps. Therefore I posit that traditional gender role beliefs and attributions for the violence could not only predict the ways in which the woman copes, but can also provide useful mechanisms in therapy.

To be parsimonious and consistent with the dating violence literature, for this study I define dating violence as acts of physical violence, not including sexual violence (Cornelius & Resseguie, 2007; Lichter & McCloskey, 2004). Though men can certainly be targets of intimate partner violence, I focused my study on female targets in heterosexual relationships given that women tend to seek help for the abuse more than men (Graham-Kevan & Archer, 2005; Koopmans & Lamers, 2006; Mitchell, 1987), and that the literature has focused on heterosexual relationships. Thus I surveyed female undergraduates on their experience during the course of one dating relationship and how much they used the four types of coping strategies. The first type that I call active coping encompasses active efforts, planning and suppression

of competing activities. The second type that I call social support includes use of social support for emotional and instrumental support, as well as expressing of emotions. The third type of coping that I call denial encompasses denial as well as mental and behavioral disengagement. And the last type that I call acceptance includes acceptance, restraint coping, and positive reinterpretation and growth.

I surveyed Arizona State University students enrolled in on-line undergraduate sociology 101, 252, 321, 348, 351, 352, 391 and 493 courses, with the permission of the instructor who oversees all those courses. A total of 1,112 students took my survey. This includes 905 women of which 324 (35.8 percent) reported being on the receiving end of some form of physical abuse throughout the course of one dating relationship. To obtain my sample statistics and frequencies of measured variables I utilized the software PASW Statistics 18. Figure 5 shows my hypothesized model with my expected relationships designated on the paths. One change I have made on this figure compared to past figures is that I have replaced "traditional gender roles" with "feminist orientation" since higher scores on the GRBS reflect a more feminist orientation. This makes it easier to see the relationship between gender role beliefs and the coping strategies that I hypothesized.
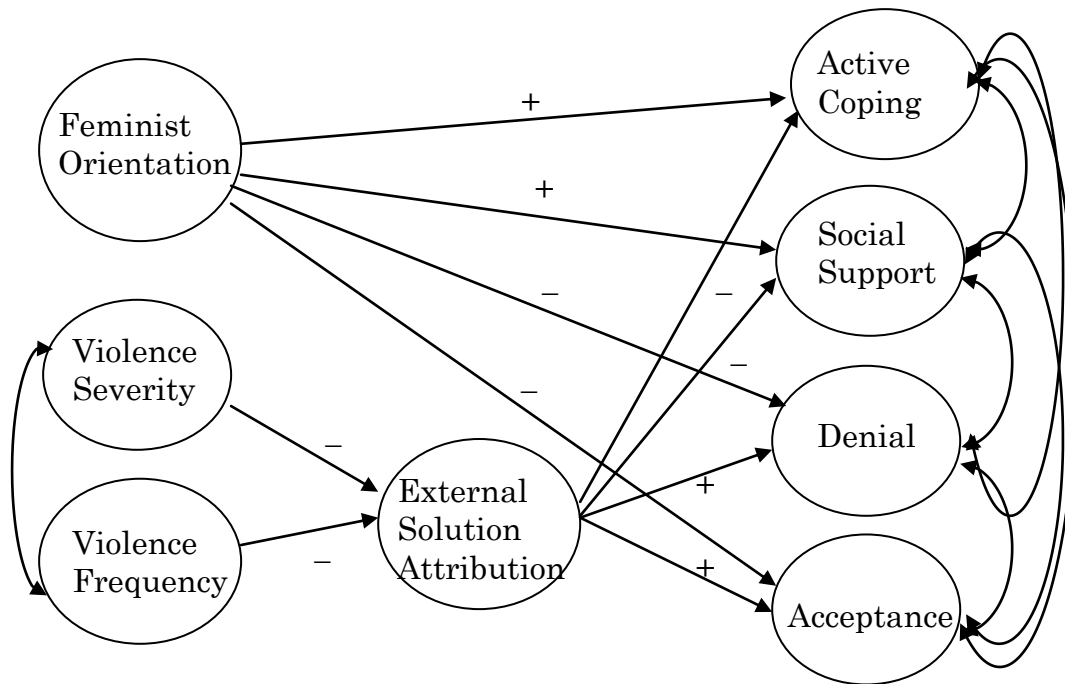
Figure 5. Hypothesized relationships between variables related to coping with dating violence.

I am specifically interested in how gender role beliefs are related to coping strategies. I expect that a higher feminist orientation is related to a higher use of active coping and seeking social support, and decreased use of denial and acceptance. The literature provides some evidence for the traditional view of relationships to be that of the woman being more passive and the man more dominant. Sellers, Woolsey and Swann (2007) found that the undergraduates in their viewed the couple in which the man was more passive as the less likeable couple. Long (1989) also found that masculine traits are more

associated with problem-focused coping, therefore I expected that a woman holding a more traditional view of gender roles would have a more passive style of coping, in effect using more denial and acceptance coping rather than active coping or seeking out social supports.

I am also interested in how the frequency and severity of violence are related to how women attribute responsibility for solving the problem of abuse in their relationships. Holtzworth-Munroe (1988) found that though women did not blame themselves for their husbands' abusive behaviors, they blamed themselves for their lack of assertiveness in responding to the behaviors (solution attribution). Therefore I hypothesize that increased severity and frequency of violence experienced will lead to a decreased external attribution for dealing with the abuse. That is, I expected women to feel that the onus in more on themselves than on anyone else if they want to avoid more abuse. In turn, I also expected that a decrease in external solution attribution (putting responsibility onto others for dealing with the abuse) will lead to an increase in use of active coping and social support, and decrease in denial and acceptance.

In addition, I hypothesized that frequency and severity are positively correlated. Wood (2001) found in her qualitative study that

women reported that their partners displayed loving and romantic behaviors when the relationships first began but that the abusive behaviors began as the relationships progressed. Thus it is plausible that the frequency of the abuse increases over the course of the dating relationship. It is also plausible that the severity of the abuse increases over time. There is evidence that dating violence is an issue of wanting to control a partner (Graham-Kevan & Archer, 2008; Prospero, 2008; Simmons, Lehmann and Collier-Tenison) and as time goes on and the woman tries to retaliate against the abuse, the abuse could increase as the perpetrators attempts to gain more control. Fifty percent of the domestic violence-related murders in Arizona occurred when the woman was in the process of leaving the relationship (AZCADV, 2002).

Lastly, I hypothesized that the four types of coping to be positively correlated as well. Like Folkman and Lazarus (1984) I expected that those in my sample will utilize all forms of coping concurrently. This has been shown in studies of middle-aged adults (Folkman & Lazarus, 1984) and undergraduate students as well (Matheson et al., 2007). I will next describe my method beginning with a description of my sample followed by the measures I used, procedure for recruiting participants and survey administration, description of missing data, and strategy for analysis.

Chapter 3

Method

Sample

Of the 324 women who reported experiencing some physical

abuse from a partner, the average age was 24 with a standard

deviation of 6.9. Six did not report their age. Twelve (four percent) of

the women were freshman, 62 (19 percent) were sophomores, 103 (32

percent) were juniors, 145 (45 percent) were seniors, and two were

graduate students. Sixty percent of the sample (193 women) was

single, 34 percent (111 individuals) were married or partnered, and 5

percent were divorced. One individual identified as single and divorced

and another identified as both divorced and married or partnered. One

person did not identify her relationship status.

Ten percent of the women (31 individuals) reported having one

child, five percent (16 individuals) reported having two children,

approximately three percent (8 individuals) reported having three

children, approximately two percent (6 individuals) reported having

four children, approximately one percent (individuals) reported having

five children and approximately another one percent (3 individuals)

reported having six children. Seventy-eight percent of the students

(255 women) reported having no children. With regard to sexual orientation, 93% of the women (300 individuals) reported as being heterosexual, four percent (12 individuals) as homosexual and another four percent (12 individuals) as bisexual.

Of my sample of 324 female students who reported being on the receiving end of some abuse in a dating relationship, 64 percent (208 students) identified their ethnicity as being white American, 14 percent (45 students) as Hispanic/Mexican American, eight percent (25 individuals) as multi-ethnic, six percent (18 students) as Black/African American, five percent (15 women) as Asian American, two percent (5 women) as non-American, approximately two percent (six individuals) identified their ethnicity as "other," one-half percent (one person) identified her ethnicity as Arab American and another one person identified her ethnicity as being Native American.

I also surveyed the participants on how many years they have lived in the US, since amount of exposure to the American culture could influence relationship attitudes and coping behaviors. The number of years that a person has lived in the US needs to be standardized. Meaning, the measure cannot just be in years since the experiences and worldview would be very different for a person who, for example, who has lived in the US for 30 years but is 60 years-old

compared to someone who's lived in the US for 30 years and is only 32 years-old. As a way to standardize the measure of integration into the American culture, I generated an *immigrant ratio* for each participant by dividing the total number of years in the US by the age. In effect this is a percent of the person's lifetime spent in the US. Approximately three percent of the participants (35 individuals) did not answer my question "How many years have you lived in the US?" The average immigrant ratio for this group of 324 women was .96 with a standard deviation of .14, a minimum of .01 and maximum of one.

Procedure

    Measures

        There are a total of eight variables that I examined. The exogenous, or independent, variables were frequency of physical abuse, severity of physical abuse and level of subscription to traditional gender role beliefs. My endogenous, or dependent, variables were solution attribution for the abuse and the four types of coping. The four different types of coping that I measured were active coping, seeking social support, denial and acceptance.

<u>Frequency of Abuse</u>

To measure abuse frequency I used the physical abuse scale of

the Conflict Tactics Scale (CTS) developed by Straus (1979). Straus

(1979) found the measure to have construct and factor validity, and the

reliability (internal consistency as measured by Cronbach's alpha) to

be .83, demonstrating strong reliability in their sample. Participants

responded to 10 items on the CTS physical abuse scale by indicating on

a 7-point Likert-type scale ranging from 0 to 6 (*Never to More than

once a month*) how much their partners did each of those behaviors.

The item responses are summed for a maximum possible score of 60.

The higher the score, the higher the frequency of the physical abuse. I

show the CTS physical abuse scale items in Table 1.

Table 1

Conflict Tactics Scale-Physical Abuse Subscale Items

Scale	Items
Physical Abuse	How often did your partner threaten to hit or throw something at you?
	How often did your partner throw, smash, hit or kick something?

How often did your partner throw
something at you?

How often did your partner push, grab
or shove you?

How often did your partner slap you?

How often did your partner kick you,
bite you or hit you with a fist?

How often did your partner hit you?

How often did your partner beat you
up?

How often did your partner threaten
you with a knife or gun?

How often did your partner use a
knife, gun or other weapon
against you?

The mean value of CTS frequency for my sample of 905 female

college students was 3.3, with a standard deviation of 7.5. The

minimum value was zero, indicating that those participants did not

report any violence experienced in their dating relationship. The

maximum CTS value was 57 for this sample. Four percent of the

participants in my sample (48 individuals) did not respond to the CTS

questions at all. That is, they dropped out of the survey before

answering them.

Severity of Abuse

I adopted the method of Coffey et al. (1996) and Bird et al.

(1991) for measuring abuse severity. I placed participant responses

into one of three severity levels: 1) slapped (item 5), 2) kicked, bit, hit

with a fist or something (items 1-4 and 6-7) and 3) beat up, choked,

threatened with a gun or knife, or had a gun or knife used against

them (items 8-10). That is, if a participant reported any of the abusive

behaviors in the third category, then I assigned it a severity score of 3.

If the response fell in the second category but not in the third category,

I assigned it a severity score of 2. Lastly, if the respondent reported

abusive behaviors that fell only in the first category, I assigned it a

severity score of 1. The mean severity score for my sample of 324

females was .78 and the standard deviation was 1.1. The minimum

score was zero and the maximum score was 3.

<u>Attributions</u>

To measure participants' attributions of solution responsibility

for the abuse, I used the solution attribution scale of the APCSS. The

internal consistency for the APCSS was high in the sample in the

study done by Stepleman, Darcy and Tracey (2005). They generated an

initial set of 47 items that encompassed the two scales of problem

cause attribution and problem solution attribution, and after a

preliminary factor analysis, found that some items did not load in a

desired manner. This led the researchers to rework the items in a way

that yielded a new group of 55 items. They established content validity

of these items by having one faculty member and one graduate student

sort the items into the categories of cause and solution and found the inter-rater reliability to be .98. After conducting a factor analysis with their sample of 202 students, a total of 44 items resulted. The researchers also found that the internal consistency of the APCSS was high for their sample, with Cronbach's alpha of .95 for the cause scale and .92 for the solution scale.

The subscale for responsibility for problem solution consists of 20 items, four that measure internal attribution for solution responsibility and 16 that measure external attribution for solution responsibility. Participants rated these items on a 7-point Likert-type scale (1 = *very strongly disagree* and 7= *very strongly agree*). Table 2 shows the APCSS solution attribution items. Since I measured participants' experiences with dating violence in the past, I reworded the items as such.

Table 2

Attribution of Problem Cause and Solution Scale Items

Scale	Items
Internal solution items	Solving this problem was my responsibility.

	I should have used my own capabilities.
	I had the inner strength to solve this problem.
	Solving this problem was more my responsibility.
External solution items	Solving the problem was someone else's responsibility.
	Others were better able to solve my problem than I.
	I needed other people's help to solve this problem.
	Other people should've done more to solve this problem.
	Others needed to be more assertive to solve this problem.
	Other people needed to change for resolution.
	Others were responsible for changing the situation.
	I felt dependent on others to solve this problem.
	I did not feel I could solve this problem without others.
	Other people's assistance was necessary.
	The situation prohibited me from solving this problem.
	I held others accountable for modifying this problem.
	Others should have worked to rectify this problem.
	Others had the obligation to help me.
	I waited for someone else to take action.
	I think other people were required to fix the problem.

