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Cognitive Processing Patterns Associated with Completion of Treatment for Domestic Violence

Amina Porter

University of South Florida

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Cognitive Processing Patterns Associated with Completion of Treatment for
Domestic Violence

by

Amina Porter

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
Department of Psychology
College of Arts and Sciences
University of South Florida

Major Professor: James Epps, Ph.D.
Maria dePerczel, Ph.D.
Mario Hernandez, Ph.D.
Katurah Jenkins-Hall, Ph.D.
Marilyn Myerson, Ph.D.
Doug Rohrer, Ph.D.

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ABSTRACT

This study investigated the differences in how domestically violent men processed social information before, during, and after the completion of treatment received from a Batterers Intervention Program in Florida.

Men receiving mandatory treatment for domestic violence as the result of a court order were exposed to a series of hypothetical scenarios involving their intimate partners and women with whom they were not intimately acquainted. The scenarios were sculpted to create negative feelings in the men, and cognitive processing patterns were investigated by testing their recall of social cues, their perception of intentionality and hostility, response consideration, response decisions, enactment ability, and response evaluation. Data was collected from participants prior to their first treatment session, after 14 weeks, and upon completion of treatment after 26 weeks. The cognitive processing patterns of domestically violent men from a control group not receiving treatment were tested at the same points in time.

Results of the study suggest that receiving treatment for domestic violence does have an effect on the cognitive processing patterns of domestically violent men. Namely, after receiving treatment, there is a greater consideration of more socially appropriate forms of behavioral responses, and less emotional comfort with intimate partner

aggression.

Implications of this study on research and treatment are discussed, and suggestions for improvement are made.

COGNITIVE PROCESSING PATTERNS ASSOCIATED WITH COMPLETION OF TREATMENT FOR DOMESTIC VIOLENCE

Introduction

Social scientists have shown a long-standing interest in the effect of marital quality on the emotional and psychological well being of individuals (Bradbury & Fincham, 1990). Marital distress is the most common reason people seek psychological help in the United States. The consequences of marital distress may be more serious than just hurt feelings. It is reported that 71% of maritally discordant couples seeking psychological treatment were involved in at least one episode of domestic violence (Cascardi, Langhinrichsen, & Vivian, 1992). Although the majority of the violence reported was reciprocal between husbands and wives (Kessler, Molnar, Feurer, & Appelbaum, 2001), impact and injuries sustained were more serious for wives than husbands. Wives were more likely to sustain severe injuries such as broken bones, broken teeth, concussions and injury to sensory organs. Additionally, wives who experienced marital aggression reported clinical levels of depressive symptomatology. Using physical aggression against one's spouse or intimate partner, called battering, is common. Over 50% of all women will experience physical violence in an intimate relationship, and for 24-30% of those women the battering will be regular and ongoing. It is estimated that a woman is beaten up by her intimate partner every fifteen seconds (National Coalition Against Domestic Violence, 1996).

There are many theories and perspectives about why men batter. Stress,

unemployment, poor impulse control, provocation by the victim, the use of alcohol and drugs, and inability to express feelings, have all been cited as potential reasons for intimate partner domestic violence of this type. Some of these "causes" have not provided much insight, because it is hard to describe why the aggression is directed at a specific target repeatedly, and why not all men handle similar situations in similar ways (Sonkin, Martin, & Walker, 1985). To attempt to explain these phenomena, some researchers have looked at historical and cultural factors that permit and encourage male domination over women, such as traditional subordinate gender roles. The literature on feminist education intervention suggests that men desire power and control, and that abuse works in getting men what they want (Augusta-Scott & Dankwort, 2002). Some researchers have looked to how biological factors link with violence. Over the years, aggression towards women has been seen as a neural flaw, or as a genetic mandate (Dutton, 1998). Soler, Vinayak, & Quadagno (2000) found that men with higher testosterone levels have self-reported higher rates of verbal and physical aggression towards their dyadic partners.

Only relatively recently have researchers begun to study the potential role of cognitive processes in marital violence. Much of the research in this area has its roots in the research base established for cognitive processes and aggression. As aggression is a concept that will be frequently discussed in this paper, it is necessary to define it at this point. Aggression can be viewed as the behavioral component of a specific area of human functioning. The other two components in the same constellation are anger and hostility. Anger is the emotional component, and hostility is the attitudinal component. According to cognitive-behavioral theory, these three components, acted upon in a social

context, are related and interactive (Epps & Kendall, 1995). Aggression can also be defined as a behavioral expression. According to Spielberger et al (cited in Epps & Kendall, 1995), the likely outcome of aggressive behavior is injury, punishment, or destruction of objects or persons in the environment. The next section will examine some of the theories about the causes of aggression in a social context.

Social Learning Theory

Bandura's (1973) social learning theory views the causes of behavior as being in the environment, and not in the organism. It suggests that actions are under external control. Social learning principles such as stimulus control (the ability to anticipate the probable consequences of different events) and vicarious reinforcement (learning by observing the consequences of others' behavior) are used to guide human behavior.

This theory differs from previous ones on aggressive behavior in that it suggests that aggressive acts are not merely internal impulses, and serve ends other than to inflict injury. Bandura states:

By aggressive behavior, or dominance by physical or verbal force, individuals can obtain valued resources, change rules to fit their own wishes, gain control over and extract subservience from others, eliminate conditions that adversely affect their well-being, and remove barriers that block or delay attainment of desired goals. Thus, behavior that is punishing for the victim can, at least on a short-term basis, be rewarding for the aggressor (Bandura, 1973).

In short, people are taught (by experiencing and / or observing positive reinforcement) to

find value in aggressive acts.

However, not all aggression is instrumental. All social behavior, including aggression, is extensively regulated by social cues. People learn to be aggressive via two main mechanisms, reinforcement and modeling. Children, for example, are often rewarded when they act aggressively. Consider the child who is praised for making a particularly vicious tackle during a football game. Or the child whose parents are visibly proud that he beat up a much larger boy.

Aggression is also learned through modeling. People are prone to imitate the behaviors of other persons - especially those whom they admire or like. A son who sees his father aggress or a boy who sees his favorite hero wipe out twenty-five villains may come to believe that violence is a good thing because “good” people act violently.

Learning to aggress is different from performing aggression. Whether someone will aggress depends on the conditions in the present situation. People will generally not aggress if they know that they will receive punishment, or if they employ self-evaluation (“I will not hit that little old lady because that would make me a bad person. It would be wrong.”).

Social learning theory suggests that, through modeling processes, as children witness conflict between their parents they learn strategies regarding the negotiation and resolution of intimate interpersonal conflict. Children who are exposed to violence between their parents will have the opportunity to learn coercive, violent strategies for marital conflict resolution.

Information-Processing Theory

Responses to situations occur as a function of a sequence of cognitive processes. Information from the environment is received through a temporary short-term memory store and is transferred to short-term memory through attention and chunking of information. If relevant to a person, the information is then transferred to long term memory through cognitive rehearsal - rethinking and mentally “practicing” the information. Accessing behavioral responses from long-term memory is based on associative networks and availability, and behavioral decision making is based on the application of heuristics and schemata (expectations) to accessed responses.

Huesmann (1987) proposed that social behavior is controlled to a great extent by programs for behavior that have been learned during a person’s early development (childhood). These programs can be described as cognitive scripts that are stored in a person’s memory and are used as guides for behavior and social problem solving. A script suggests what events are to happen in the environment, how the person should behave in response to these events, and what the likely outcome of those behaviors would be.

According to Huesmann, a child may enter any social interaction with a preexisting emotional state. The state consists of both a physiological arousal component and a cognitive component. The physiological dispositions may be stable (e.g., neuroanatomy) or relatively transient (e.g., dietary factors). The cognitive component of the emotional state will be influenced heavily by the child’s past reinforcement history and the attributions the child has made about those reinforcements. For example, a child

who attributes goal blocking to the actions of others may enter a social interaction with hostile feelings towards others. Sometimes recent environmental stimuli may trigger an instantaneous emotional state. Think of a child who suddenly sees an “enemy” in the hall. The sight will provoke both an instantaneous arousal and the recall of thoughts about the “enemy” that give meaning to the aroused state as anger.

Because emotional states persist for some time, a child may enter a situation in an emotional state unrelated to current situational cues, and that emotional state may influence the environmental cues to which the child does attend in that particular situation. A highly aroused, angry child may focus on just a few highly salient cues and ignore others that convey equally important information about the social situation. Then the angry child’s evaluation of these cues may be biased toward perceiving hostility when none is present. The current emotional state coupled with both the objective properties of the current stimulus situation and the evaluative cognitions cued by the stimulus situation determines which scripts will be retrieved from memory.

The script is reviewed for its appropriateness to and usefulness for the child. In aggressive children, a history of reinforcement for aggressive acts increases the likelihood that the child will reenact that script. Observation of violence in the family and the media also serves as a reinforcer to the appropriateness of aggressive scripts. Weiss, Dodge, Bates and Pettit (1992) suggest that physically abused children are more likely to aggress and to have a maladaptive social information processing style.

Social Information-Processing Theory

Dodge et al (1986, as cited in Epps & Kendall, 1995) combined the information-processing theory with Bandura's social learning theory to form a statement of processing steps followed during competent social performance. According to this model, a behavioral response to a problematic social situation is a function of several stages of processing. Skillful processing at each step will lead to socially competent performance within the situation, while biased or deficient processing will lead to deviant or aggressive behavior.

The first step of processing is to encode relevant information from the broad array of cues in any social situation. Selective attention is used to focus on the subset of cues which are important to that particular situation. Heuristic rules and cognitive schemata enable the processor to encode the relevant cues efficiently and accurately. If relevant cues are not encoded, the likelihood of a deviant response increases.

After the cues are encoded, they are represented in long-term memory and given meaning. In social situations, this often involves making interpretations of another person's intentions and attributions about the causes of the stimulus or event. Accurate social cue reading is making an accurate interpretation about the stimulus person's behavior when the behavior is clear. The interpretation of cues has been shown to be a function of selective attention to particular cues such as malicious or benign information, as well as a function of the use of self-schemata, such as those concerning the probable meaning of similar cues in past experiences.

The next step of processing is to access one or more possible behavioral responses

from long-term memory. Responses that are easily accessible because of frequency or recency of use are more likely to be used in the future.

A response decision is the next step of processing. The individual applies rules of response evaluation to determine whether or not a particular response is above the threshold of acceptability for enactment. Many factors are included in this evaluation of one or more responses. For example, one examines the strategy and efficiency of the response, evaluates the outcomes, considers the appropriateness of performing the act in the environment, and evaluates personal efficacy for enactment. Obviously, the threshold of acceptability and the hierarchy of each factor's importance is different for each person.

The final processing step is enactment. The individual uses protocols and scripts to transform the selected response into verbal and motor behaviors. Recall that a script is knowledge of a situation and the way events in that situation are supposed to unfold. Limited skills of enactment will lead to incompetent performance. Response monitoring is an aspect of enactment, in which the individual alters the performance for maximum effectiveness based on the social cues observed while performing the act. The behavior is being evaluated and altered as it is being enacted.

Social Skills

When one is able to progress successfully through the previous five steps outlined above, they are said to have "good social skills." McFall (1982) defines social skills as the specific abilities that enable a person to perform competently at particular social tasks. Specifically, social skills are conceived of as a series of sequential steps through

which incoming stimuli or situational tasks are transformed into responses, or task performances, judged as competent or incompetent. Each skill is considered a necessary but not sufficient condition for competent responding. Aggressive individuals may not be socially skilled in one or more of these areas, as research studies to date have shown.

Encoding Deficits

Aggressive children differ from non-aggressive children in the quality of their cue search. Dodge & Tomlin (1987) presented aggressive and non-aggressive children with a series of hypothetical situations in which they were provoked by a peer. The children were then given a series of relevant cues that supported the cause of the peer's behavior. The subject's task was to interpret the peer's behavior as hostile or benign, and give reasons for their interpretation. Aggressive children were less likely than non-aggressive children to cite the presented cues as justification for their interpretation, suggesting that the aggressive subjects did not code the cues as well as the other children. In addition, the order in which the cues were presented had an affect on the aggressive children's interpretations. The aggressive children displayed a "recency bias" in that their decisions about the intent of the peer tended to be based to the cues that were presented last. Thus, the aggressive children seemed less likely to use relevant cues when making interpretations of intent, and tended to emphasize more recent cues (Akhtar & Bradley, 1991).

Interpretational Biases

Numerous studies of children's intention-cue detection have indicated that aggressive children are biased to attribute negative or hostile intentions to others, particularly in ambiguous situations. This "hostile attributional bias" occurs whether the situation is actual or hypothetical (Akhtar & Bradley, 1991). Aggressive adults are subject to this bias as well. Epps and Kendall (1995) found that aggressive males and females were more likely to interpret the actions of others as hostile than non-aggressive individuals, even in situations where the social cues were unclear.

Response Search

Aggressive children and adolescents have difficulty generating alternative solutions to problematic situations. Of the strategies that they do generate, a relatively small number are relevant or effective (Akhtar & Bradley, 1991).

A common consideration when studying response search and evaluation is whether an individual is cognitively capable of generating and evaluating strategies. Difficulty in generating alternative solutions may result from a more general deficit in means-ends problem solving. Means-ends thinking has been defined as "the ability to conceptualize means and potential obstacles in moving towards a goal." Aggressive or "acting-out" children are aware of fewer individual steps (means) in problem solving, mention fewer potential obstacles, and are less cognizant of the importance of the passage of time (Akhtar & Bradley, 1991). Milich and Dodge (1984) factored out intelligence (as

measured by the Wechsler Intelligence Scale for Children-Revised (WISC-R) Full Scale IQ) in their analyses and still found that aggressive boys were biased in generating aggressive responses. Intelligence scores do not appear to be a factor in aggressive response generation.

Response Decision

Aggressive children may not necessarily lack knowledge of effective strategies, and part of the cause of aggressive children's preference for aggressive action may be due to the reinforcement history of these children. Peer-nominated aggressive children believe that aggression is associated with positive consequences. They also believe that aggression is a legitimate response which increases self esteem (Akhtar & Bradley, 1991).

Enactment

Aggressive children have been found to be deficient in their behavioral responses in social situations. They have difficulty maintaining appropriate eye contact and affect, and are deficient in asking questions and offering support to their peers. Although most studies have evaluated role-playing, naturalistic observations of aggressive children have also revealed a variety of enactment difficulties in their social interactions (Akhtar & Bradley, 1991). Researchers have also examined the enactment skills of domestically violent men in various situations with their wives. In many studies conducted, physically

abusive husbands, as compared to verbally abusive and withdrawing husbands, evidenced more offensive negative behaviors (e.g., negative gestures, nonverbal commands) and more negative voice qualities. Physically abusive husbands were also more likely to express more overt hostility (e.g., attribute problem to spouse, express disapproval, raise voice, badger) and more defensiveness (e.g., defending self, rejecting responsibility). In addition, over the course of an interaction, physically abusive men increased patronizing (e.g., condescending, sarcasm, rejection), uninvolved (e.g., aloof, reluctant to talk), and despairing (e.g., sad, hopeless) behaviors, while decreasing their problem-solving (e.g., generating solutions, cooperating) and warmth (e.g., happy, playful, involved) behaviors as the discussion progressed (Holtzworth-Monroe, 1992).

Although many studies have demonstrated a variety of enactment deficits in aggressive individuals, it is difficult to determine the extent to which these deficits are the result of problems with behavioral enactment itself or with social cognitive difficulties that involve an earlier step of the information processing sequence. Some apparent behavioral difficulties, for example, may be the result of skill deficits that involve the ability to accurately interpret the intentions of others (Akhtar & Bradley, 1991).

Potential Mediating Factor of Intelligence

There have been studies which have looked at intelligence and aggression (Tarter, Hegedus, Winsten, & Alterman, 1985, Donovan Westby & Ferraro, 1999), mostly within the context of criminal behavior. Impaired cognition may represent an important piece of the aggression puzzle. It is hypothesized that cognitive deficits, especially impulsivity,

poor planning ability, mental inflexibility, low verbal intelligence, and impaired attention, limit an individual's ability to cope with other biological and environmental vulnerabilities; these limitations, in turn, lead to feelings of frustration and anxiety and, ultimately, to difficulty with regulation of emotion and increased aggressive behavior (Elliott & Mirsky, 2002). However, the definitions of “intelligence” in the literature have been very broad (e.g. emotional intelligence, social intelligence, environmental adaptability, creativity, etc), so research has failed to provide a consistent link.

Social Skills Deficits in Domestically Violent Men

Using the social information processing theory as a model, Holtzworth-Monroe (1992) outlined the series of steps in which domestically violent men may have difficulty, or may be lacking in social skills. For example, a batterer may not attend to relevant cues regarding his wife's behavior, he may misinterpret her actions, he may have difficulty generating appropriate responses, and be more likely to choose an antisocial response, like violence, and feel more comfortable carrying it out.

Affective variables such as anger and hostility may serve as “transitory factors” that can disrupt the social information processing sequence. For example, Eckhardt, Barbour, & Davison (1998) found that during anger arousal, aggregate irrational beliefs and cognitive biases are articulated to a greater degree in domestically violent men, than in their nonviolent counterparts.

When doing research on social skills deficits in domestically violent men, it is important to determine which types of social situations are difficult for violent men to

handle competently. The type and quality of the relationship with the other person may affect the man's emotional arousal, and therefore, affect his social skills in that situation.

Effects of Treatment

There is a small but growing number of published studies that have surveyed the effectiveness of treatment programs that counsel abusers. This is still a new field, due to the relatively recent phenomena of group treatment for men who batter. These groups were developed with the encouragement of the Women's Movement, and in the mid- to late-1970s, were seen by advocates as a crucial component in the reduction of violence toward women. In the 1980s, batterer treatment groups often became a mandatory consequence of criminal prosecution, treatment groups proliferated, and their effectiveness was questioned. In the 1990s, the value, form, and success rates of these groups came under scrutiny (La Violette, 2002).

A popular way of determining whether a treatment program works is simply to see if the client batters again (through surveying the client or their partner, or reviewing subsequent arrest records). Most of those studies have examined treatment programs in which the client is self or spouse referred. Findings on the question of recidivism among batterers are problematic and elusive. This is because estimates have been based on judgments of program staff and self reports. Further complications arise from low response rates and the absence of control groups (Chen et al, 1989). High attrition is another problem. According to Gondolf & Foster's (1991) study, the attrition rate from inquiry to intake is 73%, from inquiry to counseling is 86%, from inquiry to 12

counseling sessions is 93%. Less than 1% of the initial inquirers actually complete the contracted 8 months of sessions. Groups of batterers evaluated are often the final products of low recruitment and high attrition, therefore questions about generalizability can be raised. Another issue is the measurement of effectiveness. In other words, how should violence reduction be operationalized? Many studies have simply compared the recidivism rate - that is, during a follow-up period, looked at whether the men were violent at all toward their intimate partners (Tolman & Weisz, 1995; Chen et al, 1989).