In order to determine how the APCSS solution scale scores were distributed among my participants, I reverse-scored the internality items such that taking the average of all item responses yielded an overall externality score. The average externality score for the sample was 3.06 with a standard deviation of 1.14. The minimum value was 1 and the maximum value of 6.25. Out of 324 possible participants who could have responded to the APCSS solution scale, three percent (ten individuals) did not complete the scale. Five percent (16 individuals) responded to some of the 20 solution attribution questions but not all. Thus the missing data I had were missing at random (MAR), due to either fatigue or participants overlooking certain items. Figure 6 shows the frequency distribution of the participants' responses to the APCSS solution scale. The data are not normal hence I used the Satorra-Bentler correction for non-normality in my analyses.
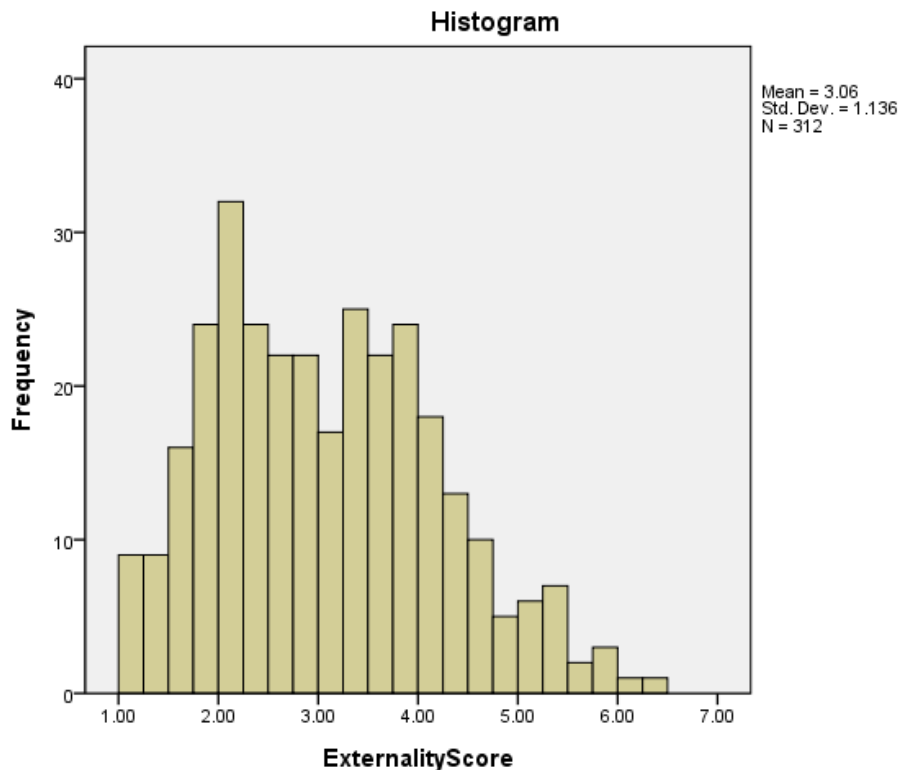
Figure 6. Distribution of scores on APCSS solution attribution scale for 324 female participants who reported experiencing some physical abuse from a dating partner.

Gender Role Beliefs

Since I wanted to examine the relation between participants' level of gender role ideals and level of the various coping strategies, I utilized the Gender Role Beliefs Scale (GRBS) developed by Kerr and Holden (1996); items are shown in Table 3. Kerr and Holden developed the measure using the criterion groups of feminist and traditional and choosing the most relevant items in their initial item pool; the

researchers found the items to significantly differentiate between the

feminist and traditional groups. The GRBS is the most recent available

measure of gender role beliefs and is made up of 20 items rated on a 7-

point scale with 1=*strongly agree*, 4=*undecided* and 7=*strongly*

disagree; higher scores reflect a feminist orientation whereas lower

scores reflect a traditional orientation. Scores are summed scores of all

the items, ranging from 20 to 140. Kerr and Holden found the internal

consistency scores for their samples to be .89, .83 and .87, and test-

retest reliability to be .86. When adding the GRBS items to my survey

I replaced the original word "lady" with "woman" and "gentleman" with

"man," in order to make the items even more relevant to the present

day.

Table 3

Gender Role Beliefs Scale Items

Scale	Items
GRBS	It is disrespectful for a man to swear in the presence of a woman.
	Women should not expect men to offer them seats on buses.
	Homosexual relationships should be as socially accepted as heterosexual relationships.

The initiative in courtship should
usually come from the man.

It bothers me more to see a woman
who is pushy than a man who is
pushy.

When sitting down at the table, proper
respect demands that the man
hold the woman's chair.

Women should have as much sexual
freedom as men.

Women should appreciate the
protection and support that
men have traditionally given
them.

Women with children should not work
outside the home if they don't
have to financially.

I see nothing wrong with a woman
who doesn't like to wear skirts
or dresses.

The husband should be regarded as
the legal representative of the
family group in all matters of
law.

 I like women who are outspoken.

Except perhaps in very special
circumstances, a man should
never allow a woman to pay the
taxi, buy the tickets or pay the
check.

Some equality in marriage is good, but
by and large the husband ought
to have the main say-so in
family matters.

Men should continue to courtesies to
women such as holding open the
door or helping them on with
their coats.

It is ridiculous for a woman to run a
locomotive and for a man to
darn socks.

> A woman should be as free as a man
>   to propose marriage.
> Women should be concerned with their
>   duties of childrearing and house
>   tending, rather than with
>   desires for professional and
>   business careers.
> Swearing and obscenity is more
>   repulsive in the speech of a
>   woman than a man.
> There are some professions and types
>   of businesses that are more
>   suitable for men than women.

The average GRBS score for all the female participants in my sample

was 76.22, with a standard deviation of 12.03, a minimum of 6, and a

maximum of 118. Of the total 905 women who took my survey, 51

(approximately six percent) dropped out before answering any GRBS

questions. For the 324 women in my sample who reported some abuse

in their dating relationships, the mean GRBS score was 77.0 with a

standard deviation of 11.7, a minimum of 23 and a maximum of 110.

Of the 324 women who reported some abuse on the CTS questions, 11

(three percent) dropped out before answering any GRBS questions. The

Cronbach's alpha value for the female portion of my sample was .60. I

expected this fairly low value for internal consistency given that the

scale includes questions for prescriptive gender role beliefs in a wide

variety of domains including dating etiquette, career and parenting

responsibilities. However, my interest was to use the GRBS scores as an indicator of average subscription to traditional gender roles.

<u>Coping</u>

I used the COPE scale developed by Carver et al (1989). It is a widely used scale today (Chung et al., 2008; Pollard & Kennedy, 2007; Jerome & Liss, 2005; Evans et al., 2004) and Carver et al. found the internal consistencies (Cronbach's alpha values) to be between .45 and .92 for their sample, as I show in Table 4. The original inventory has 60 items and I requested participants to respond to 48 of the items, the ones of the four higher-order factors that Carver et al. (1989) derived that I call active coping, seeking social support, denial and acceptance. One factor comprised of Carver et al.'s items describing active coping, planning and suppression of competing activities. The second factor was comprised of seeking instrumental and social support, and focus on emotions. The third factor was made up of denial and mental and behavioral disengagement. Lastly, the fourth factor comprised of acceptance, restraint coping and positive reinterpretation and growth. Carver et al. found that the scales within each factor correlated in these theoretically meaningful ways.

Each scale has 12 items to which participants responded on a 4-point Likert-type scale ranging from *I didn't do this at all* to *I did this*

a lot. The responses in each scale are summed for a total score on that scale. The higher the value for that factor, the more the participant used that form of coping. Table 5 shows the coping items I used in my questionnaire.

Table 4

Cronbach's Alpha Reliabilities of Carver et al. (1989) COPE scales

COPE Scale	Cronbach Alpha value
Active coping	.62
Planning	.80
Suppression of competing activities	.68
Restraint coping	.72
Seeking social support-instrumental	.75
Seeking social support-emotional	.85
Positive reinterpretation and growth	.68
Acceptance	.65
Turning to religion	.92
Focus on and venting of emotions	.77
Denial	.71
Behavioral disengagement	.63
Mental disengagement	.45
Alcohol-drug disengagement	

Table 5

Items of the Coping Orientations to Problems Experienced (COPE)

Scale

Scale	Items
Active Coping	I took additional action to try to get rid of the problem.
	I concentrated my efforts on doing something about it.
	I did what has to be done, one step at a time.
	I took direct action to get around the problem.
	I tried to come up with a strategy about what to do.
	I made a plan of action.
	I thought hard about what steps to take.
	I thought about how I might best handle the problem.
	I put aside other activities in order to concentrate on this.
	I focused on dealing with the problem and if necessary let other things slide a little.
	I kept myself from getting distracted by other thoughts or activities.
	I tried hard to prevent other things from interfering with my efforts at dealing with this.
Seeking Social Support	I asked people who had similar experiences what they did.
	I tried to get advice from someone about what to do.
	I talked to someone to find out more about the situation.
	I talked to someone who could do

something concrete about the problem.

I talked to someone about how I felt.

I tried to get emotional support from friends or relatives.

I discussed my feelings with someone.

I got sympathy and understanding from someone.

I got upset and let my emotions out.

I let my feelings out.

I felt a lot of emotional distress and I found myself expressing those feelings a lot.

I got upset and was really aware of it.

Denial   I refused to believe that it had happened.

I pretended that it hadn't really happened.

I acted as though it hadn't even happened.

I said to myself "this isn't real."

I gave up the attempt to get what I wanted.

I just gave up trying to reach my goal.

I admitted to myself that I couldn't deal with it, and I quit trying.

I reduced the amount of effort I put into solving the problem.

I turned to work or other substitute activities to take my mind off of things.

I went to the movies or watched tv, to think about it less.

I daydreamed about things other than this.

I slept more than usual.

Acceptance   I forced myself to wait for the right time to do something.

I held off doing anything about it until the situation permitted.

I made sure not to make matters
worse by acting too soon.
I restrained myself from doing
anything too quickly.
I looked for something good in what
was happening.
I tried to see it in a different light, to
make it seem more positive.
I learned something from the
experience.
I tried to grow as a person as a result
of the experience.
I learned to live with it.
I accepted that this had happened and
that it couldn't be changed.
I got used to the idea that it had
happened.
I accepted the reality of the fact that it
had happened.

For the active coping scale, the mean for my sample of 324 women who experienced dating violence was 30.16 with a standard deviation of 9.42. The minimum value for use of active coping was 12 and the maximum value was 48. The below figure shows the distribution of scores on the active coping scale.
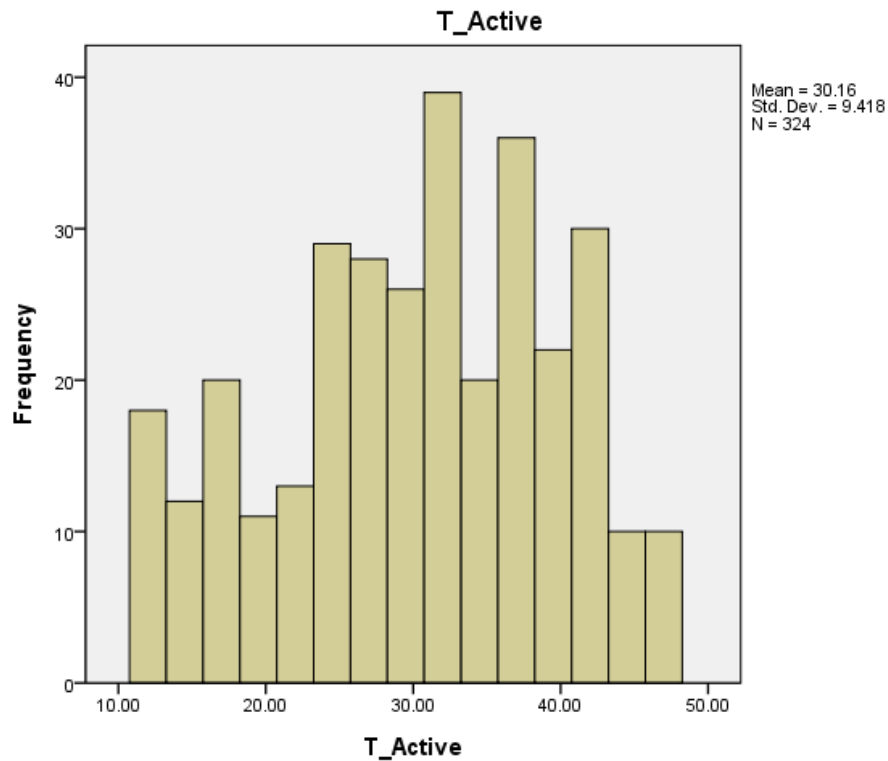
Figure 7. Distribution of scores on COPE active scale for 324 female participants who reported experiencing some physical abuse from a dating partner.

For the scale measuring use of social support, the mean was 28.90 with a standard deviation of 9.75. The minimum for this scale was 12 and the maximum was 48. The below figure shows the distribution of scores for the social support scale.
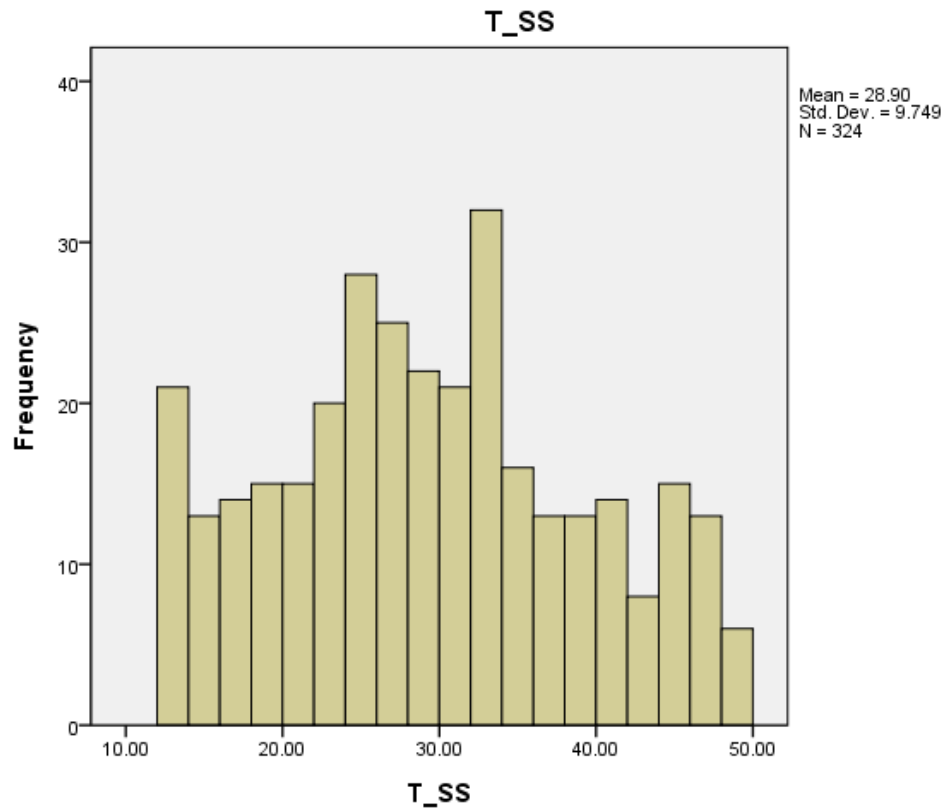
Figure 8. Distribution of scores on COPE social support scale for 324 female participants who reported experiencing some physical abuse from a dating partner.