Chen et al (1989), to address the issue of skewed effectiveness results due to self-selection bias and high attrition, investigated recidivism rates in men who were court-ordered to treatment. This study found that when men attended 75% or more of the scheduled sessions, the recidivism rate was significantly lower than the control group. When men in the court-mandated treatment attended less often than 75% of the sessions, their recidivism rate was not significantly different from those who did not attend treatment at all. Not only does this have implications for policy and program planning (such as enforced attendance), but it also has implications for research development. For example, what are the men learning in treatment that reduces the number of violent episodes with their intimate partners?

There are a number of possible answers to that question. Could it be a matter of simply learning impulse control? Possibly not, because batterers often exercise a substantial amount of control. For example, battered wives often report that enraged husbands do not just strike out and slap; they use their fists and generally aim at parts of the body where the bruises do not show. They go for the breasts, the stomach, the base of the spine, and parts of the head hidden by hair (Sonkin, Martin & Walker, 1985).

Sonkin et al (1985) suggest that there are certain goals for batterers in treatment that contribute to long-term change. These include decreasing isolation and developing a support system, increasing feelings of personal control and power, increasing feelings of self-esteem, increasing responsibility for their behavior, increasing awareness of the dangerousness of violent behavior, increasing acceptance of consequences, increasing awareness of violence in society in general, developing communication skills, developing stress reduction skills, developing the ability to empathize with their partners, increasing the understanding of the relationship between violence and sex-role behavior, developing control over alcohol and/or drug use, and achieving or supporting other therapy goals. But, in addition to these changes in the clients, how does treatment affect the social interactions between the men and their intimate partners? Does it improve their social skills in real life situations? And are their social skills improved with only their intimate partners, or with women in general? These are the questions that this study will attempt to answer.

Additional Considerations for the Current Study

A problem which affects all areas of research involving human subjects, but is of particular concern to researchers in the sensitive areas of abuse, is the difficulty one encounters when trying to obtain valid data. There is a slim chance that the researcher will be able to observe the abusive behavior in its natural environment, and even less likely that the behavior will be expressed in a laboratory setting. Domestic abuse is usually a very private issue.

Researchers have had to rely on self-report measures to obtain this information

(Flournoy & Wilson, 1991; Holtzworth-Monroe & Hutchinson, 1993). As is common with self-reports, there may be self-presentation biases. Aiken and West (1990) suggest detection of these biases by using external criteria such as official reports or behavioral observations, and leading subjects to believe that their reports will be externally validated. To increase self-report validity, a researcher can minimize biased reporting by (1) informing participants that there is a distinction between the researcher performing the study and the staff of any program in which the participants are or will be involved; (2) leading the participants to believe that the research staff will validate their results against external criteria; (3) employing experienced interviewers, familiar with the difficulties of interviewing the specific target population; (4) wording self-report evaluation items which encourage explicit comparison to a known reference group familiar to the study participants; and (5) using self-report evaluation items which use objective, behavioral referents to anchor scales, e.g. symptom checklists are more useful than global ratings (Aiken & West, 1990).

As previously stated, when doing research on social skills deficits in domestically violent men, it is important to determine which types of social situations are difficult for violent men to handle competently. The first step is to determine whether violent men display social skills deficits in general (i.e. with a variety of people, across a variety of situations) or whether the deficits are evident only in certain social situations (i.e. marital interactions).

The current study investigated domestically violent men's interactions with their intimate domestic partners, and their interactions with non-intimate females. Differential responding across these situations would suggest that certain types of social situations are

more problematic for domestically violent men. For example, in a potentially less arousing interaction with a stranger, a violent man may act socially skilled. However, he may fail to use these same skills during an interaction with his spouse (Holtzworth-Monroe, 1992).

Differential responding may also be a result of the history of a violent man's interactions with his intimate partner. According to Dodge's Social Information-Processing Theory, an individual will most likely bring to mind for possible selection as a behavioral response, one that is strongly associated with specific mental representations of stimuli, or one that "holds a place at the top of the memory bin" (because of recency of presentation or a limited response repertoire) (Dodge & Crick, 1990). In other words, a domestically violent man, who has recently assaulted his intimate partner, or uses violence as one but of a few other methods for dealing with his intimate partner's "infraction", will be more likely to consider, and subsequently select, a violent response. He will learn to associate a violent response with a negative intimate partner interaction, but may not with a female stranger or acquaintance, because he has not developed that association.

Hypotheses

The current study tested these two sets of hypotheses:

Hypothesis Set I. Domestically violent men who had received treatment (14 weeks or the complete 26 week program) would (H1) perceive social cues more accurately; (H2) perceive less hostility; (H3) consider a greater proportion of prosocial

responses; (H4) be more likely to choose a prosocial response for implementation; (H5) feel more confident about enacting prosocial responses; and (H6) be more likely to feel that prosocial responses lead to positive outcomes in situations involving their intimate partners, non-intimate women, and women overall, than a comparison group of domestically violent men who had received no treatment. Men completing 26 weeks of treatment would show this pattern in comparison to those only completing 14 weeks of treatment.

Hypothesis Set II. After receiving 14 weeks of psychological treatment for domestic violence, men would (H1) perceive social cues more accurately; (H2) perceive less hostility; (H3) consider a greater proportion of prosocial responses; (H4) be more likely to choose a prosocial response for implementation; (H5) feel more confident about enacting prosocial responses; and (H6) be more likely to feel that prosocial responses lead to positive outcomes in situations involving their intimate partners, non-intimates, and women overall, than they did prior to treatment. It was hypothesized that, after receiving 26 weeks of psychological treatment, they would exhibit this pattern in comparison to pre-treatment and to 14 weeks of treatment. A comparison group of domestically violent men was assessed during the same time periods, and it was hypothesized that they would not demonstrate the same changes.

Method

Participants

Experimental (treatment) participants in this study were recruited from Joni Stewart and Associates, a psychological treatment program which specializes in treating domestic violence offenders. Joni Stewart and Associates facilitates treatment groups in Tampa, Plant City and Riverview, Florida. At the time of this project's inception, the court system in Hillsborough County routinely sentenced offenders to batterer's intervention programs classified as Level One, Level Two, or Level Three. Offenders were sentenced to particular programs based upon the severity and history of their abuse behavior. Level One program clients were first-time offenders or were perpetrators of mild to moderate violence against their partners, and were court-ordered to 14 weeks of treatment. Level Two program clients were repeat offenders, or were perpetrators of severe violence against their partners, and were court-ordered to 26 weeks of treatment. Level Three program clients were perpetrators of repetitive and severe violence against their partners and other individuals, and were court-ordered to 52 weeks of treatment. All experimental perpetrators participating in this study were assigned to Level Two domestic violence programs. (During the year recruitment began on this project, Level Two offenders constituted approximately 77% of individuals in batterer's intervention programs in Hillsborough County (Coulter, Byers, & Jayakumar, 2002)).

Through their attendance in Hillsborough county court-authorized treatment programs, participants learn to examine their abusive behaviors and the impact that these behaviors have on themselves and their partners. These programs provide practical

information by exploring non-controlling and non-violent ways of relating to their partners (Thirteenth Judicial Circuit, Administrative Office of the Courts, n.d.). In their treatment curriculum for domestic violence, Joni Stewart and Associates utilizes a cognitive-behavioral group therapy format, with heavy emphasis on the Duluth Model. In the Duluth Model, the problem of battering is understood from a sociopolitical perspective, rather than a psychological perspective. The focus is on understanding the exploitation of women through men's use of techniques (physical, sexual, and psychological aggression) that upset the balance of power between men and women. The main purpose for men's violence against women is seen to be an effort to maintain control and power rather than a result of psychological deficiencies. This approach focuses on the sexist attitudes that are precipitant of violence rather than the psychological causes. Heavy emphasis is placed on the man examining how his behavior has affected his partner or family, and ways that he can make them safe from his violence. Although this perspective has been questioned from both a practical and philosophical standpoint, many programs around the country use this philosophy as a basis for their treatment of male batterers (Dutton, 1998).

Comparison participants in this study were consumers of Bridgeway Incorporated, and Brownstone Life Skills Center, two community organizations in Philadelphia. These two established organizations offer support services to the residents of the community, such as the provision of food to needy families, job skills training, tutoring, and educational services. Consumers who were recruited for this study were direct or indirect consumers of some part of the organizations' various programs. For example, some men attended weekly meetings at Bridgeway which provided information of interest to the

community, such as employment opportunity information, or came to view educational and historical films, or were part-time volunteers of the agency. Some men's families were on Brownstone's food distribution list, or their children were attending the after-school tutoring program or the summer camp.

Experimental participants were administered the questionnaires prior to their first treatment session, after 14 weeks of treatment, and after the completion (26 weeks) of treatment. Comparison participants were administered the questionnaires at similar times - before the first week, after 14 weeks, and after 26 weeks. All participants were compensated in the amount of \$5 each for completing the first, second, and third parts of the study.

A total of 46 adult male volunteers participated in this study. Of this number, 18 were enrolled in treatment for domestic violence, and constituted the treatment group, and 28 were not enrolled in treatment, and constituted the comparison group. All of these men participated in the initial (first) administration of the study. Of the treatment group, 5 men participated in the second administration, and 4 participated in the third administration of the study. The remaining men either (1) chose to or were asked to no longer participate in the domestic violence program which they were attending at the time of recruitment; (2) relocated to another area and opted to participate in a comparable domestic violence program; (3) violated conditions of their probation or re-offended and were incarcerated; (4) denied further participation in this study; or (5) were unable to be contacted by the experimenter by telephone or letter. Of the comparison group, 7 men participated in the second administration, and 7 in the third administration. The remaining men either (1) declined further participation in this study; or (2) were unable to

be contacted by the experimenter by telephone or letter.

Measures

Marlowe-Crowne Social Desirability Scale

The Marlowe-Crowne Social Desirability Scale (M-C SDS) is a 33-item inventory used to account for response distortion with face valid instruments. The original form (Crowne and Marlowe, 1960) was developed by taking 50 items from inventories that met the criteria of cultural approval and were required to have insignificant abnormal or pathological insinuations if answered in the socially desirable or undesirable manner. Item analysis revealed that 33 items discriminated between low and high total scores at the .05 level. These final items comprise the final M-C SDS. The internal consistency coefficient (using the Kuder-Richardson formula) is 0.88. The test-retest correlation is 0.89 when administrations are one month apart. There have been several published short forms of the Marlowe-Crowne, which have been shown to have high reliability estimates. The one which was used in this study was piloted on a contemporary sample and has a reliability estimate of .70 (Ballard, 1992).

The MC-SDS was chosen for inclusion in this study over other social desirability scales because of the way social desirability is defined. In this scale, social desirability is defined as the subject's need to gain approval by answering in an acceptable and culturally sanctioned manner. This definition does not include the subjects' willingness to admit or deny symptoms.

Beck Depression Inventory

The Beck Depression Inventory (BDI) is a widely used 21-item instrument designed to assess the severity of state and trait depression in adults and adolescents. It can have a written or oral administration. For each item, the person is asked to circle the statement that best describes their experience in a cluster of four statements indicative of a mild to severe experience of that symptom. In non-psychiatric patients, the BDI has a one week test-retest reliability of 0.64 to 0.90. The BDI has been shown to be a valid measure of depressive symptomatology, with correlations of 0.55 to 0.73 between scores on the BDI and scores on other measures of depression.

Mini Mental State Examination

The Mini Mental State Examination (MMSE, Folstein, Folstein, & McHugh, 1975, as cited in The Hartford Institute for Geriatric Nursing, 1999) is a screening tool that can be used to systematically and thoroughly assess mental status. It is an 11-question measure that tests five areas of cognitive function: orientation, registration, attention and calculation, recall, and language. The MMSE has been validated and extensively used in both clinical practice and research.

State-Trait Personality Inventory

The State-Trait Personality Inventory (STPI) consists of six subscales: state and trait anxiety, state and trait curiosity, and state and trait anger (Spielberger, 1979). Subjects respond to the state items in terms of how they feel at a particular moment by rating themselves on the following four point scale: (1) Not at all; (2) Somewhat; (3)

Moderately so; and (4) Often. In responding to the trait items, they indicate how they generally feel by rating themselves on the following four point scale: (1) Almost never; (2) Sometimes; (3) Often; and (4) Almost always.

The range of Alpha coefficients for the Trait Anxiety, Curiosity, and Anger scales were 0.88 – 0.92, 0.93 – 0.96, and 0.88 – 0.92 respectively, while the coefficients for the State Anxiety, Curiosity, and Anger scales were 0.91 – 0.94, 0.91 – 0.94, and 0.93 – 0.94 respectively.

For the purpose of this study, only the state and trait anger subscales were used.

Emotional Response Scenarios

The Emotional Response Scenarios (ERS) are selected stories of hypothetical interactions between the subject and another person (Epps and Kendall, 1995). The ERS for this study were patterned after the scenarios in the Epps and Kendall study. Each scenario contained a "core section" and four "valence statements." The core section consisted of descriptive information which provided a situational backdrop and the observable behaviors of an interaction. For example, a core section could consist of the relationship between the person and the subject, the circumstances that bring them together, and any words or actions that pass between them both. The core section displayed ambiguous intent. The valence statements contained information providing evidence for either hostile or benign intent.

The Emotional Response Scenarios used for this study were developed as follows: (1) using the framework described in the previous paragraph, scenarios were generated that were sculpted to arouse anger, and be relevant to men currently residing with their

female dyadic partners; (2) generated scenarios were independently rated on a 1 to 9 scale for hostility of the initiator by 16 clinical psychology graduate students. Those scenarios which received mean ratings in the middle third of the scale were identified as "ambiguous intent" scenarios (the scenarios receiving mean ratings in the lowest third were identified as "benign", and those receiving mean ratings in the highest third were identified as "hostile"). Following identification of scenarios as ambiguous, the scenarios were confirmed as ambiguous as follows: (1) identified ambiguous scenarios were submitted to a group of raters who did not participate in the first rating process; (2) the raters judged the core section as being either hostile, benign or ambiguous, each of the valence statements as suggesting hostile, benign, or ambiguous intent, and then rated each complete scenario as having hostile, benign, or ambiguous intent (previously rated hostile and benign scenarios were randomly included in the set when the raters judged the entire scenarios to ensure that the raters judged the ambiguous scenarios as objectively as possible, and did not skew their ratings towards either extreme (benign or hostile)) based on comparison only with other ambiguous scenarios); (3) ambiguous scenarios were accepted and included in the study when at least 75% of the raters saw the core sections as ambiguous, and saw each valence statement as reflecting its intended effect.

Half of the interactive scenarios used for this study took place between the man and his female domestic partner; and half took place between the man and a woman with whom he was not intimately acquainted (a co-worker, stranger, friend, etc.). In the scenarios where the interaction was between the man and his female domestic partner, the term "wife" was used to describe the initiator. Men who were not legally married were asked to consider their current female intimate domestic partner when reading the

scenarios; men without a current intimate female domestic partner were asked to imagine that they had one. All of the scenarios had core statements, and four valence statements in the ratio previously described for ambiguous (2 hostile: 2 benign).

All of the scenarios were audiotaped, and verbalized by the same adult male speaker. Twelve of the eighteen ambiguous scenarios (six involving the wife, six involving the non-intimate female) were audiotaped and presented to the participants in that manner. Four of the twelve scenarios were presented during the first administration, four were presented during the second administration, and the remaining four were presented during the third administration. The order of presentation alternated between the type of initiator, so that in the first and third scenarios, the initiator was the wife, and in the second and fourth scenarios, the initiator was the non-intimate female. In each case, each participant was told to close his eyes, listen carefully to the scenarios, and to imagine that he was actually experiencing the events. After each participant heard each scenario, he was asked to recall the facts of the scenario by verbally responding to the audiotaped directive (1) "In your own words, describe *everything* you remember about what just happened." They were asked to rate the level of perceived intentionality and hostility of the initiator by verbally answering the audiotaped directives, (2) "I want to know if she meant for this to happen. On a scale from 1 to 10, with 1 meaning she definitely did *not* mean for this to happen and 10 meaning she definitely *did* mean for this to happen, please tell me if she meant for this to happen." and (3) "I want to know if her motives were hostile. On a scale from 1 to 10, 1 meaning her motives were definitely *not* hostile and 10 meaning her motives definitely *were* hostile, please tell me if her motives were hostile." To investigate response option generation, participants were then asked to

verbally respond to the question (4) "What are some of the things you *could possibly* do or say in this situation?" To investigate probable response decision, they were asked to verbally respond to the question, (5) "What would you *probably* do or say in this situation?"

Following this, the six remaining ambiguous scenarios (three involving the wife, three involving the non-intimate female) were presented to the participants. Two of the scenarios (one wife initiator, then one non-intimate female initiator), were presented at the first administration, two were presented at the second administration, and two were presented at the third administration. After hearing each scenario, the participant was given three response options (one passive, one aggressive, and one prosocial, as judged by independent raters prior to inclusion in the protocol) in the following format to investigate self-efficacy (to which the participant was asked to verbally respond), (6) "If this happened to them, some men would have chosen to (response). I want to know how easy or difficult would it be for you to do this if you tried. On a scale from 1 to 10, 1 meaning very easy and 10 meaning very difficult, how easy or difficult would this be for you to do if you tried?" The three types of responses (passive, aggressive, prosocial) were counterbalanced for each question to control for order effects. Finally, to investigate the participants' perception of the outcome of their prosocial, passive, and aggressive actions they were asked to verbally respond to the question, (7) "What would probably happen after you did that?"

For the open-ended questions that tested recall, response generation, response decision, and outcome, the participants had 20 seconds to give their response; for the questions which were to be answered by the likert scale, they had 10 seconds. The end of

each time period was indicated by a tone, which prompted the participant to stop speaking and prepare to listen to the next directive.

Participant responses were captured on audiotape during each administration, and subsequently transcribed by the researcher.