For the denial scale the mean value was 22.26 with a standard deviation of 8.86, a minimum of 12 and a maximum value of 48. The below figure shows the distribution of scores on the denial scale.
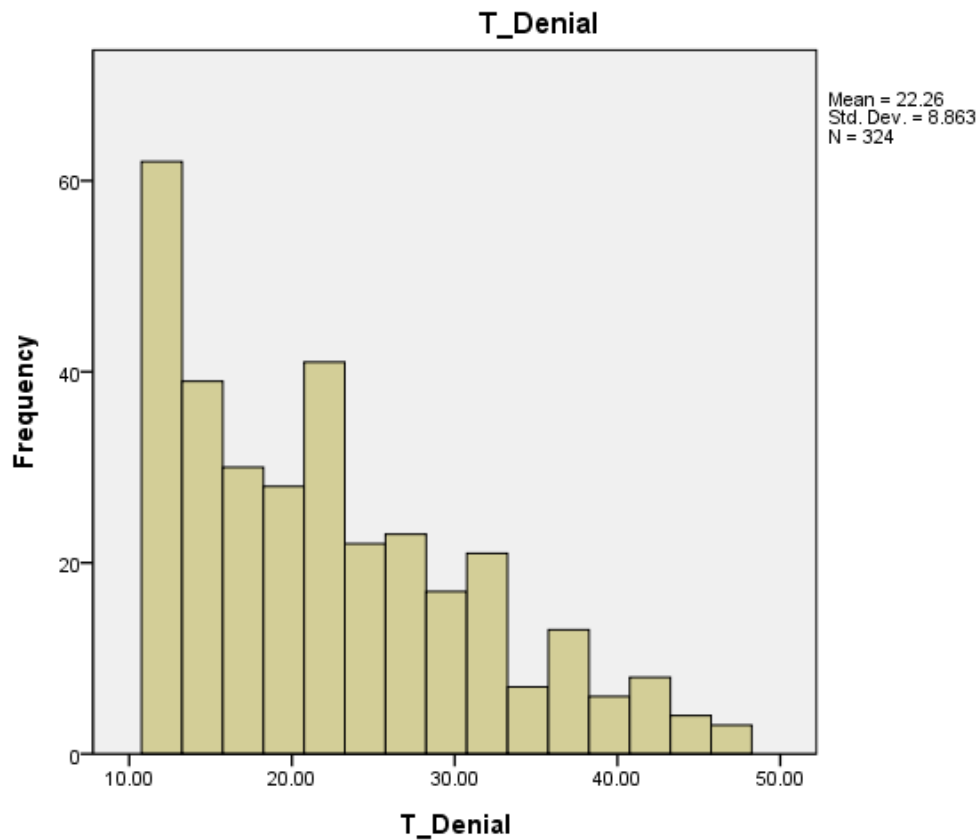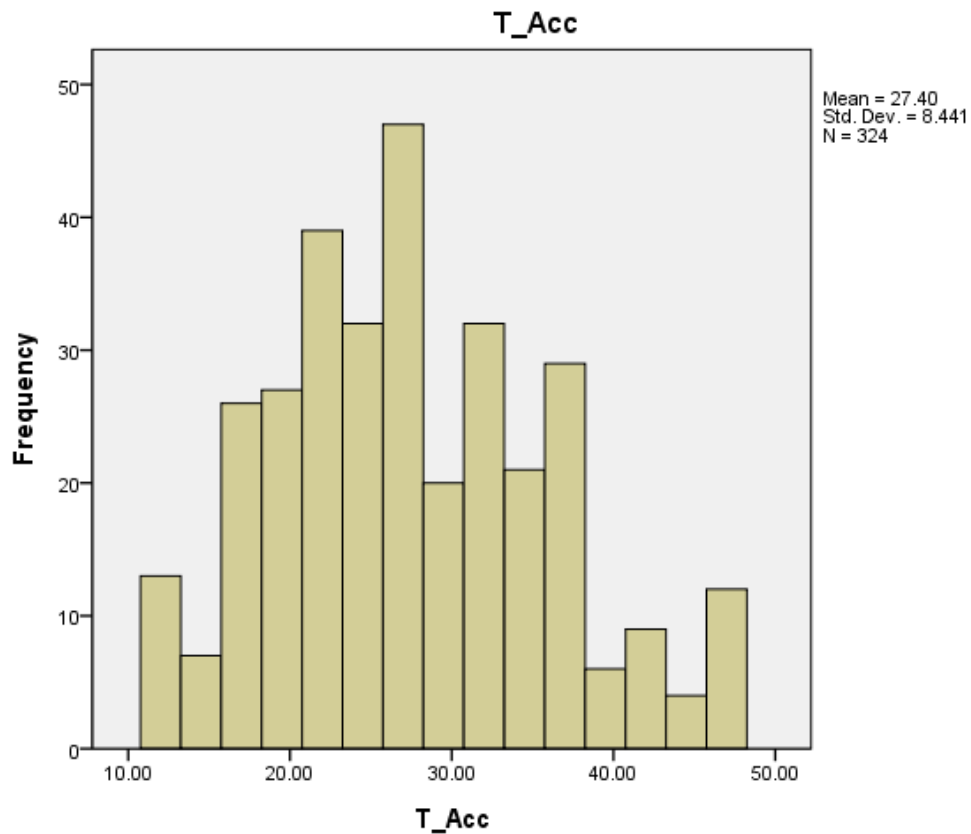
Figure 9. Distribution of scores on COPE denial scale for 324 female participants who reported experiencing some physical abuse from a dating partner.

Lastly for the acceptance scale, the mean was 27.40, the standard deviation was 8.44, the minimum value was 12 and the maximum value was 48. The below figure shows how the scores on the acceptance scale were distributed.

Figure 10. Distribution of scores on COPE acceptance scale for 324 female participants who reported experiencing some physical abuse from a dating partner.

Of the 324 women in my sample who reported experience with an abusive relationship, ten did not respond to the coping questions (approximately three percent) and five of these individuals had dropped out of the survey all-together. Given that the data are not normally distributed for all the COPE scales, I used the Satorra-Bentler correction for non-normal data when doing my analyses.

Recruitment of Participants

I recruited female undergraduate students in various sections of on-line undergraduate sociology courses. I asked the instructor to post the link to my survey on her classes' pages with a brief announcement of my study. The instructor offered the students extra credit points for completion of my survey and I also included those students who completed the survey in a raffle drawing for a $50 gift card. In my announcement of the study that accompanied the link I told students that 1) that it is an anonymous on-line survey, 2) they will be entered into a raffle for a prize and, 3) their grade will not be penalized based on whether or not they participate but they could receive extra credit points and be entered in the raffle for completing the survey.

Survey Administration

I utilized Survey Monkey (on www.surveymonkey.com) to design and administer my survey. Upon clicking on the survey link students were first presented with my informed consent letter. The letter stated that the survey should take between 10 and 20 minutes to complete, and that only upon completion they will receive extra credit and be entered in a drawing for a prize, so as to encourage students to complete the entire survey. The informed consent letter also told the students that 1) I am studying dating experiences of undergraduate

students (so as to not reveal my hypotheses), 2) their responses are

anonymous, 3) they may exit the survey anytime they feel

uncomfortable, 4) they do not have to answer any particular question

that makes them uncomfortable, 5) their responses are anonymous, 6)

and if they have filled the survey out once before, they should not fill it

out again and finally, 7) at the end after they complete the survey, they

will be given an email address to which to send a short email saying

that they completed the survey and would like to be entered into the

drawing. Students were also told that there was no way for the

researcher to link their email address to their responses. In addition to

providing the email address to which to send a brief message saying

they completed the survey, I also provided students the contact

information of their student counseling center should they need to talk

to someone about any difficult feelings experienced from answering

questions related to dating violence.

Of the 1,112 students who completed my on-line questionnaire,

eighty-one percent (905) were female and nineteen percent (207) were

male. The average age of the participants was 22.7 years, with a

minimum of 18 years and maximum of 68 years. Approximately three

percent of the participants (31 students) did not state their age.

Approximately 44 percent of the participants (488 students) identified

their school year as being senior, 28 percent (313) as junior, 21 percent (232 students) as sophomore and six percent (70 students) as freshman. One-half of one percent (four individuals) identified themselves as "grad student." One-half of one percent (four individuals) identified themselves as "non-student."

Approximately 66 percent of the participants in my survey (738 students) identified their relationship status to be "single." Thirty percent (332 students) identified themselves as "married or partnered" and two percent (20 students) identified their status as "divorced." Two individuals identified themselves as single and divorced, and one individual stated their relationship status as married/partnered as well as divorced. Approximately two percent of the sample (19 individuals) did not state their relationship status. Eighty-eight percent of the students (975 individuals) reported that they did not have any children; eleven percent stated they had children and one percent did not respond to the question. Regarding sexual orientation, 93 percent of the participants (1039 individuals) identified themselves as heterosexual, four percent (41 students) identified themselves as homosexual and two percent (23 individuals) as bisexual. Approximately one percent of the sample (nine students) did not identify their sexual orientation.

To identify ethnicity, participants were asked to select all ethnicities with which they identified. About 66 percent of the students (731 individuals) identified themselves as being White American; twelve percent (130 students) identified themselves as Hispanic or Mexican American. Approximately five percent (57 students identified themselves as Asian American), five percent (52 individuals) as Black or African American, two percent (24 individuals) as non-American, one-half percent as Native American, one-half percent as Arab American. One-half percent of the sample identified themselves as non-American and also specified their ethnicities. Approximately seven percent (73 students) I coded as "multi-ethnic," for those who identified with two or more ethnicities. Approximately two percent of the sample identified its ethnicity as being "other."

For about four percent of the participants (48 students) I was not able to calculate their immigrant ratio due to them not reporting years lived in US and/or their age. The mean immigrant ratio was .95 with a standard deviation of .18, minimum of .01 and maximum of 1.0.

Of the women who participated, 324 reported some form of physical abuse in their dating relationship. Meaning, their scores on the CTS scale were greater than zero. I sorted my sample based on CTS scores and then gender, so as to have for my analysis a sample of

women who had experienced some physical abuse in a dating relationship. This resulted in 324 participants for my analyses.

My survey asked the students to respond to my questions in the following order: demographic information (gender, age, ethnicity, years lived in U.S., year in school, major, relationship status, sexual orientation, number of children they had), Conflict Tactics Scale (CTS), solution attribution scale of the APCSS, coping scale (COPE), and Gender Roles Beliefs Scale (GRBS). Before they completed the CTS, they were asked "Please think of a dating relationship you have had in which your partner was most violent or threatening toward you" so as to prime them to answer the survey with respect to a relationship that was even minimally abusive. After completing the CTS, participants were asked if they were still in a relationship with the person, if they were living together at the time they took the survey, how long they had been together (___Months____Years in an open-ended format) and if they had already broken up, how long they were together (_____Months____Years in an open-ended format). Lastly, participants were asked in an open-ended format (years and months) how far into the relationship the abuse began. For this last question, they had the option of selecting "non-applicable" had they not experienced any physical abuse in that relationship.

For the students who did not report as having experienced any physical abuse, I used skip logic in Survey Monkey so that those students would not be prompted answer the scales that would not apply to them (i.e. solution attribution and coping) and they would be prompted to answer the gender role belief questions immediately after the CTS questions, since the gender role belief questions would apply to all participants. My goal with using the skip logic was to discourage students from quitting the survey because they constantly had to respond to questions that did not apply to them. This allowed me to get more data on gender role beliefs had those same students quit the survey.

The skip logic question I used was, "Did you answer 'never' on all the above questions?" in a yes-no format. If participants selected "yes" they were immediately prompted to the gender role belief questions and if they answered "no" they were forwarded on to the solution attribution questions. Some participants answered "yes" on this question even though they did report some violence experienced on the CTS questions. Some students also reported "no" on my skip logic question when they did not report any violence experienced. It is probable that these participants misunderstood the question leading to the discrepancy in their answers. To overcome this discrepancy, I

included in my coping model all cases that reported some violence on

the CTS (i.e. for whom the CTS score was greater than zero) given that

the CTS is how I am measuring violence experienced. Further, my skip

logic question allowed as many participants to complete the survey as

possible, allowing me to get that much more data on gender role

beliefs.

   With the scales participants were asked to answer after the CTS

– APCSS, COPE and GRBS, they were instructed on each page of

questions with: "Now, please answer the following questions with

respect to the same relationship and abusive behaviors I just asked

you about" so that they responded to all scales with that one

relationship in mind. A few times in the survey participants will also

be reminded that there are no "right" or "wrong" answers, so as to

encourage honest responding. After students completed the on-line

survey, they were given a message, on the last screen of Survey

Monkey, in which I asked them to email me their name, course prefix

and number, and instructor name so that I could enter them in my

drawing and send their information to the instructors to receive their

extra credit.