Procedure

Experimental participants were recruited in the following manner: just after the orientation session, staff for the domestic violence treatment program informed clients that there was a project available that was open to men enrolled in the Levels One and Two domestic violence treatment program. They were informed that the study was strictly voluntary, and they would be compensated for their involvement. Interested men met with the study representative, who waited outside of the orientation room. The study representative explained the project in more detail and answered any questions that the client had. If the client was interested, he went with the representative at that time (or a later time mutually agreed upon prior to the first session) to a private room where the first administration was conducted. During the thirteenth week of the participant's treatment, the participant was contacted and an appointment was scheduled to meet after the fourteenth treatment session, where the same procedure was followed. Finally, during the twenty-fifth week of treatment, the participant was contacted and an appointment was scheduled to meet after the twenty-sixth (and last) treatment session. After the completion of each administration, the participant was thanked and given the opportunity to ask any additional questions.

Comparison participants were informed about the project by the directors of the community organizations where they or their families received services. Men who were known to have a history of domestic violence were informed that there was a project available in which they could participate. If they were interested, the organization director would give the experimenter's contact information to the participant, who would contact the experimenter and set an appointment to meet for the first administration.

Administration 1

Each participant met with the experimenter individually. The experimenter reviewed the consent form with the participant, who signed it and returned it to the experimenter. He was then asked to fill out a Demographic Questionnaire (Appendix A), the Marlowe-Crowne Social Desirability Scale – Ballard's Short Form (Appendix B), the Beck Depression Inventory (Appendix C), the Mini-Mental Status Examination (Appendix D), and the state and trait anger scales on the State-Trait Personality Inventory (Appendix E).

The participant was then provided with both a tape player and tape recorder that included a blank audiotape. The participant was instructed not to touch the tape recorder, or in anyway interfere with the recording of his answers. He was then presented with a practice trial audiotaped scenario and was asked to speak the answers to questions that follow into his provided tape recorder. This gave the participant an opportunity to become familiar with the format of the scenarios, and with answering the questions verbally in the time allocated. After the participant had a chance to practice, he was allowed to ask questions about anything he did not understand. When the participant

understood the instructions and felt comfortable with the format, he was asked to respond to the six Emotional Response scenarios selected for Administration 1 of the study (Appendix F).

Upon completion of the Emotional Response Scenarios component, the materials were collected and the participant was given another chance to ask questions about the study. The participant was given a \$5 participation fee and was told that he would be contacted by the experimenter to answer similar questions in fourteen weeks (Administration 2) and again in twenty-six weeks (Administration 3).

Administrations 2 and 3

The participant met the experimenter at the scheduled meeting time (fourteen and twenty-six weeks later, respectively). He filled out the Marlowe-Crowne Social Desirability Scale, Beck Depression Inventory, and the state and trait anger scales of the State-Trait Personality Inventory. The participant was given the instructions as he was in Administration 1, filled out the questionnaires, and listened and responded to the Emotional Response Scenarios developed for the respective parts of the study (Appendix G and Appendix H, respectively). After the materials were collected, the participant was given a chance to ask additional questions about the study, and received \$5. After Administration 2 he was reminded that he would be contacted by the experimenter to answer similar questions twelve weeks later (Administration 3).

Results

All analyses have been conducted using the Statistical Packages for the Social Sciences 11.0 for Windows computer data analysis program.

Preparation of the Data for Analysis

Three independent raters (two men and one woman) who did not participate in the rating process) volunteered to code and rate the open-ended questions which were to be analyzed. Each rater was from a different geographical region of the United States, and had at least some college education. The raters were given instructions and definitions of each type of response. They were given practice sample responses that they coded and rated. Raters were considered sufficiently trained when inter-rater reliability was 100% on all potential codings of each type of scenario.

Coding of Open-Ended Questions

Participants' responses to the open-ended questions were coded into numerical data and analyzed. For the first question: "In your own words, describe *everything* you remember about what just happened," each participant's responses were transcribed, and each complete thought (containing a subject and verb and ending with a conjunction or phrase ending punctuation symbol) was submitted for rating by the three independent judges (trained raters). Each rater first determined from which section (the core or the

valence) of the scenario the information came. Each thought was categorized either as an event that the participant remembered that was related to the core section of the scenario, an event that the participant remembered that was related to the valence statement section of the scenario, or an erroneous event, which the participant "remembered" that was not related to any part of the scenario. For the purpose of this study, only the events remembered about the valence statements (social cues) were analyzed. Each participant's valence statement responses for each scenario were then judged by the three trained raters, who decided whether each event that the participant recalled was a factual representation of an actual valence statement. Agreement between all three raters on the data occurred approximately 80% of the time; in the event of a discrepancy between the ratings, the response was coded as at least two out of the three raters coded the answer. For each participant, the percentages of the two scenarios involving the wife or intimate partner were averaged, which yielded an "intimate encoding accuracy score." For each participant, the percentages of the two scenarios involving a non-intimate female initiator were averaged, which yielded a "non-intimate encoding accuracy score." These two scores, when averaged, yielded an "overall encoding accuracy score" for each participant to be included in the statistical analyses.

For the fourth question, "What are some things you *could possibly* do or say in this situation?" each statement within the responses was coded by three independent judges using coding instructions that were designed for the study (Appendix I). The responses were categorically coded as (1) aggressive, (2) passive/inept, and (3) prosocial/assertively competent. A participant's statement was included in the analysis if at least two out of three independent judges agreed on a particular code (agreement

between all three judges occurred approximately 75% of the time), and that code was assigned to the participant's statement. The percentage of aggressive, passive, and prosocial responses made during each administration for each group was included in the statistical analyses.

For the fifth question, "What would you *probably* do or say in this situation?" the responses were coded into the categories described in the previous paragraph, and included in the analyses.

The participants' answers to the seventh question, "What would probably happen after you did that?" were categorized into (1) short-term (addresses the current situation) or long term (affects the likelihood that it would happen again) (2) self-focused, other-focused, or both-focused; (3) positive, neutral or negative outcomes. The independent judge method previously described was used for categorizing these responses.

Descriptive Statistics

The men in this study assigned to the treatment group were significantly younger ($t(1,40) = -3.58$, $p = .00$) with an average age of 33.71 (SD = 10.91), than the men assigned to the comparison group with an average age of 46.24 (SD = 11.31). "Black" was the self-reported racial identification of 41.2% of the treatment group and 92.3% of the comparison group, "Hispanic" was the self-reported racial identification of 11.8% of the treatment group and none of the comparison group, and "White" was the self-reported racial identification of 41.2% of the treatment group and 3.8% of the comparison group. There was no significant difference between groups in the percentage of men reporting a

religious affiliation, the percentage who were employed, the level of educational attainment, and household income. There was also no significant difference in the average number of children in the households of the experimental participants, and in the households of the comparison participants. There was no significant difference in the length of marriage or cohabitating relationship between the experimental participants and the comparison participants.

There was no significant difference in the treatment group men's average score and the comparison group men's average score on the Mini Mental Status Exam, suggesting no difference in the current mental functioning between the two groups.

Between-Groups Preliminary Analyses

During the first administration, there was no significant difference in the tendency for men to skew their responses in a socially desirable manner, as indicated by the mean scores for the men in the group receiving treatment and the men in the group not receiving treatment on the Marlowe-Crowne Social Desirability Scale. With regards to the anger that the men were feeling at the time of the administration, the men in the group receiving treatment ($M = 10.53$, $SD = 1.74$) reported feeling less anger ($t(41) = -2.29$, $p = .03$) than the men in the group not receiving treatment ($M = 14.77$, $SD = 6.81$), as reported by their scores on the State-Trait Personality Inventory (State Anger Subscale). With regards to the anger that the men reported generally feeling, there was no difference between the men in both groups, as reported by their scores on the State-Trait Personality Inventory (Trait Anger Subscale).

During both the second and the third administration, there was no significant

difference between groups in the tendency for men to skew their responses in a socially desirable manner, as indicated by the mean scores for the men in the treatment group and the men in the comparison group on the Marlowe-Crowne Social Desirability Scale. There was no significant difference in the level of anger that the men in the group receiving treatment were feeling at the time of this administration, and the level of anger that the men in the group not receiving treatment were feeling as reported by their scores on the State-Trait Personality Inventory (State Anger Subscale). With regards to the anger that the men reported generally feeling, there was no difference between the men in the group receiving treatment and the men in the group not receiving treatment as reported by their scores on the State-Trait Personality Inventory (Trait Anger Subscale).

During the third administration, there was no significant difference in the tendency for men to skew their responses in a socially desirable manner, as indicated by the mean scores for the men in the group receiving treatment and the men in the group not receiving treatment on the Marlowe-Crowne Social Desirability Scale. There was no significant difference in the level of anger that the men in the group receiving treatment were feeling at the time of this administration, and the level of anger that the men in the group not receiving treatment were feeling, as reported by their scores on the State-Trait Personality Inventory (State Anger Subscale). With regards to the anger that the men in both groups reported generally feeling, there was no difference between the men in the group receiving treatment and the men in the group not receiving treatment, as reported by their scores on the State-Trait Personality Inventory (Trait Anger Subscale).

Within-Groups Preliminary Analyses

Neither group displayed significant differences between administrations one, two and three on the Marlowe-Crowne Social Desirability Scale, Beck Depression Inventory, or State-Trait Personality Inventory anger subscales. This suggests that each group's tendency to report in a socially desirable manner, severity of depression, and levels of state and trait anger did not change between administrations. In addition, there were no differences in racial composition found among the first, second, and third administrations, suggesting no differential attrition based on race in this study.