   I used structural equation modeling (SEM) to test the

relationships I hypothesized. I will first describe the patterns of

missing data in my sample and how I chose to handle them. Next, in the results chapter, I will then describe how I established reliability and validity of the measures for my sample, then my measurement model and finally, my structural model.

Missing Data

I examined the pattern of missing data in my survey. Questions that were at the beginning of the survey, more demographic in nature and before the CTS, were for the most part completed. Those that were missing appeared to mostly be those that were not multiple choices, requiring more effort on part of the participants. That is, questions such as age, specification of ethnicity and number of children were open-ended requiring participants to key in the answers rather than selecting from a list of possibilities. In addition, sexual orientation is a more personal question, possible making answering the question for some students more difficult. Three percent of participants did not report on their age, two percent did not report on their relationship status and one percent did not report how many children they had or their sexual orientation. For immigrant ratio, the last demographic piece of information, I was not able to calculate it for four percent of

my participants, because they did not key in either their age or the number of years they have lived in the U.S.

Regarding the APCSS, COPE and GRBS questions, about three percent of the 324 who reported experience with dating violence (10 individuals) completely dropped out of the survey, and approximately one and a half percent (5 individuals) inadvertently skipped the APCSS and COPE questions. In other words, they reported some violence on the CTS but did not answer those scales even though they responded to the GRBS questions. This is probably due to them misunderstanding and inaccurately responding to my skip logic question "Did you answer "never" on all the above items?" Those who answered "yes" were directed to the GRBS questions and those who said "no" were directed to the APCSs questions. Within all the scales (CTS, APCSS, COPE and GRBS) there were some individuals who skipped over some questions here and there.

Given that with the APCSS, COPE and GRBS data were missing due to fatigue or inadvertently missed, I treated the data as missing at random (MAR) and used linear interpolation in PASW Statistics 18 to fill in the missing values for the items to which participants did not respond. Meaning, I generated scale values after filling in the original missing cells with linear interpolation. I then

entered the scale values into the SEM software for all my analyses. I
used maximum likelihood estimation in my analyses for the recursive
process it uses to find as tight parameter estimates as possible. In
other words, the process conducts as many iterations as needed until
the estimates do not change from one iteration to the next (Schlomer,
Bauman, & Card, 2010). For all of my models, I utilized the EQS 6.1
for Windows software through Instructor Volumes on the Arizona
State University campus to analyze all my data.

Chapter 4

Results

In this chapter I will first present the reliability and validity of my measures, interpretations of my measurement and structural models, and the interpretations of my final structural model.

Reliability and Validity of Measures

Reliability of APCSS

The internal consistency value for the solution attribution scale of the APCSS, as measured by Cronbach's alpha, was .71. This was for all participants who had reported experiencing some abuse from their dating partners. In order to account for measurement error in determining the reliability of the solution scale of APCSS for my sample, I also conducted a confirmatory factor analysis (CFA). Given that there are 20 items in the solution scale of the APCSS and one item does not have as much reliability as a subscale of a number of items together, I combined items to create subscales prior to conducting the CFA. To do this, I ran an initial CFA with all 20 items as measured variables, in order to obtain initial loadings for each of the items. Given there are 16 items that measure externality, I then ranked those items in ascending order based on loading value, and

grouped then into three groups by counting them off by three's. This way, each subscale had a similar combination of weak and strong items. This resulted in two subscales of five externality items and one subscale with six externality items (total of 3 subscales measuring externality). Lastly, I combined the four internality items into one subscale of four items. In effect this resulted in four subscales for the APCSS solution attribution measure.

Note that I did not do any reverse-scoring when doing this analysis; I created subscales with original participant responses because as it is, the CFA model allows us to see how the internality and externality are related to each other. The reverse-scoring I presented earlier was simply to show distribution of scores of the entire APCSS solution attribution scale. Figure 11 shows the factor model for the APCSS, including the loadings.
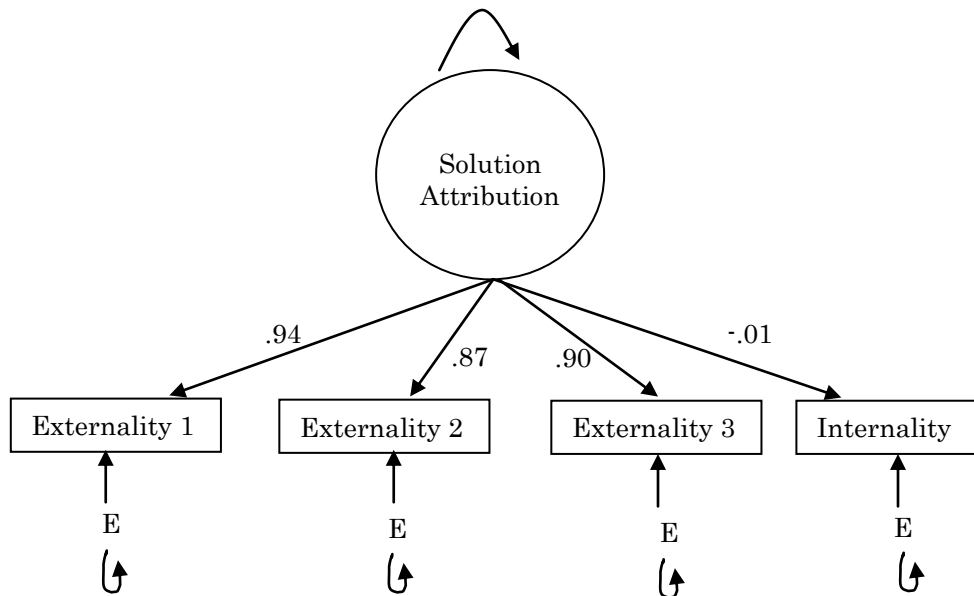
Figure 11. Confirmatory Factor Analysis model for solution scale of APCSS, including loadings of subscales.

The model is theoretically over-identified so it could be subject to model-fit assessment. The number of pieces of information equals u (as a function of the number of measured variables) = 4 (4 + 1)/2 = 10 and parameters to be measured equals = t = 8 (paths) + 1 (variances) + 0 (covariances), which equals 9 parameters to be estimated. I then ran a CFA on the subscales as the measured variables. In my EQS output for this CFA I received the message "Parameter estimate appear in order, no special problems were encountered during optimization" so I was able to interpret the model fit information. The model fit indices are shown in Table 6.

Table 6

Fit indices for CFA of solution scale of APCSS, using Satorra-Bentler correction for non-normal data.

Model	Absolute				Parsimonious			Incremental		
	$\chi2$	df	SRMR	GFI	AGFI	RMSEA	AIC	NFI	NNFI	CFI
APCSS	.17	2	.00	1.0	1.0	.00	-3.83	1.0	1.0	1.0

Hu and Bentler (1999) recommend these cut-off values for the fit indices: SRMR $\leq$ .08, GFI $\geq$ .90, AGFI $\geq$ .90, RMSEA $\leq$ .06, NFI $\geq$ .90, NNFI $\geq$ .95, and CFI $\geq$ .95. The fit indices of the CFA of the solution scale of the APCSS indicate a strong model fit.

Validity of APCSS

I also examined the validity of the APCSS solution scale by examining the loadings of the subscales that I created. The loadings were strong for the three subscales measuring externality (all greater than .50) meaning that the externality items account for a significant amount of variance in solution attribution. That is, for the first set of externality items, it explains the percentage of variance in solution attribution that equals to the loading squared, or $(.94)^2 = .88$, or 88 percent of the variance in solution attribution for my sample of 324

females. Similarly, the second set of externality items accounts for

$(.87)^2 = .76$ or 76 percent of the variance in solution attribution for this

sample, and the third set of externality items accounts for $(.90)^2 = .81$

or 81 percent of the variance in solution attribution. For the internality

subscale, the factor loading of the scale is essentially zero (-.01). This

means that the internality items did not account for any variation in

solution attribution for this sample. It also means that for this sample,

the internality and externality items were not negatively correlated.

Thus for this sample of female students, externality items were a

measure of solution attribution but not the internality items.

Reliability of COPE

The internal consistency of the COPE, as measured by

Cronbach's alpha for my sample of 324 females reporting experienced

abuse in a dating relationship, was .90. In order to account for

measurement error in determining the reliability the COPE with my

sample, I conducted a CFA for this measure as well. Given that there

are 12 items in each COPE scale and one item does not have as much

reliability as a subscale of a number of items combined, I combined

items to create subscales prior to conducting the CFA. To do this, I ran

an initial CFA of each COPE scale to determine the initial loadings. I

then rank-ordered the items based on loadings in ascending order, and

then counted off by three's to get three groups of four items. I then

created the subscales with those composites by summing the responses

on those respective items. Figure 12 shows the model that I tested; it is

over-identified so it can be subjected to model-fit assessment.

To assess the fit of the COPE to my sample, I first ran a 1-factor

CFA model, and then a 4-factor model. The EQS results of both models

yielded the statement "Parameter estimate appear in order, no special

problems were encountered during optimization" so I was able to

interpret the output of the COPE CFA as well. The fit indices of both

models are shown below in Table 7.
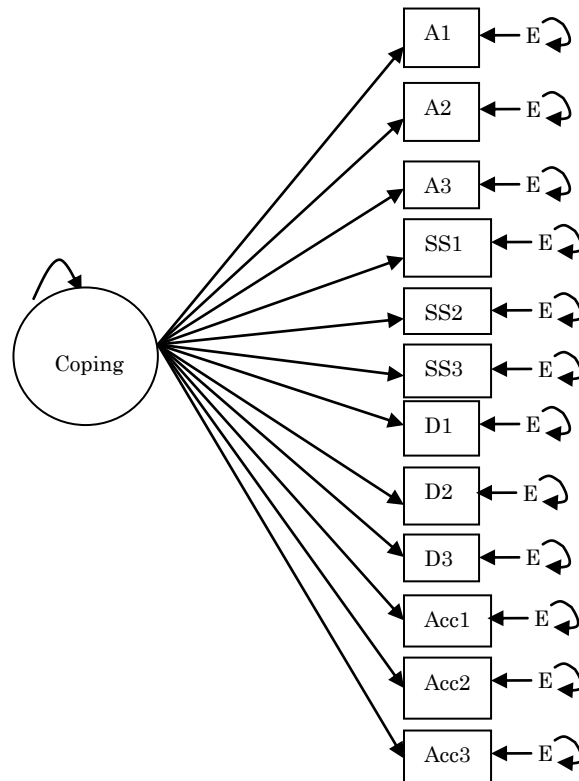
Figure 12a. Confirmatory Factor Analysis 1-factor model for COPE scale.
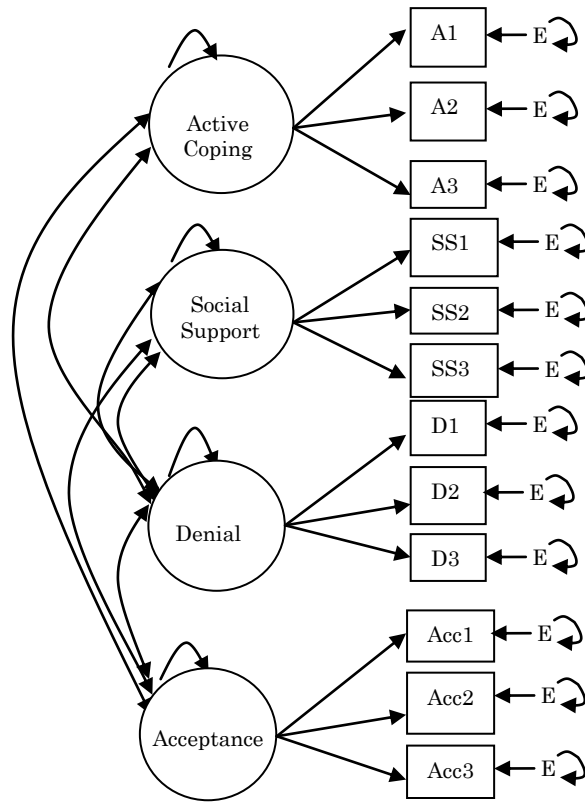
Figure 12b. Confirmatory Factor Analysis 4-factor model for COPE scale.

Table 7

Fit indices for 1-factor and 4-factor COPE CFA models, using Satorra-Bentler correction for non-normal data.

Model	Absolute				Parsimonious			Incremental		
	χ2	df	SRMR	GFI	AGFI	RMSEA	AIC	NFI	NNFI	CFI
1-Factor	2122.78	54	.25	.44	.19	.34	2014.78	.39	.26	.39
4-Factor	160.24	48	.07	.92	.87	.09	64.24	.95	.96	.97

The fit indices are significantly stronger for the 4-factor model compared to the 1-factor COPE model, indicating that for my sample active coping, utilizing social support, denial and acceptance are separate types of coping. Given that the 4-factor model did not meet the cut-off values for parsimony, I reran the model using the Wald test for removing parameters. In the EQS output this resulted in the message "None of the free parameters is dropped in this process" indicating that EQS did not have any suggestions of parameters to be dropped. Further, though the 4-factor model fit indices did not meet the cut-off values for model parsimony as recommended by Hu and Bentler (1999), its AIC value is smaller than that of the 1-factor model, indicating a more parsimonious model compared to the 1-factor model.

Validity of COPE

The loadings for all the measured variables on the coping factors were strong, with each greater than .50, indicating their validity in measuring the use of those coping strategies for my sample. That is, all the measured variables related to the COPE accounted for a significant portion of the variance in use of the coping strategies.

Models

Measurement Model

I first tested a measurement model for my data to establish fit of my latent variables in relationship to each other and then tested my structural, path, model to test the relationships I hypothesized between all my variables. Testing my model in such a two-step way allowed me to ascertain if any problems with fit were related to the measures versus the structural paths. Figure 13 below shows my measurement model.

Figure 13. Measurement model of latent variables related to coping with dating violence.

Given that the model is over-identified, it also can be subject to model-fit assessment. The number of pieces of information equals u (as a function of the number of measured variables) = 16 (16 + 1)/2 = 136 and parameters to be measured equals = t = 16 (paths) + 21 (variances) + 10 (covariances), which equals 47 parameters to be estimated. My EQS output yielded the statement "Parameter estimate appear in order, no special problems were encountered during optimization" indicating that I could interpret the results of the measurement model test.