Primary Analyses

To test hypotheses 1-5, a series of paired-samples t-tests was used, which determined if there were any differences in the dependent variables for each group over administration time (i.e. Treatment group (Administration 1 vs. Administration 2, Administration 2 vs. Administration 3, Administration 1 vs. Administration 3) and Comparison group (Administration 1 vs. Administration 2, Administration 2 vs. Administration 3, Administration 1 vs. Administration 3)). A series of independent-samples t-tests were used to determine if there were any differences between groups at each administration time (i.e. (Administration 1 (Treatment vs. Comparison), Administration 2 (Treatment vs. Comparison), and Administration 3 (Treatment vs. Comparison))).

To test hypothesis 6, that positive outcomes were more likely to be expected from prosocial responses, a chi-square analysis was attempted. Unfortunately, for this

particular analysis, there was insufficient power to yield any meaningful results, so the data for this analysis is not included in this paper.

Each of the steps described above were analyzed for both the men's responses in scenarios involving intimates, scenarios involving non-intimates, and scenarios involving women overall, to determine if changes were made in each area.

Comparisons of Groups by Administration Time

First Administration. Table 1 outlines the comparisons between the treatment and the comparison groups for the variables measured during the first administration.

There was no significant difference in the percentage of social cues accurately recalled by men in the treatment group and men in the comparison group in situations involving their intimate partners. There was, however, a significant difference between the two groups ($t(12) = 2.45, p = .03$) with the treatment group ($M = 91.42, SD = 15.26$) recalling a higher percentage of social cues accurately than the comparison group ($M = 62.50, SD = 17.68$) in situations involving non-intimates and a difference ($t(8) = 2.55, p = .03$) between the two groups with the treatment group ($89.92, SD = 14.83$) recalling cues more accurately than the comparison group ($M = 50.00, SD = n/a$) in situations overall.

There was no significant difference between the treatment group and the comparison group in the perception of intent, the perception of hostility, the percentage of aggressive, passive, and prosocial responses considered for possible enactment, and the percentage of aggressive, passive, and prosocial responses chosen for probable enactment in scenarios involving intimates, no difference between groups in scenarios

involving non-intimates, and no difference between groups in scenarios involving women overall.

There was no significant difference between the two groups regarding their ability to enact an aggressive, passive, or prosocial response toward intimates, and no difference in their ability to enact those responses towards non-intimates. While there was no difference between the two groups in their perceived ability to enact aggressive and prosocial responses toward women overall, the comparison group ($M = 7.47$, $SD = 2.59$) reported that it would be more difficult ($t(26) = -2.57$, $p = .016$) to enact a passive response than did the treatment group ($M = 5.08$, $SD = 2.29$) toward women overall.

Second Administration. Table 2 outlines the comparisons between the treatment and the experimental groups for the variables measured during the second administration.

In social situations involving intimates, non-intimates, and women overall, there was no difference in the recall accuracy of encoded cues, and perception of intentionality between the treatment group and the comparison group.

There was no significant difference between the two groups on their perception of hostility in situations involving intimates. However, in situations involving non-intimates, the comparison group ($M = 5.00$, $SD = 0.00$) perceived more hostility ($t(4) = 2.80$, $p = .049$) than the treatment group ($M = 2.17$, $SD = 1.76$). In addition, in situations involving women overall, the comparison group ($M = 5.00$, $SD = .43$) perceived more hostility ($t(4) = -3.18$, $p = .033$) in women than the treatment group ($M = 2.75$, $SD = 1.15$).

There was no significant difference between the treatment group and the

comparison group with regards to the percentage of aggressive, passive, and prosocial responses considered for possible enactment, and no difference in the percentage of aggressive, passive, and prosocial responses chosen for probable enactment in situations involving intimates, non-intimates, and women overall.

There was no difference between the two groups in their ability to enact an aggressive response in any type of situation (intimates, non-intimates, and women overall), nor was there any difference between the two groups in their ability to enact a prosocial response in any type of situation. There was no difference between the two groups in their ability to enact a passive response toward intimates or women overall. However, there was a difference ($t(5) = -2.79, p = .038$) between the two groups in their ability to enact a passive response toward women outside of the intimate relationship. The comparison group ($M = 7.00, SD = 2.00$) found it more difficult to enact a passive response towards non-intimates than did the treatment group ($M = 2.67, SD = 2.08$).

Third Administration. Table 3 outlines the comparisons between the treatment and the comparison groups for the variables measured during the third administration.

In social situations involving intimates, non-intimates, and women overall, there was no difference in the recall accuracy of encoded cues, perception of intentionality, perception of hostility, or percentage of aggressive, passive, and prosocial responses considered for possible enactment between the comparison and treatment groups.

There was no significant difference between the comparison and treatment groups with regards to the percentage of passive and prosocial responses that they reported that they would probably enact with intimates, non-intimates, and women overall. With

regards to aggressive responses, men in the treatment group ($M = 33.33$, $SD = 19.09$) reported that they would probably enact a higher percentage of aggressive responses ($t(5) = 2.80$, $p = .04$) than men in the comparison group ($M = 4.13$, $SD = 8.25$) towards their dyadic partners. There was no difference between the percentage of aggressive responses chosen for probable enactment towards non-intimates and women overall.

There was no significant difference reported in the ability of the two groups to enact an aggressive, passive, or prosocial response towards intimates, non-intimates, or women overall.

Comparisons of Administration Time by Group

Considerations for the Following Within-Subjects Contrasts. The probability level for all analyses in this study was set at 0.05, standard for empirical investigations in psychology field. However, the a-priori assumption in this study was that there was a difference between the dependent variables at each administration time (1 vs. 2, 2 vs. 3, 1 vs. 3). To test this hypothesis, multiple planned comparisons on the same data were required. Unfortunately, this process increases the likelihood that one will find significance due to chance, and not necessarily due to the nature of the data. The results presented in the following text are a report of these multiple planned comparisons.

To reduce the likelihood of finding false significance, statisticians recommend using the Bonferroni correction, a procedure in which the probability level is reduced as a function of the number of comparisons planned. In this study, there were three comparisons planned in the data, so the recommended probability level of 0.05 was

reduced to 0.0167. In Tables 4 – 10, significance is reported at both probability levels.

Treatment Group.

Comparisons of Administrations 1 and 2. Table 4 outlines the comparisons between variables measured at administrations 1 and 2 for the treatment group.

There was no significant difference between administrations 1 and 2 in social cue recall, perception of intent and perception of hostility, percentage of aggressive, passive, and prosocial actions considered for possible enactment, percentage of aggressive, passive, and prosocial actions that reportedly would be chosen for probable enactment, or ability to enact an aggressive, passive, and prosocial act. This pattern was the same for scenarios involving intimates, non-intimates, and women overall.

Comparisons of Administrations 2 and 3. Table 5 outlines the comparisons between variables measured at administrations 2 and 3 for the treatment group.

There was no significant difference between the second and third administrations the recall accuracy, perception of intentionality, and perception of hostility with regards to situations involving intimates, non-intimates, and women overall.

There was no significant difference found between the second and third administrations in the percentage of aggressive responses men in treatment possibly enacted in scenarios involving intimates, non-intimates, and women overall. There was no significant difference found between the second and third administrations in the

percentage of possible passive responses enacted in scenarios involving intimates, non-intimates, and women overall. There was a significant difference ($t(2) = -7.13, p = .019$) found between the second ($M = 34.67, SD = 16.74$) and third ($M = 94.50, SD = 9.53$) administrations in the percentage of possible prosocial responses considered in scenarios involving intimates, but not in situations involving non-intimates. There was also a significant difference ($t(2) = -14.47, p = .005$ (two-tailed)) in situations involving other women overall between the second ($M = 61.50, SD = 11.03$) and third ($M = 89.75, SD = 9.33$) administrations.

There was no significant difference found between the second and third administrations in the percentage of aggressive, passive, and prosocial responses the treatment group reported that they would probably enact, nor in the ability to enact an aggressive, passive, or prosocial response, in scenarios involving intimates, non-intimates, and women overall.

Comparisons of Administrations 1 and 3. Table 6 outlines the comparisons between variables measured at administrations 1 and 3 for the treatment group.

There was no significant difference between the first and third administrations in the recall accuracy, perception of intent, perception of hostility, and percentage of aggressive, passive, and prosocial responses considered for possible enactment in situations involving intimates, non-intimates, and women overall.

There was no significant difference found between the first and third administrations in the percentage of aggressive responses the treatment group reported that they would probably enact in scenarios involving intimates, non-intimates, and

women overall. There was no significant difference found between the first and third administrations in the percentage of probable passive responses enacted in scenarios involving intimates, and non-intimates. There was, however, a lower ($t(3) = 7.38, p = .01$) percentage of probable passive responses chosen for enactment in the first ($M = 31.75, SD = 16.42$) than in the third ($M = 12.38, SD = 15.24$) administration in situations involving other women overall. Finally, there was no significant difference found between the first and third administrations in the percentage of probable prosocial responses reportedly chosen in scenarios involving intimates, non-intimates, and women overall.

The men reported that they would have less difficulty ($t(2) = -8.50, p = .014$) acting aggressively towards intimates in the first administration ($M = 3.67, SD = 2.31$) than they would in the third administration ($M = 9.33, SD = 1.15$). However, there was no difference between the first and third administrations between the men's ability to enact a passive or a prosocial response towards intimates, or their ability to reportedly enact an aggressive, passive, or prosocial response towards non-intimates and women overall.

Comparison Group.