I also utilized the Wald test to determine any parameters to be removed from the measurement model. This yielded the parameter for the path from the solution attribution factor to the internality subscale. The probability for this parameter was .98, indicating that there would not be a significant loss in fit if that parameter were deleted from the model. In other words, this parameter should be constrained. Thus, I reran the measurement model without this parameter. My revised measurement model including the loadings is shown in Figure 14.
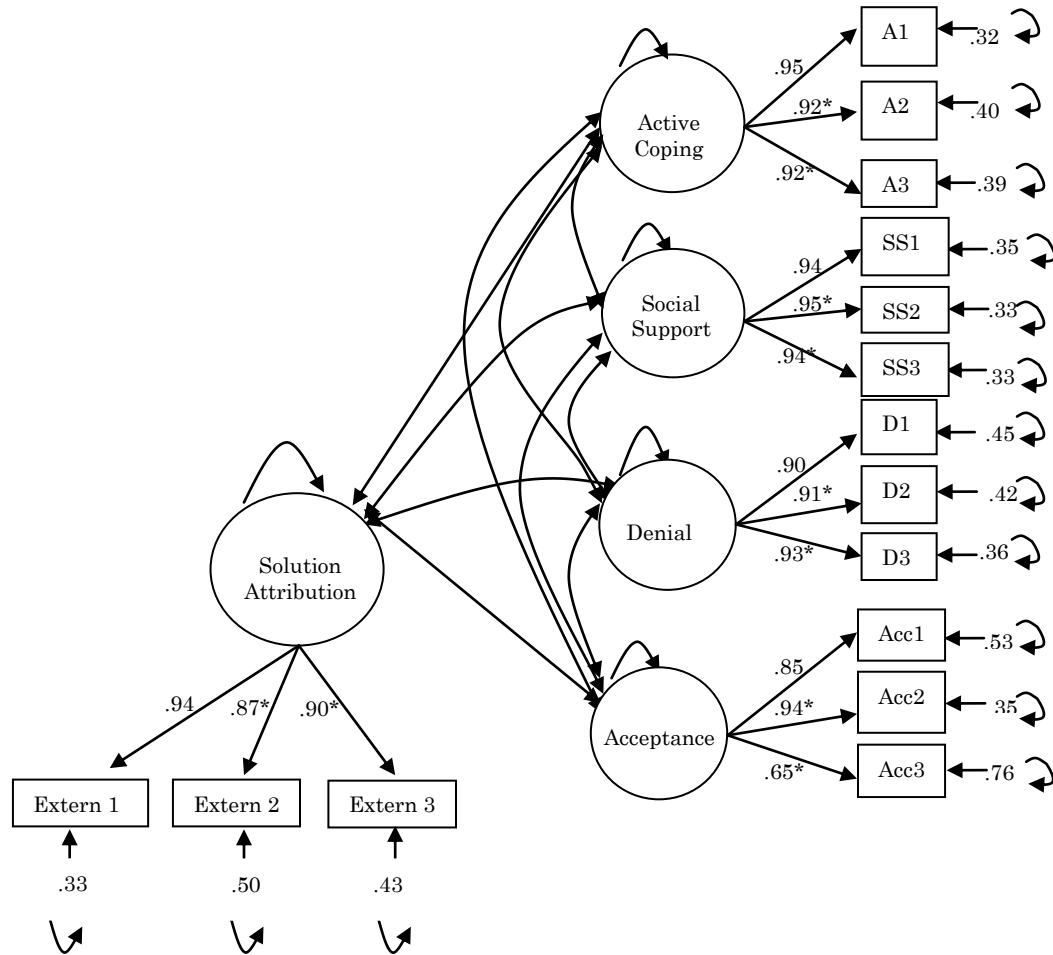
Figure 14. Revised measurement model of coping with dating violence including factor loadings.

Table 8 below shows the fit indices of my initial and revised

measurement models. The EQS output had the message "Parameter

estimate appear in order, no special problems were encountered during optimization" so I was able to interpret the results for both models.

Table 8

Fit indices for measurement model of coping with dating violence, with Satorra-Bentler correction for non-normal data.

Model	Absolute				Parsimonious			Incremental		
	$\chi2$	df	SRMR	GFI	AGFI	RMSEA	AIC	NFI	NNFI	CFI
Initial	248.40	94	.08	.90	.86	.07	60.40	.94	.95	.96
Revised	192.96	80	.06	.92	.88	.07	32.96	.96	.97	.97

In terms of absolute and incremental fit, the fit indices for the revised model are more desirable than that of my initial measurement model. That is, with regard to absolute fit, the observed covariance matrix from my data fits with the matrix implied by the model I tested; 92% of my observed covariances are explained by the model-implied covariances as indicated by the GFI index. Further, when comparing the fit of my hypothesized to a model where my variables are all uncorrelated (i.e. incremental fit), my hypothesized model is 96% better, as indicated by the NFI. Regarding model parsimony, the AGFI value for my model is very close to the recommended cut-off value. The

RMSEA value does not meet the recommended cut-off value for model

parsimony, but it is also close to that value. Further, the AIC for my

revised model is smaller than that of my initial model, indicating that

it is more parsimonious than my initial measurement model. I also ran

the Wald test when running my revised measurement model, and

received the message "None of the free parameters is dropped in this

process", so there were no additional parameters to consider

constraining. Given that the measurement model has strong fit, I

proceeded to test my structural model.

Structural Model

Figure 15 shows my structural, latent path, model. I added the

indicator variables of violence frequency, severity and gender role

beliefs to this model. The model is over-identified, so it can be subject

to model-fit assessment. The number of pieces of information equals u

(as a function of the number of measured variables) = 19 (19 + 1)/2 =

190 and parameters to be measured equals = t = 34 (paths) + 24

(variances) + 13 (covariances), which equals 71 parameters to be

estimated.
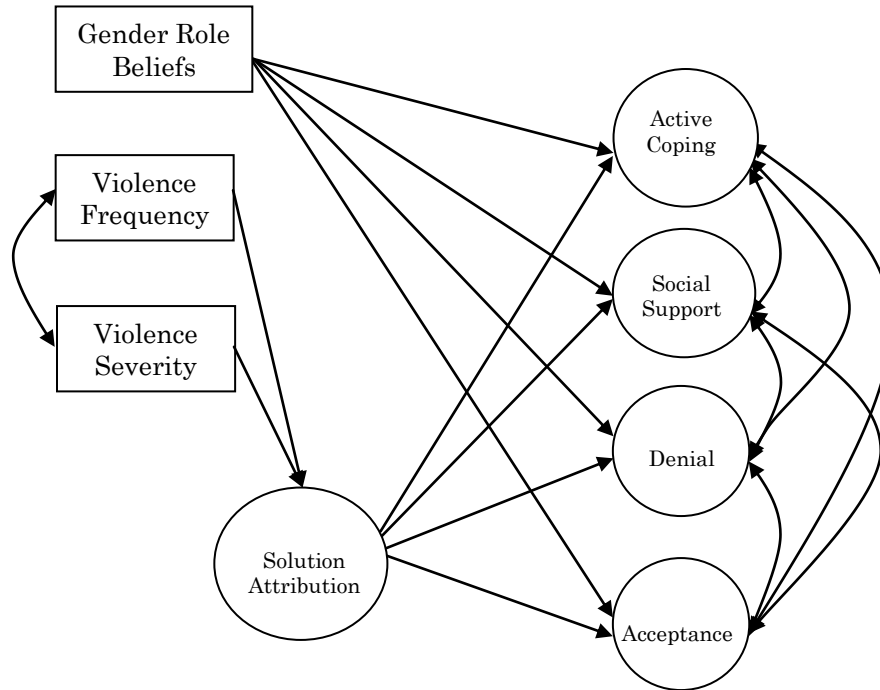
Figure 15. Hypothesized structural model on coping with dating violence.

After running this structural model I received the message in the output saying "Parameter estimate appear in order, no special problems were encountered during optimization." Table 9 shows the fit indices of the above structural model.

Table 9

Fit indices for initial latent structural model for coping with dating violence, with Satorra-Bentler correction for non-normal data.

Model	Absolute				Parsimonious			Incremental		
	χ^2	df	SRMR	GFI	AGFI	RMSEA	AIC	NFI	NNFI	CFI
Initial Path	332.68	121	.10	.89	.85	.07	90.68	.93	.94	.95

In terms of absolute fit, this model fits fairly well. Though the GFI index nor the SRMR meet the cut-off values recommended by Hu and Bentler (1999), the GFI index comes close and it indicates that 89% of my observed covariances are explained by the model-implied covariances. Further, when comparing the fit of my hypothesized to a model where my variables are all uncorrelated, my hypothesized model is 93% better, as indicated by the NFI.

Regarding model parsimony, the fit indices do not meet the desired cut-off values. Therefore I conducted the Wald test when I ran my structural model. For step one the Wald test yielded that constraining parameter from gender role beliefs to social support (probability of .70). I reran my model with this parameter removed, and received the EQS message "Parameter estimate appear in order,

no special problems were encountered during optimization." Table 10

shows the fit indices of my revised model and original model.

Table 10

Fit indices for initial and revised structural models for coping with dating violence, with the Satorra-Bentler correction for non-normal data.

Model	Absolute				Parsimonious			Incremental		
	χ^2	df	SRMR	GFI	AGFI	RMSEA	AIC	NFI	NNFI	CFI
Initial	332.68	121	.10	.89	.85	.07	90.68	.93	.94	.95
Revised	332.24	122	.10	.89	.85	.07	88.23	.93	.94	.95

The revised model incremental and absolute fit indices are the same as my initial structural model, but the lower AIC in comparison to the AIC of the original structural model shows that it is more parsimonious than the original model. When running the analysis for this model, I again ran the Wald test for removing parameters. This time the recommended parameter to be constrained was from gender role beliefs to active coping. I reran my model without this parameter.

The second revised model incremental and absolute fit indices are the same as my first revised structural model, but the lower AIC in

comparison shows that it is more parsimonious than the previous

model. When running the analysis for this model, I again ran the Wald

test for removing parameters. This time the recommended parameter

to be constrained was from gender role beliefs to denial, with a

probability of .25. Therefore I reran my model with this parameter

constrained as well.

While rerunning the model, I again ran the Wald test. This time,

the parameter from violence severity to solution attribution came up as

a suggested one to drop, with a probability of .19. I dropped this path

and reran my model again, while still using the Wald Test. This time,

the parameter suggested to be constrained was from gender role beliefs

and acceptance. I dropped this parameter and reran my model with the

Wald test. This time, EQS gave me the message "None of the free

parameters is dropped in this process" indicating that there were no

other parameters that the program suggested I drop. When running all

these models I received the EQS message "Parameter estimate appear

in order, no special problems were encountered during optimization" so

that I could interpret the results. Table 11 shows the fit indices of all

my revised models in the order in which I describe them above and

with the EQS variable labels I had used.

Table 11

Fit indices for initial latent structural, and all revised, models for coping with dating violence, with   Satorra-Bentler correction for non-normal data.

Model			Absolute			Parsimonious			Incremental	
Dropped path	χ^2	df	SRMR	GFI	AGFI	RMSEA	AIC	NFI	NNFI	CFI
Initial	332.68	121	.10	.89	.85	.07	90.68	.93	.94	.95
F3,F4	332.24	122	.10	.89	.85	.07	88.23	.93	.94	.95
F2,V4	332.71	123	.10	.89	.85	.07	86.72	.93	.94	.95
F4,V4	333.53	124	.10	.89	.85	.07	85.53	.93	.94	.95
F1,V3	335.28	125	.10	.89	.85	.07	85.28	.93	.94	.95
F5,V4	338.33	126	.10	.89	.85	.07	86.33	.93	.94	.95

My last model, the one with all listed parameters removed, had a slightly higher AIC compared to the model that did not have the parameter from gender role beliefs to acceptance removed. However, given that the parameter was not a significant path in the model, I chose to leave it out. I also used the Lagrange Multiplier test when running my last revised model, to see if any direct effects would significantly improve the fit of the model; I specified in EQS to only include parameters between factors and measured variables when conducting the test. I received the statement "None of the univariate

Lagrange multipliers is significant. The multivariate test procedure will not be executed" indicating no need for path directly from violence to coping.

My final model is with all paths in Table 11 removed. In Figure 16 below I show my final coping model; all paths and covariances are significant.
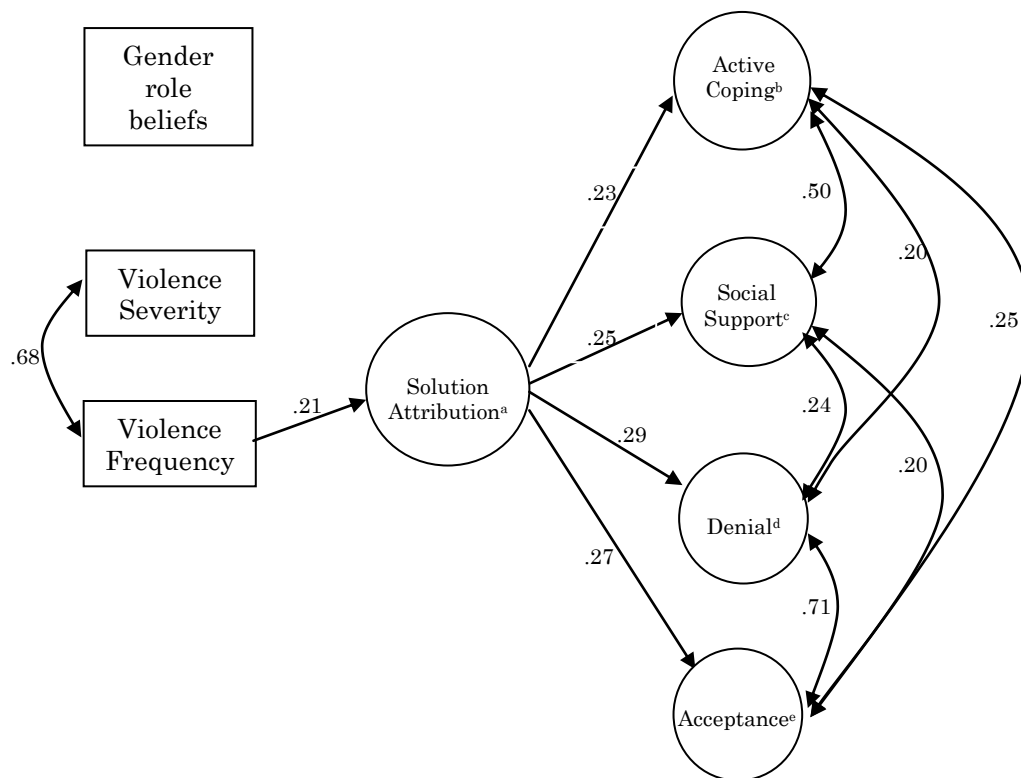
[a]R-squared=.04, [b]R-squared =.05, [c]R-squared=.06,[d]R-squared= .08, [e]R-squared= .07.

Figure 16. Structural model on coping with dating violence with standardized path values.

The interpretations of the paths of this model are first, that on average holding all else constant, a one standard deviation increase in violence frequency leads to a .21 standard deviation increase in external solution attribution. Second, on average holding all else constant, a one standard deviation increase in external solution attribution leads to 1) a .23 standard deviation increase in use of active coping, 2) a .25 standard deviation increase in use of social support, 3) a .29 standard deviation increase in use of denial, and 4) a .27 standard deviation increase in use of acceptance. In other words, internal solution attribution was related to all four coping strategies in the positive direction whereas I had hypothesized this only for denial and acceptance. Participants believing that they needed others' assistance in dealing with the abuse in the dating relationship had an effect on their use of all coping styles. Third, solution attribution fully mediated the relationship between violence frequency. Lastly, frequency and severity of abuse were significantly positively correlated, as well as all four types of coping.

In addition, I ran my structural model with the path from violence frequency to solution attribution removed, which led to the path from violence severity to solution attribution to be significant. Table 12 shows the fit indices of this model with a path from severity

to solution attribution. The second set of fit indices in this table shows

that of the previous model in which I had tested paths from both

frequency and severity to solution attribution. The fit indices are

similar and Figure 17 on the next page shows the standardized path

values.

Table 12

Fit indices for initial and revised structural models for coping with dating violence, with the Satorra-Bentler correction for non-normal data.

Model Path	Absolute				Parsimonious			Incremental		
	χ^2	df	SRMR	GFI	AGFI	RMSEA	AIC	NFI	NNFI	CFI
Severity path	302.53	109	.10	.89	.87	.07	84.58	.93	.95	.96
Frequency path	338.33	126	.10	.89	.85	.07	86.33	.93	.94	.95
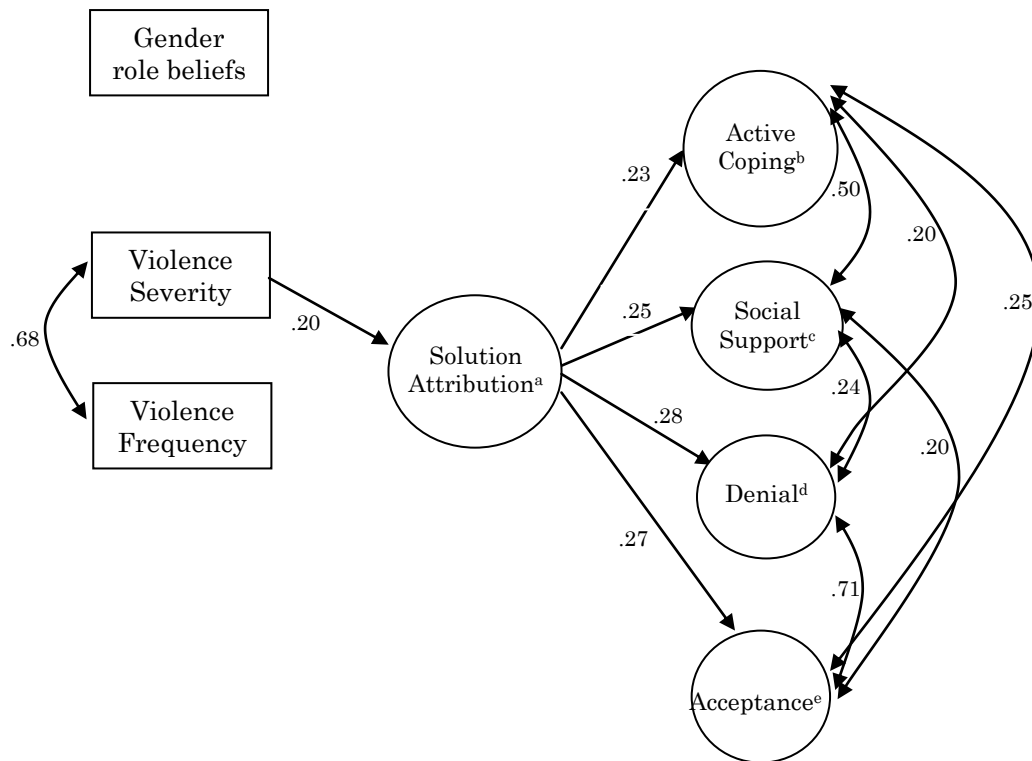
Figure 17. Structural model on coping with dating violence with severity path instead of frequency path, including standardized path values.

These results being similar means that alone, both violence frequency and severity significantly predict solution attribution but when both are in the model at the same time, one does not significantly predict solution attribution when the other is accounted for. Both are significantly correlated so both have an important part in the model.

Chapter 5

Discussion

Based on the results of my analyses, I have rejected the coping model I had proposed. The final, revised, model integrates some key variables that could have an impact on how college women cope with dating violence over the course of the entire dating relationship The model describes one possible relationship between abuse frequency, external solution attribution, and the overall use of each of the four types of coping: active (including planning and suppression of competing activities), use of social supportive (including use for instrumental as well as emotional support, and expressing emotions), use of denial (including mental and behavioral disengagement) and acceptance (including restraint coping and positive reinterpretation).

A few aspects of my final model are consistent with the model I hypothesized. First, external solution attribution was a significant mediator between abuse frequency and all four coping strategies. This supports the Brickman et al. (1982) theory that solution attribution is independent of causal attribution and has an impact on how my sample participants responded to their dating relationships. It also supports the Folkman and Lazarus (1984) transactional model of coping, where solution attribution is one appraisal my sample

conducted by taking the environmental variable of abuse frequency into consideration.

Second, abuse severity and frequency were positively correlated for my sample; the literature has shown that both are more likely to increase over time (AZCADV, 2000; Wood, 2001). Third, all four types of coping were positively correlated for my sample. Both active coping and using social support fall under the Folkman and Lazaru (1984) category of problem-focused coping so they are expected to be correlated. Similarly, denial and acceptance both fall under the emotion-focused category of coping as defined by Folkman and Lazarus.

It appears counterintuitive that the problem-focused and emotion-focused forms of coping be positively correlated. However, Carver, Scheier and Weintraub (1989) found support for coping being a multi-dimensional construct, as did I since the 4-factor COPE model I tested fit my sample better than did the 1-factor model I tested. That means that each of the four types of coping I measured is a construct independent of the other three types and if they are independent, the participants in my study utilized all four types of coping throughout the entire duration of their dating relationships. I did not ask my participants to respond to the coping statements with regard to specific

phases of their relationships but rather, if they had those thoughts or did those behaviors at all in response to the abuse. It is possible that a woman could cope actively, utilize social support, express her feelings, be in denial and have acceptance (i.e. see positive aspects of her situation) throughout the relationship.

Fourth, as I hypothesized, external solution attribution was positively related to denial and acceptance behaviors. That is, an external solution attribution (participants putting responsibility for fixing the problem on others besides themselves) led them to use more denial (including disengagement) and acceptance (including restraint coping and positive reinterpretation and growth) strategies.

My final structural model in Figure 16 is also different from the original model I hypothesized in three main ways. First, the variable of gender role beliefs as measured by the GRBS was not a significant predictor of any of the coping strategies. This can be explained by the internal consistency of the GRBS for my sample not being very high (Cronbach's alpha of.60). Additionally, the research thus far that supports the notion of traditional gender role beliefs being related to viewing a passive versus assertive woman as more attractive has focused solely on the domain of hypothetical romantic relationships (Jackson et al., 1994; Sellers et al., 2007. Furthermore, these

researchers were not studying abusive relationships but rather, their participants' reactions to normal couple conflict (Sellers et al., 2007) and prescriptive beliefs about roles of men versus women in romantic relationships (Jackson et al. 1994). Thus it is possible that when physical abuse is involved in one's own relationship, gender role beliefs are not a strong predictor of how a woman might cope. When a woman is experiencing threat from her partner, she will still cope as she needs to in order to protect herself and manage her situation and feelings in the best way she can. Additionally, though she might hold traditional gender role beliefs she might not condone abuse in a romantic relationship while still condoning other prescriptive notions about romantic relationships.

Second, abuse severity was not a predictor of solution attribution. Though it makes theoretical sense that severity of abuse impacts how a target of abuse attributes responsibility for solution (Mitchel & Hodson, 1983; Walker, 1984), my measure of severity included categorizing the items in the frequency measure. Thus when added to the model at the same time, severity is not a significant predictor when frequency is accounted for and vice versa. Yet there is a significant relation with severity as frequency and severity were significantly correlated.

In addition, there is one variable that could be related to abuse severity that I did not examine and that is alcohol abuse. Dating violence with young adults is highly correlated with perpetrator alcohol abuse (Roudsari, Leahy & Walters, 2009; Schnurr, 2009; Walton et al., 2009). Katz and Arias (2001) studied college women's attributions for dating violence in a hypothetical vignette. They used the manipulations of alcohol use and abuse severity. Their vignettes differed in that they had one of three levels of severity and one of two conditions related to alcohol use, one that explicitly described the perpetrator as being intoxicated and the other made no mention of intoxication (control condition). The researchers found that women's solution attributions varied not by severity alone but as a function of the interaction between severity and alcohol use. Women in the alcohol use condition held perpetrators less responsible than those in the control condition. Therefore it is possible that severity could have an impact on attribution if alcohol use is involved.

Third, external solution attribution was positively related to active coping and use of social support, the opposite of what I expected. In theory, it makes sense that if a person puts the responsibility of solving her or his problem onto others, then she or he might not act actively or seek out information on their own. As such, Gondolf and

Fisher (1988a) found from their interviews with survivors of domestic violence that the women put the responsibility on themselves to protect themselves from further abuse.

However, the COPE scales simply measure the level of use of the coping strategies. Therefore if the participants put solution responsibility on someone besides themselves, they probably would have had to have used the strategies over a longer period of time rather than if they had taking direct action sooner. That is, taking direct action sooner would probably lead them to be removed from the abuse such that they would not have the need for more use of any coping strategy.

The last way in which my revised model is different from my hypothesized model is the direction of the relationship between abuse frequency and external solution attribution; I had hypothesized a negative relationship when the model yielded a positive relationship. Based on the findings of Gondolf and Fisher (1988a) I had expected that a higher frequency of abuse would lead a woman to take on more responsibility for removing herself from the abuse. That is, she might be more motivated to not depend on others to remove herself from a partner who is frequently abusive. There is a dearth of empirical research on the relationship between frequency and attribution though

it is also plausible that she feel she needs more help from others the more frequent the abuse is. Given that both domestic violence and dating violence follow a cycle of abuse (Carlson, 1987), if the cycle occurs less frequently, the target has more time to recover between cycles, perhaps leading her to feel she can handle the relationship on her own. However, if the time between cycles is much shorter, she may not have as much time to recover, requiring more assistance from others.

The structural model for coping with dating violence in Figure 16 could be one possible guide for mental health professionals in their work with college women who are targets of dating violence. The key variables that the model includes are violence frequency and severity, solution attribution and the four types of coping: active coping (including planning and suppression of competing activities), seeking social support (including expressing emotions), denial (including mental and behavioral disengagement) and acceptance (including positive reinterpretation and growth). The model does not include any paths involving gender role beliefs as measured by the GRBS or violence severity as measured by categorizing participant responses on the CTS measure. An important variable that future research should include is alcohol use on part of perpetrators given the high correlation

between alcohol abuse and dating violence (Roudsari, Leahy & Walters, 2009; Schnurr, 2009; Walton et al., 2009) and the plausibility of targets' attributions varying as a function of the interaction of abuse severity and perpetrators' level of alcohol use (Katz & Arias, 2001). Researchers could ask participants how often their partners would drink and test if that level of use related to severity and targets' attributions.

This model suggests that solution attribution is a critical variable with which a clinician could work when helping a woman who is dealing with dating violence. If she has an external internal solution attribution, it would be important for the therapist to help her see what actions are within her control to protect herself from further abuse. This might entail some psychoeducation around the dynamics of intimate partner violence, that if she does not end the relationship, the abuse could increase over time.

This model for coping with dating violence can also be one guide in designing outreach programs on college campuses. Given that in this model solution attribution mediates between abuse frequency and coping, outreach programs could stress to college women that perpetrators are at fault for being abusive (causal attribution) and at the same time, there are steps women can and will need to take to

protect themselves (i.e. the need to have a more internal solution attribution). There might also be women who are struggling with an abusive dating relationship and not realize that there are counseling services available on campus. Thus providing information to students that such confidential counseling is available could be invaluable; Dienemann et al. (2007) found in their work with 162 women when testing their Domestic Violence Survivor Assessment (DVSA) that individual counseling and resource referrals were the strongest interventions in predicting the women's readiness to remove themselves from an abusive partner.

The results of this research are limited in several ways. First, only one college campus was studied and results cannot be generalized to other undergraduate campuses. Second, my sample was highly homogeneous with regard to ethnicity. Most participants identified as White American, and there might be differences in how differing ethnic groups cope with dating violence. Third, my sample was also mostly composed of undergraduate women, and the age at which a violent dating relationship is experienced may impact how a woman copes. Fourth, my sample was also homogenous with regard to sexual orientation. Those targets of abuse in same-gender dating relationships might cope very differently and might have different key

variables determining their coping strategy. Fifth, it is important to remember that my data is self-report data regarding events, beliefs and actions of the past, leading to some error in measurement of those indicators.