Comparisons of Administrations 1 and 2. Table 7 outlines the comparisons between variables measured at administrations 1 and 2 for the comparison group.

There was no significant difference in the recall accuracy of social situations involving intimates. There was a lower recall accuracy ($t(5) = -3.48, p = .02$) in the first

($M = 54.17$, $SD = 33.23$) administration than in the second ($M = 85.42$, $SD = 20.03$) administrations with respect to situations involving non-intimates. There was also a lower recall accuracy ($t(5) = -2.62$, $p = .05$) in the first ($M = 67.08$, $SD = 15.03$) than in the second ($M = 77.08$, $SD = 9.41$) administration with respect to situations involving women overall.

There was no difference between the first and second administrations in the perception of intent, the perception of hostility, and the percentage of aggressive, passive, and prosocial responses men in the comparison group reported that they could possibly enact in situations involving intimates, non-intimates, and women overall.

There was no significant difference in percentage of aggressive responses men in the comparison group reported that they would probably enact with intimates, non-intimates, and women overall between the first and the second administrations.

There was no significant difference in percentage of passive responses men not in treatment reported that they would probably enact with intimates in the first and the second administrations, and that they would probably enact with non-intimates in the first and second administrations. However, in situations involving women overall, men in the comparison group reported that they would probably choose a higher percentage ($t(3) = -7.02$, $p = .01$) of passive responses for enactment during the second administration ($M = 46.88$, $SD = 6.25$) than during the first administration ($M = 19.25$, $SD = 10.70$).

There was no significant difference in percentage of prosocial responses men not in treatment reported that they would probably enact with intimates in the first and the second administrations, and that they would probably enact with non-intimates in the first and second administrations. However, in situations involving women overall, men in the

comparison group reported that they would probably choose a higher percentage ($t(3) = 3.77, p = .033$) of prosocial responses for enactment during the first administration ($M = 67.69, SD = 8.62$) than they would during the second administration ($M = 34.38, SD = 18.75$).

There was no significant difference between the first and second administrations in the men's reported ability to enact an aggressive, passive, and a prosocial response with intimates, with non-intimates, or with women overall.

Comparisons of Administrations 2 and 3. Table 8 outlines the comparisons between variables measured at administrations 2 and 3 for the comparison group.

There was no significant difference in the recall accuracy, perception of intent, nor in the perception of hostility of social situations involving intimates, non-intimates, and women overall between the second and third administrations.

There was no significant difference between the second and third administrations in the percentage of aggressive, passive, and prosocial responses men in the comparison group reported that they could possibly enact and would probably enact with intimates, non-intimates, and women overall.

There was no significant difference between the second and third administrations in the men's ability to enact an aggressive, a passive, and a prosocial response with intimates, with non-intimates, or with women overall.

Comparisons of Administrations 1 and 3. Table 9 outlines the comparisons between variables measured at administrations 1 and 3 for the comparison group.

There was no difference in the recall accuracy of social situations, perception of intent, nor in the perception of hostility between the first and third administrations in situations involving intimates, non-intimates, and women overall.

There was no significant difference in the percentage of aggressive, passive, and prosocial responses men in the comparison group reported that they could possibly enact with intimates, non-intimates, and women overall in the first and the third administrations.

There was no significant difference in percentage of aggressive, passive, and prosocial responses men in the comparison group reported that they would probably enact with intimates, non-intimates, and women overall in the first and the third administrations.

There was no significant difference between the first and third administrations in the men's ability to enact an aggressive, passive, and prosocial response with intimates, with non-intimates, or with women overall.

Discussion

A notable consideration is that the number of individuals participating in this study was relatively small, particularly during the second and third administrations. Therefore, the power of the statistical analyses was generally low. Any conclusions drawn based on the analyses are exploratory in nature. However, statistically significant findings in the study are especially encouraging, as they were revealed in spite of the low power, which indicates a robust effect.

The results of this study verified the hypotheses that men who had received fourteen weeks of treatment would perceive less hostility in the actions of non-intimates and women overall than their comparison group counterparts.

The results of this study also verified the hypothesis, that after receiving psychological treatment for domestic violence, men would consider a greater proportion of prosocial responses for enactment with intimates and women overall, than they would prior to completing treatment.

Additionally, the study found that men who had received treatment would report they would have more difficulty enacting an aggressive response with intimates after receiving treatment, than they would have prior to receiving treatment. Their comparison group counterparts did not show this pattern over the same time period. It also found that men who had received treatment would report that they would find it easier to enact a passive response in situations involving non-intimates, than their comparison group counterparts.

While the other hypotheses of this study could not be specifically verified, the results suggest that there is some cognitive change. Specifically, after receiving treatment, there was a greater consideration of more socially appropriate forms of behavioral responses, and less emotional comfort with intimate partner aggression. A man who has more prosocial options available to him, and who is not comfortable enacting an aggressive response may be less likely to use aggression as an option in a difficult interpersonal situation.

These findings also suggest that treatment for domestic violence may be especially helpful in assisting men to develop a greater repertoire of positive, non-violent

response options towards intimates, which will not only decrease the likelihood of an interpersonal dispute ending in injury and decrease the chances of criminal justice involvement, but it will have the added benefit of improved dyadic relationships. The fact that this pattern was shown with intimates (but not with non-intimates) may be a function of the treatment curriculum, which places heavy emphasis on the man's household and relationship with his partner.

The specific mechanisms by which these changes take place are still not fully understood, especially given the variations allowed within the standard curriculum. For example, is it that a better-developed sense of responsibility and accountability makes a person feel more powerful, and therefore less likely to desire the use of aggression to overcome powerlessness? Could it be that discussions of alternative prosocial interactions allow a man to mentally practice and behaviorally utilize these skills? If there is a male and female facilitator (which is a "best practice" suggestion for treatment groups in many states), are the men exposed to, and do they internalize, a model of prosocial interactions between equals? One must also consider the influence of non-specific therapeutic variables. There are numerous possible mechanisms for these changes, and this is a field in which, given the urgent need for awareness and intervention, practice based on theory has preceded study.

An important feature of this study is that it looked at the process of cognitive changes in men who had committed intimate partner violence. Unlike previous studies which primarily looked at a "snapshot" of batterer thought and / or behavior at one point in time (usually prior to any intervention), and studies which looked at the overall recidivism rate after an intervention, this study was able to track a particular group over

the course of their treatment, and determine if and where the changes actually occurred. Perhaps future studies could look at certain types of cognitive changes and their correlation with recidivism, and utilize these findings to make recommendations regarding implementation of content into the treatment curriculum that addresses those cognitive changes that have the highest correlation with the lowest recidivism rates. When looking at recidivism however, future studies should take care to not limit themselves to official arrest records, as the chances of being re-arrested for domestic violence is only a tiny fraction of actual abuse (Bennett & Williams, n.d.), and the overall level of “success” is likely to be massively overrated (Robertson, 1999).

The other notable contribution is to the literature on treatment effectiveness. Much of the previous literature on recidivism has had to depend on re-arrest records (which reveal a fraction of the actual violence), victim reports (who often could not be found), or perpetrator self-reports (which are usually skewed downward) (Wolf, Ly, Horbert, & Kernic, 2003). There has also been concern that these programs, instead of being vehicles for positive change, actually produce a better educated and more effective batterer (Robertson, 1999), one who learns to operate under the radar of the criminal justice system when using aggressive and intimidating tactics towards his partner. Information on thought and behavioral changes coming directly from the batterer, yet which are not threatening for the batterer to reveal to the experimenter, is a valuable resource in determining if and how the intervention is really working.

This study was able to obtain data from those currently involved in the domestic violence criminal justice system, and those currently not. However, the paucity of demographic and cognitive differences between the groups during the first administration

indicates that these two groups may be subgroups of the same population. Not only does this suggest that the group of men not attending treatment was a reasonable comparison group for this study, but it is also an encouraging finding for the researchers in this field who, due to limited resources and contacts, have had to rely on obtaining data primarily from the most convenient available source - the pool of potential subjects currently confined within the boundaries of the criminal justice system. It is possible that conclusions drawn on data obtained by convicted offenders pre-treatment may generalize to the larger population of domestically violent men.

A residual benefit for the participants of this study (albeit one which was unexpected and which may have weakened the strength of the experimental design) was that the assessment process itself may have affected the men's cognitive processing patterns. This may help to explain some of the changes in the comparison group between the first and second administration, like improved recall accuracy. Many men reported that listening to the scenarios was "fun" and that it made them think about situations that had really happened to them in the past and how they had handled those situations. In fact, the community directors (who were the contacts for the men in the comparison group) informed us that some of the men mentioned that they thought for several days after participating about the questions that were asked, and wanted to know if they could participate again. A couple of men reported that just talking to someone for an hour about their thoughts and feelings made them feel important; being poor and relatively uneducated, they felt that no one really cared to listen to what they had to say about anything.

Men charged with a domestic violence offense may feel the same way. Once

convicted, many of their life choices are made and monitored by someone else – the type and duration of the community service they perform, the amount of the fine they pay, the type of contact they can have with their dyadic partners, and the type and duration of treatment they receive. With respect to their sentence, they may feel as if it doesn't matter what they think.

But it does matter. Treatment as a preventative measure to prevent future victimization is, of course, the top priority. However, beyond the assurance of victim safety and injury prevention, rehabilitation – which implies a positive return to life and society – has to be given serious attention. We need to obtain continuous feedback from our clients about how this process is working - for them and within them - so that our intervention efforts will not only yield lower rates of violence in our communities, but also an individual desire for rehabilitation and a personal commitment to maintain a higher quality of life.