In turn, sixth, my data includes self report data related to the entire course of the dating relationship. There is opportunity to examine specific stages of the relationship and how the solution attributions and coping strategies differed from one stage to the next, and how those strategies impacted the abuse cycle in the relationship. This might lead to some empirical support for undergraduate women taking more active steps earlier on in the relationship that could lead them to remove themselves from the abuse. Seventh, another limitation of my analyses include the use of composites of my measured variables, which yields conservative path values. Creating testlets is a needed method in EQS in order to increase the reliability of the measures however for other software programs such as MPlus, testlets would not be needed and the fit of the model could be even stronger.

Eighth, there is an opportunity to test the relationship between coping and gender role beliefs specifically related to romantic relationships. Given that no unidimentional scale exists for

relationship-related gender role beliefs, there is the opportunity to create one that specifically measures attitudes related to romantic relationships, do an exploratory factor analysis, and use it to test coping with dating violence. Yet another possibility is to examine how level of passivity impacts coping strategies, since my argument for a possible relation between gender role beliefs and coping was grounded on the idea that women who hold traditional gender role beliefs might be more passive. Lastly, I examined how women alone cope with abuse in a dating relationship; there is opportunity to examine how men cope if they are targets of abuse in a dating relationship as well.

Nevertheless, the significant path values and strong effect sizes of the changes in coping strategies as a result of external solution attribution show that this model is tenable in describing the relationships between the variables for this sample of female college students.

REFERENCES

Abel, M. H., & Meltzer, A. L. (2007). Student ratings of a male and female professors' lecture on sex discrimination in the workforce. *Sex Roles, 57*(3-4), 173-180.

Abramson, L. Y., Seligman, M. E., & Teasdale, J. D. (1978). Learned helplessness in humans: Critique and reformulation. *Journal of Abnormal Psychology, 87*(1), 49-74.

Adams, E. M., & Betz, N. E. (1993). Gender differences in counselors' attitudes toward and attributions about incest. *Journal of Counseling Psychology, 40*(2), 210-216.

Aldwin, C. M., & Revenson, T. A. (1987). Does coping help? A reexamination of the relation between coping and mental health. *Journal of Personality and Social Psychology, 53*(2), 337-348.

Alksnis, C., Desmarais, S., & Curtis, J. (2008). Workforce segregation and the gender wage gap: Is "women's" work valued as highly as "men's"? *Journal of Applied Social Psychology, 38*(6), 1416-1441.

Amar, A.F. & Gennaro, S. (2005). Dating violence in college women: Associated physical injury, healthcare usage, and mental health symptoms. *Nursing Research, 54 (4),* 364-375.

Anderson, M.A., Gillig, P.M., Sitaker, M., McCloskey, K., Malloy, K. & Grigsby, N. (2003) "Why doesn't she just leave?": A descriptive study of victim reported impediments to her safety. *Journal of Family Violence, 18 (3),* 151-155.

Antonovsky, A. (1979). *Health, stress and coping.* San Francisco: Jossey-Bass.

Aosved, A. C., & Long, P. J. (2006). Co-occurrence of rape myth acceptance, sexism, racism, homophobia, ageism, classism, and religious intolerance. *Sex Roles, 55*(7-8), 481-492.

Arizona Coalition Against Domestic Violence (2002). *Arizona domestic violence fatality review: A review of 2000 & 2001 murder suicides* (p.7). Phoenix, AZ: Grant #2001-DW-BX-0081.

Arriaga, X.B. & Foshee, V.A. (2004). Adolescent dating violence: Do adolescents follow in their friends' or their parents' footsteps? *Journal of Interpersonal Violence, 19 (2),* 162-184.

Avants, S. K., Warburton, L. A., & Margolin, A. (2000). The influence of coping and depression on abstinence from illicit drug use in methadone-maintained patients. *American Journal of Drug and Alcohol Abuse, 26*(3), 399-416.

Avery, D. R., McKay, P. F., & Wilson, D. C. (2008). What are the odds? how demographic similarity affects the prevalence of perceived employment discrimination. *Journal of Applied Psychology, 93*(2), 235-249.

Bird, G.W., Stith, S.M., & Schladale, J. (1991). Psychological resources, coping strategies, and negotiation styles as discriminators of violence in dating relationships. *Family Relations, 40,* 45-50.

Bower, P., West, R., Tylee, A., & Hann, M. (2000). Symptom attribution and the recognition of psychiatric morbidity. *Journal of Psychosomatic Research, 48*(2), 157-160.

Bowlby, J. (1978). Attachment theory and its therapeutic implications. *Adolescent Psychiatry, 6*, 5-5.

Bradford, B.B. (1982). The extent and effects of peer pressure among high school students: A retrospective analysis. *Journal of Youth and Adolescence, 11(2),* 121-133.

Brickman, P., Rabinowitz, V.C., Karuza, J., Cohn, E., & Kidder, L. (1982). Models of helping and coping. *American Psychologist, 37,* 363-384.

Brown, J. A., Cross, H. J., & Nelson, J. M. (1990). Sex-role identity and sex-role ideology in college women with bulimic behavior. *International Journal of Eating Disorders, 9*(5), 571-575.

Burker, E. J., Evon, D. M., Loiselle, M. M., Finkel, J. B., & Mill, M. R.

(2006). "Coping predicts depression and disability in heart transplant candidates": Erratum. *Journal of Psychosomatic Research, 60*(3), 319.

Carlson, B.E. (1987). Dating violence: A research review and comparison with spouse abuse. *Social Casework: The Journal of Contemporary Social Work, 68*(1), 16-23.

Carver, C. S. & Scheier (1994). Situational coping and coping dispositions in a stressful transaction. *Journal of Personality and Social Psychology, 66*(*1*), 184-195.

Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology, 56*(2), 267-283.

Choi, N., & Fuqua, D. R. (2003). The structure of the BEM sex role inventory: A summary report of 23 validation studies. *Educational and Psychological Measurement, 63*(5), 872-887.

Choice, P. & Lamke, L.K. (1997). A conceptual approach to understanding abused women's stay/leave decisions. *Journal of Family Issues, 18(3),* 290-314.

Chung, M. C., Berger, Z., Jones, R., & Rudd, H. (2008). Posttraumatic stress and co-morbidity following myocardial infarction among older patients: The role of coping. *Aging & Mental Health, 12*(1), 124-133.

Coffey, P., Leitenberg, H., Henning, K. Bennett, R.T. & Jankowski, M.K. (1996). Dating violence: The association between methods of coping and women's psychological adjustment. *Violence and Victims, 11(3),* 227-238.

Constantino, J. N., Chackes, L. M., Wartner, U. G., Gross, M., Brophy, S. L., Vitale, J., et al. (2006). Mental representations of attachment in identical female twins with and without conduct problems. *Child Psychiatry & Human Development, 37*(1), 65-72.

Cornelius, T.L. & Resseguie, N. (2007). Primary and secondary prevention programs for dating violence: A review of the literature. *Aggression and Violent Behavior, 12,* 235-242.

Cortina, L.M., Lonsway, K.A., Magley, V.J., Freeman, L.V., Collinsworth, L.L., et al. (2002). What's gender got to do with it? Incivility in the federal courts. *Law and Social Inequity, 27,* 235-270.

Cota, A. A., & Xinaris, S. (1993). Factor structure of the sex-role ideology scale: Introducing a short form. *Sex Roles, 29*(5-6), 345-358.

Cunradi, C. B., Ames, G. M., & Moore, R. S. (2008). Prevalence and correlates of intimate partner violence among a sample of construction industry workers. *Journal of Family Violence, 23*(2), 101-112.

Cutrona, C. E. (1983). Causal attributions and perinatal depression. *Journal of Abnormal Psychology, 92*(2), 161-172.

Daniel, S. I. F. (2006). Adult attachment patterns and individual psychotherapy: A review. *Clinical Psychology Review, 26*(8), 968-984.

Dienemann, J., Glass, N., Hanson, J., & Lunsford, K. (2007). The domestic violence assessment (DVSA): A tool for individual counselin with women experiencing intimate partner violence. *Issues in Mental Health Nursing, 28*, 913-925.

Dinero, R. E., Conger, R. D., Shaver, P. R., Widaman, K. F., & Larsen-Rife, D. (2008). Influence of family of origin and adult romantic partners on romantic attachment security. *Journal of Family Psychology.Special Issue: Public Health Perspectives on Family Interventions, 22*(4), 622-632.

England, P., Allison, P., & Wu, Y. (2007). Does bad pay cause occupations to feminize, does feminization reduce pay, and how can we tell with longitudinal data? *Social Science Research, 36*(3), 1237-1256.

Estrada, A. X., & Harbke, C. R. (2008). Gender and ethnic differences in perceptions of equal opportunity climate and job outcomes of US army reserve component personnel. *International Journal of Intercultural Relations, 32*(5), 466-478.

Erikson, E.H. (1968). *Identity: Youth and crisis*. New York: Norton.

Fincham, F. D., Cui, M., Braithwaite, S., & Pasley, K. (2008). Attitudes toward intimate partner violence in dating relationships. *Psychological Assessment, 20*(3), 260-269.

Folkman, S., & Lazarus, R. S. (1984). An analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior, 21*(3), 219-239.

Forbes, G. B., Collinsworth, L. L., Jobe, R. L., Braun, K. D., & Wise, L. M. (2007). Sexism, hostility toward women, and endorsement of beauty ideals and practices: Are beauty ideals associated with oppressive beliefs? *Sex Roles, 56*(5-6), 265-273.

Fuller, S. (2008). Job mobility and wage trajectories for men and women in the united states. *American Sociological Review, 73*(1), 158-183.

Gibelman, M. (2003). So how far have we come? pestilent and persistent gender gap in pay. *Social Work, 48*(1), 22-32.

Gondolf, E. & Fisher, E. (1988). The survivor theory, battered women as survivors: An alternative to treating learned helplessness. N.K.D.

Gondolf and Fisher (Ed.), *Domestic Violence Law.* (106-117). Berkeley: Thompson West.

Gondolf, E. & Fisher, E. (1988b). *Battered Women as Survivors.* Lexington, Massachusetts: Lexington Books.

Gormley, B. (2005). An adult attachment theoretical perspective of gender symmetry in intimate partner violence. *Sex Roles, 52*(11-12), 785-795.

Graham-Kevan, N., & Archer, J. (2008). Does controlling behavior predict physical aggression and violence to partners? *Journal of Family Violence, 23*(7), 539-548.

Graham-Kevan N., & Archer, J. (2005). Investigating three explanations of women's relationship aggression. *Psychology of Women Quarterly, 29,* 270-277.

Greer, T. M. (2007). Measuring coping strategies among african Americans: An exploration of the latent structure of the COPE inventory. *Journal of Black Psychology, 33*(3), 260-277.

Haan, N. (1977). *Coping and defending :Processes of self-environment organization.* New York: Academic Press.

Hamilton, D., Goldsmith, A. H., & Darity, W., Jr. (2008). Measuring the wage costs of limited English: Issues with using interviewer versus self-reports in determining Latino wages. *Hispanic Journal of Behavioral Sciences, 30*(3), 257-279.

Harvey, J.H., & Weary, G. (1984). Current issues in attribution theory and research. *Annual Review of Psychology, 35,* 427-459.

Helmreich, R. L., Spence, J. T., & Gibson, R. H. (1982). Sex-role attitudes: 1972-1980. *Personality and Social Psychology Bulletin, 8*(4), 656-663.

Hill, K. J., & Larson, L. M. (1992). Attributional style in the reformulated learned helplessness model of depression: Cognitive processes and measurement implications. *Cognitive Therapy and Research, 16*(1), 83-94.

Holtzworth-Munroe, A. (1988). Causal attributions in marital violence: Theoretical and methodological issues. *Clinical Psychology Review, 8,* 331-344.

Hong, Z. (2004). An investigation of Taiwanese female college students' sexist attitudes. *Sex Roles, 51*(7-8), 455-467.

Howard, J. A. (1987). The conceptualization and measurement of

attributions. *Journal of Experimental Social Psychology, 23*(1), 32-58.

Hu, L. & Bentler, P.M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*(1), 1-55.

Israelashvili, M., Gilad-Osovitzki, S., & Asherov, J. (2006). Female adolescents' suicidal behavior and mothers' ways of coping. *Journal of Mental Health, 15*(5), 533-542.

Jackson, S.M. (1999). Issues in the dating violence literature: A review of the literature. *Aggression and Violent Behavior 4(2),* 233-247.

Jackson, L.A., Hodge, C.N. & Ingram, J.M. (1994). Gender and self-concept: A reexamination of stereotypic differences and the role of gender attitudes. *Sex Roles 30(9/10),* 615-630.

Johnson, M. E., Brems, C., & Fischer, P. (1996). Sex role conflict, social desirability, and eating-disorder attitudes and behaviors. *Journal of General Psychology, 123*(1), 75-87.

Jones, N. T., Ji, P., Beck, M., & Beck, N. (2002). The reliability and validity of the revised conflict tactics scale (CTS2) in a female incarcerated population. *Journal of Family Issues, 23*(3), 441-457.

Joshi, A., Liao, H., & Jackson, S. E. (2006). Cross-level effects of workplace diversity on sales performance and pay. *Academy of Management Journal, 49*(3), 459-481.

Kalin, R., & Tilby, P. J. (1978). Development and validation of a sex-role ideology scale. *Psychological Reports, 42*(3, Pt 1), 731-738.

Katz, J., & Arias, I. (2001). Women's attributions for hypothetical dating violence: Effects of partner alcohol use and violence severity. *Journal of Applied Social Psychology, 31*(7), 1458-1473.

Kohn, C. S., Mertens, J. R., & Weisner, C. M. (2002). Coping among individuals seeking private chemical dependence treatment: Gender differences and impact on length of stay in treatment.

Alcoholism: Clinical and Experimental Research, 26(8), 1228-1233.

Kolenc, K. M., Hartley, D. L., & Murdock, N. L. (1990). The relationship of mild depression to stress and coping. *Journal of Mental Health Counseling, 12*(1), 76-92.

Koopmans, G.T., & Lamers, L.M. (2006). Gender and health care utilization: The role of mental distress and help-seeking propensity. *Social Science and Medicine, 64,* 1216-1230.

Koziol-McLain, J., Coates, C. J., & Lowenstein, S. R. (2001). Predictive validity of a screen for partner violence against women. *American Journal of Preventive Medicine, 21*(2), 93-100.

Krantz, S. E., & Moos, R. H. (1988). Risk factors at intake predict nonremission among depressed patients. *Journal of Consulting and Clinical Psychology, 56*(6), 863-869.

Kuiper, N. A., Olinger, L. J., & Air, P. A. (1989). Stressful events, dysfunctional attitudes, coping styles, and depression. *Personality and Individual Differences, 10*(2), 229-237.

Lazarus, R. (1966). *Psychological stress and the coping process.* New York: McGraw-Hill.

Lazarus, R.S. & Folkman, S. (1984). *Stress, appraisal and coping.* New York, NY: Springer Publishing Co.

Lichter, E.L. & McCloskey, L.A. (2004). The effects of childhood exposure to marital violence on adolescent gender-role beliefs and dating violence. *Psychology of Women Quarterly, 28,* 344-357.

Litchfield, K., & Gow, K. (2002). Coping strategies as predictors of strain. *Journal of Applied Health Behaviour, 4*(1-2), 36-45.

Leavitt, C. H. (2008). Having it all? mothers' experiences as assistant professors in counseling psychology academia. ProQuest Information & Learning). (Electronic; Print)

Liverant, G. I., Hofmann, S. G., & Litz, B. T. (2004). Coping and anxiety in college students after the September 11th terrorist attacks. *Anxiety, Stress & Coping: An International Journal, 17*(2), 127-139.

Long, B.C. (1989). Sex role orientation, coping strategies and self-efficacy of women in traditional and nontraditional occupations. *Psychology of Women Quarterly, 13,* 307-324.

Lonsway, K. A., Cortina, L. M., & Magley, V. J. (2008). Sexual harassment mythology: Definition, conceptualization, and measurement. *Sex Roles, 58*(9-10), 599-615.

Loo, R. & Thorpe, K. (2005). Relationships between critical thinking and attitudes toward women's roles in society. *The Journal of Psychology, 139(1),* 47-55.

Marshall, L.L. & Rose, P. (1988). Family of origin violence and courtship abuse. *Journal of Counseling and Development, 66,* 414-418.

Matheny, K.B., Aycock, D.W., Pugh, J.L., Curlette, W.L., & Cannella, K.A.S. (1986). Stress coping: A qualitative and quantitative synthesis with implications for treatment. *The Counseling Psychologist, 14(4),* 499-549.

Matheson, K., Skomorovsky, A., Fiocco, A., & Anisman, H. (2007). The limits of 'adaptive' coping: Well-being and mood reactions to stressors among women in abusive dating relationships. *Stress: The International Journal on the Biology of Stress, 10*(1), 75-91.

Mechanic, D. (1974). Discussion of research programs on relations between stressful life events and episodes of physical illness. B.S. Dohrenwend & B.P. Dohrenwend (Eds.), *Stressful life events.* (87-98). New York, NY: Wiley.

Milo, T., Badger, L.W. & Coggins, D.R. (1983). Conceptual analysis of the Sex Role Ideology Scale. *Psychological Reports, 53*(3-4), 139-146.

Miner-Rubino, K., & Cortina, L. M. (2007). Beyond targets:

Consequences of vicarious exposure to misogyny at work. *Journal of Applied Psychology, 92*(5), 1254-1269.

Mirnics, Z., Békés, J., Rózsa, S., & Halász, P. (2001). Adjustment and coping in epilepsy. *Seizure, 10*(3), 181-187.

Mitchell, C. L. (1987). Relationship of femininity, masculinity, and gender to attribution of responsibility. *Sex Roles, 16*(*3-4*), 151-163.

Mitchell, R.E. and Hodson, C.A. (1983). Coping with domestic violence: Social support and psychological health among battered women. *American Journal of Community Psychology, 11*, 629-654.

Mitchell, R.E. and Hodson, C.A. (1986). Coping and social support among battered women: An ecological perspective. S.E. Hobfoll (Ed.), *Stress, Social Support, and Women, The Series in Clinical and Community Psychology.* (pp. 153-169). New York: Hemisphere.

Muhonen, T., & Torkelson, E. (2008). Collective and individualistic coping with stress at work. *Psychological Reports, 102*(2), 450-458.

Nabors, E.L., Dietz, T.L. & Jasinski, J.L. (2006). Domestic violence beliefs and perceptions among college students. *Violence and Victims, 21(6),* 779-795.

Nolen-Hoeksema, S. (1987). Sex differences in unipolar depression: Evidence and theory. *Psychological Bulletin, 101(2),* 259-282.

O'Leary, K. D., & Murphy, C. (1999). Clinical issues in the assessment of partner violence. In R.T. Ammerman & M. Hersen (Eds.), *Assessment of family violence: A clinical and legal sourcebook* (pp. 31-34). New York, NY: John Wiley & Sons, Inc.

O'Sullivan, L. F. (1995). Less is more: The effects of sexual experience on judgments of men's and women's personality characteristics and relationship desirability. *Sex Roles, 33*(3-4), 159-181.

Overholser, J. C., & Moll, S. H. (1990). Who's to blame: Attributions

regarding causality in spouse abuse. *Behavioral Sciences & the Law, 8*(2), 107-120.

Parker, G., Brown, L., & Blignault, I. (1986). Coping behaviors as predictors of the course of clinical depression. *Archives of General Psychiatry, 43*(6), 561-565.

Prochaska, J.O., DiClemente, C.C., & Norcross, J.C. (1992). In search of how people change. *American Psychologist, 47*(9), 1102-1114.

Próspero, M. (2008). Effects of masculinity, sex, and control on different types of intimate partner violence perpetration. *Journal of Family Violence, 23*(7), 639-645.

Raja, S. (2001). Secondary victimization among female veterans who have experienced sexual assault. [Abstract]. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 61(7-B)*, 3857. Retrieved on June 11, 2008 from PsycINFO database.

Rasmussen, A., Aber, M. S., & Bhana, A. (2004). Adolescent coping and neighborhood violence: Perceptions, exposure, and urban youths' efforts to deal with danger. *American Journal of Community Psychology, 33*(1-2), 61-75.

Rexrode, K.R., Peterson, S. & O'Toole, S. (2008). The Ways of Coping scale: A reliability generalization study. *Educational and Psychological Measurement, 68(2),* 262-280.

Rianon, N.J. & Shelton, A.J. (2003). Perception of spousal abuse expressed by married Bangladeshi women in Houston, Texas, U.S.A. *Journal of Immigrant Health, 5 (1),* 37-43.

Rivadeneyra, R., & Lebo, M. J. (2008). The association between television-viewing behaviors and adolescent dating role attitudes and behaviors. *Journal of Adolescence, 31*(3), 291-305.

Roberts, A.R. (2006). Classification typology and assessment of five levels of woman battering. *Journal of Family Violence, 21,* 521-527.

Rosen, K.H. & Stith, S.M. (1993). Intervention strategies for treating women in violent dating relationships. *Family Relations, 42,* 427-433.

Roudsari, B. S., Leahy, M. M., & Walters, S. T. (2009). Correlates of dating violence among male and female heavy-drinking college students. *Journal of Interpersonal Violence, 24*(11), 1892-1905.

Rusbult, C.E. & Martz, J.M. (1995). Remaining in an abusive relationship: An investment model analysis of nonvoluntary dependence. *Personality and Social Psychology Bulletin, 21(6),* 558-571.

Ryu, D. M., & Larkin, J. D. (2007). A gender discrimination class action from the point of view of plaintiffs' lawyers. In F. J. Crosby, M. S. Stockdale & S. A. Ropp (Eds.), *Sex discrimination in the workplace: Multidisciplinary perspectives.* (pp. 97-106). Malden, MA, US: Blackwell Publishing.

Sanchez, D.T. & Crocker, J. (2005). How investment in gender ideals affects well-being: The role of external contingencies of self-worth. *Psychology of Women Quarterly, 29,* 63-77.

Saxbe, D. E., Repetti, R. L., & Nishina, A. (2008). Marital satisfaction, recovery from work,and diurnal cortisol among men and women. *Health Psychology, 27*(1), 15-25.

Scheier, M. F., & Carver, C. S. (1985). Optimism, coping, and health: Assessment and implications of generalized outcome expectancies. *Health Psychology, 4*(3), 219-247.

Schlomer, G.L., Bauman,S.B. & Card, N.A (2010). Best practices for Missing Data Management in Counseling Psychology. *Journal of Counseling Psychology, 57(1),* 1-10.

Schnurr, M. P. (2009). Precursors to adolescents' dating violence perpetration and healthy romantic relationships. ProQuest Information & Learning). *Dissertation Abstracts International Section A: Humanities and Social Sciences, 70* (5-A), 1799-1799. (Electronic; Print)

Sellers, J. G., Woolsey, M. D., & Swann, J. B., Jr. (2007). Is silence more golden for women than men? observers derogate effusive women and their quiet partners. *Sex Roles, 57*(7-8), 477-482.

Simmons, C. A., Lehmann, P., & Collier-Tenison, S. (2008). Men's use of controlling behaviors: A comparison of reports by women in a domestic violence shelter and women in a domestic violence offender program. *Journal of Family Violence, 23*(6), 387-394.

Snell, J.E., Rosenwald, R.J. & Robey, A. (1964). The wifebeater's wife: A study of family interaction. *Archives of General Psychiatry, 2,* 107-112.

Srikameswaran, S., Leichner, P., & Harper, D. (1984). Sex role ideology among women with anorexia nervosa and bulimia. *International Journal of Eating Disorders, 3*(3), 39-43.

Stepleman, L.M., Darcy, M.U.A. & Tracey, T.J.G. (2005). Helping and coping attributions: Development of the Attribution of Problem Cause and Solution Scale. *Educational and Psychological Measurement, 65(3),* 525-542.

Stewart, A.J., & McDermott, C (2004). Gender in psychology. *Annual Review of Psychology, 55,* 519-544.

Strauss, J. P., Sawyerr, O. O., & Oke, A. (2008). Demographics, individual value structures, and diversity attitudes in the united kingdom. *Journal of Change Management, 8*(2), 147-170.

Straus, M.A. (1979). Measuring intrafamily conflict and violence: The Conflict Tactics (CT) Scales. *Journal of Marriage and the Family, 41(1),* 75-88.

Straus, M.A. (2004). Prevalence of violence against dating partners by male and female university students worldwide. *Violence Against Women, 10 (7),* 790-811.

Strube, M.J. (1988). The decision to leave an abusive relationship: Empirical evidence and theoretical issues. *Psychological Bulletin, 104(2),* 236-250.

Szymanski, L. A., Devlin, A. S., Chrisler, J. C., & Vyse, S. A. (1993). Gender role and attitudes toward rape in male and female college students. *Sex Roles, 29*(1-2), 37-57.

Terrance, C., Logan, A., & Peters, D. (2004). Perceptions of peer sexual harassment among high school students. *Sex Roles, 51*(7-8), 479-490.

Thompson, A., & Gaudreau, P. (2008). From optimism and pessimism to coping: The mediating role of academic motivation. *International Journal of Stress Management, 15*(3), 269-288.

Timko, C., Moos, R. H., Finney, J. W., & Lesar, M. D. (2000). Long-term outcomes of alcohol use disorders: Comparing untreated individuals with those in Alcoholics Anonymous and formal treatment. *Journal of Studies on Alcohol, 61*(4), 529-540.

Waldrop, A. E., & Resick, P. A. (2004). Coping among adult female victims of domestic violence. *Journal of Family Violence, 19*(5), 291-302.

Walker, L.E. (1984). *The battered woman syndrome*. New York: Springer Publishing Company.

Walker, L. E. (1989). Psychology and violence against women. *American Psychologist, 44*(4), 695-702.

Walton, M. A., Cunningham, R. M., Goldstein, A. L., Chermack, S. T., Zimmerman, M. A., Bingham, C. R., et al. (2009). Rates and correlates of violent behaviors among adolescents treated in an urban emergency department. *Journal of Adolescent Health, 45*(1), 77-83.

Watson, C. G., Barnett, M., Nikunen, L., Schultz, C., Randolph-Elgin, T., & Mendez, C. M. (1997). Lifetime prevalences of nine common psychiatric/personality disorders in female domestic abuse survivors. *Journal of Nervous and Mental Disease, 185*(10), 645-647.

Weaver, G. D., Turner, N. H., & O'Dell, K. J. (2000). Depressive

symptoms, stress, and coping among women recovering from addiction. *Journal of Substance Abuse Treatment, 18*(2), 161-167.

Wekerle, C., & Wolfe, D.A. (1999). Dating violence in mid-adolescence: Theory, significant, and emerging prevention initiatives. *Clinical Psychology Review 19(4),* 435-456.

White, B. H., & Kurpius, S. E. R. (2002). Effects of victim sex and sexual orientation on perceptions of rape. *Sex Roles, 46*(5-6), 191-200.

Whitley, B. E., Jr., & Ægisdóttir, S. (2000). The gender belief system, authoritarianism, social dominance orientation, and heterosexuals' attitudes toward lesbians and gay men. *Sex Roles, 42*(11-12), 947-967.

Wood, J. T. (2001). The normalization of violence in heterosexual romantic relationships: Women's narratives of love and violence. *Journal of Social and Personal Relationships, 18*(2), 239-261.

Yoo, K. H. (1994). Sex-role development in late childhood and adolescence: Relationships among sex-role stereotypes, sex-role ideology, sex-role identity, and self-esteem. *Korean Journal of Child Studies, 15*(1), 127-144.

Young, S. (2005). Coping strategies used by adults with ADHD. *Personality and Individual Differences, 38*(4), 809-816.