Limitations of the Study

Due to the participants of this study receiving treatment from various groups in only one program, we should not assume that these findings necessarily generalize to the larger community of men who commit intimate partner violence and who are receiving treatment. Treatment programs vary widely, with respect to, among other things, the duration of time in treatment, training, background, and theoretical orientation of the providers, the culture of the organization and the surrounding community. It is possible that men attending different batterer intervention programs will exhibit different

cognitive processing patterns over the course of their treatment. However, it can be reasonably inferred that the program used in this study was typical of court-ordered domestic violence treatment programs in the state of Florida. According to the State of Florida legislature, for each program treating intimate partner violence to be certified as a “Batterer’s Intervention Program” and approved by the monitoring body, the Florida Department of Corrections, to be appropriate for court mandate, it has to meet a strict set of standard treatment guidelines. These guidelines include (1) the use of a specific model in which a system of batterer utilization of power and control over a victim are addressed, (2) content which includes behavioral responsibility, behavioral identification, improving social skills and support systems, learning emotional management techniques, recognizing the effects of distorted thinking and violent behavior, and (3) an intervention which is “psycho-educational” (it treats violence as a learned system of behavior due to expectations, beliefs and attitudes which can be unlearned). Furthermore, state certified programs must submit to unconditional compliance with these current guidelines, and periodic review. (Florida Department of Corrections, n.d.). In addition, the program utilized by Joni Stewart and Associates is not only certified by the Florida Department of Corrections, but draws its curriculum from the Duluth Model of domestic violence intervention, which addresses domestic violence as a deliberate assertion of power and control motives rather than a loss of emotional control. This is congruent with the theoretical model required by the state of Florida. Due to its educational approach, based in feminist theory, the Duluth Model is one that is recognized nationally as a “best practice” model on which many programs are based (Robertson, 1999). Mankowski, Wilson, Silvergleid, Chamberlain, & Huffine (2002) report that the vast majority (61%)

of batterer intervention programs that they surveyed report at least some use of the Duluth model in the curriculum of their program, and many others (30%) utilize the Duluth curriculum in its entirety. While there is some diversity in the philosophical orientation and curriculum of programs, clearly the Duluth model is quite influential. Furthermore, mandatory standards (on philosophy, protocol, staff qualifications, and intervention), such as the ones used in Florida, for certification as a “Batterer’s Program” are remarkably similar between states (Austin & Dankwort, 1997). Therefore, it can be reasonably inferred that the participants in this study receiving treatment by Joni Stewart and Associates facilitators received an intervention that did not deviate significantly from the standard batterer intervention program nationwide.

Common to single-group, and usual for multi-group treatment programs are intra-program variables which affect attempts at standardization of treatment experience, which in turn affect research in this area. For example, this study could not realistically control for age, gender, and race of the facilitator, temporary replacement of the facilitator due to illness, unique and clinically significant therapeutic events, or the length of time between the participant’s last violence episode and the beginning of treatment.

Another potential consideration in this study is that the group of men receiving treatment and the group of men not receiving treatment came from different geographical regions. While there may be differences in culture and attitude that are unaccounted for, the literature does not support any differences in frequency, severity, or type of violence with respect to geographical region (Kessler et al., 2001).

Men in this study who were not receiving treatment were also older than the treatment group. Testosterone levels drop as men get older, and high testosterone levels

are positively associated with verbal aggression and physical domestic violence (Soler et al., 2000, George et al., 2001). While all men analyzed in the study had a history of domestic violence, it is possible that biologically, there were some between-group differences in the tendency to be physically violent at the participants' current stages of life. Given that high testosterone levels are a risk factor for violence of all kinds, and testosterone levels are heritable, more research is definitely needed in this area. An alternative or concurrent hypothesis to psychosocial theories on "the intergenerational transmission of domestic violence" merits serious consideration.

In this study, there was also a difference in racial distribution between the two groups. Namely, most of the participants in the comparison group self-identified their race as "Black", while there was greater racial diversity in the experimental group. However, this did not appear to have a statistically significant effect on the outcome of this particular study. However, further research is needed in the area of demographic and socioeconomic variables with regards to the prevalence of domestic violence, and the effectiveness of treatment. The research is very inconsistent in this area (Soler et al., 2000; Kessler et al., 2001). There is some evidence that White, middle class, employed, and married men are more likely to complete treatment than other types of men, perhaps because they have more to lose economically and socially if they don't. These so-called "stake in conformity" variables often skew research results in the literature. There is also little information on culturally competent practice with respect to batterer intervention programs (Bennett & Williams, n.d; Faulkner, Cogan, Noder, & Shooter, 1991; Robertson, 1999).

Considering the concept of "stake in conformity" highlights an obvious difference

between the two groups participating in this study. In the experimental group, successful completion of treatment was a condition of their probation. If they did not complete treatment of their own volition, or were judged by providers as being non-conforming, there was a very high likelihood that they would receive a more distasteful punishment – jail. It is possible that this type of threat could create an atmosphere of false sincerity and cooperation based on fear and not agreement. One may wonder if the men in the experimental group in this study were more concerned about maintaining a peaceful, even-tempered impression than were their comparison group counterparts. Indeed, in this study, before the experimental group attended their first treatment session, they were already reporting lower levels of anger than their comparison group counterparts.

This study excluded participants who were categorized as Level III, which was generally reserved for multiple repeat offenders, and those who had used potentially lethal weapons. Level III offenders often had a mental health diagnosis, as well. Given that the overall population of domestically violent men is composed of all types (and were they all convicted by the Hillsborough County Criminal Courts, all levels) of offenders, using a subset limits the generalizability of the study somewhat.

Due to the qualitative nature of some of the data, and the dependence on agreement between the raters, some of the data generated could not be included in the analyses. Although the percentage of disagreement between raters about particular responses was only about 20%, this may have reduced the power of the statistical analyses.

Domestic violence was defined dichotomously in this study as either having a history of physical altercations towards one's dyadic partner, or not having a history.

This study did not control for frequency of altercations, time between altercations, recency of altercations, variety of partners with whom there was an altercation, or previous access to counseling. Due to the unreliability of self-reporting in this area (Kessler et al., 2001, Porter, 1999), especially given what the men court-ordered to treatment may believe is at stake, and lack of access to a full legal history, no data was obtained for these variables. However, it is possible that these variables were influential in the outcome of this study.

The audiotaped voice verbalizing the scenarios developed for this study was that of a man, because it was hypothesized that the participants, as men, would more readily identify with an adult male voice describing their experiences than they would with a female voice, or the voice of a child. The experimenter administering the questionnaires to the participant, however, may have been either a man or a woman (depending on which experimenter was available at the time the participant was able to meet). The gender of the experimenter was a variable that was not controlled for, and may have biased findings.

This study focused only on the cognitive processing patterns of the male perpetrator alone in a heterosexual dyadic relationship. There is a growing body of literature that suggests that factors outside of the male perpetrator's psyche, including the family / relationship environment and even the victim herself, should also be examined. This is a potentially very unpopular stance, due to the public emphasis on male perpetrator accountability and victim safety. Valid public concerns for victim intimidation and security keep her out of the batterer's counseling groups. And counseling for women who are abused often include having a "safety plan" – a plan to

safely leave the batterer. This is quite reasonable and necessary. However, the reality is that a batterer receiving treatment is highly correlated with the victim staying and attempting to reconcile the relationship (Robertson, 1999). And although the way he interacts may have changed after successfully receiving treatment, the way she interacts may not have changed, which will affect the way they interact as a couple. This may be important for treatment providers to consider. What should the role of the female victim be in the recovery of the violent relationship, should she decide to stay with the male perpetrator? There have been some circumstances in which conjoint treatment has been associated with marked reductions in psychological and physical aggression (O'Leary, 2002). If, in the context of the criminal justice system, the role of any component of intervention, including mandatory completion of a batterer intervention program, is justice, accountability, rehabilitation, and behavioral change (Bennett and Williams, n.d.), and if these programs are successful at their tasks, then perhaps, beyond the insurance of safety, the assumption should be that the batterer is going to integrate back into his family unit (or into another family unit) and that the treatment of violence should be comprehensive, so that the family is psychologically prepared to receive him.

Conclusions and Suggestions for Future Research

Recruitment

Conducting a quasi-experiment in this field of study requires an experimental group (men who are domestically violent and who are receiving some sort of intervention) and a comparison group (men who are domestically violent and who are not

receiving an intervention). Recruiting the experimental group is relatively simple: one need only obtain permission from the agency providing the treatment, sell the study to the potential participants (by assuring them that the experimenter's role is benign, and providing sufficient incentive for their participation), and be reasonably sure that the subject pool does not evaporate due to societal, legal, and political environmental forces before the data is collected. Recruiting a comparison group is not so simple. How does one find a group of men who are domestically violent and are not receiving any treatment? This was one of the challenges facing this study. This study had access to one county in Florida (Hillsborough) from which to draw its experimental data. An ideal experimental model for a study like this would be for half of the men who appeared before the court to be randomly sentenced to intervention, and half to be randomly sentenced to no intervention at all, controlling for intensity of crime, prior record, and other variables. But not only would it be of questionable ethics for the court to be asked to be involved in research of this type, but there would most likely be a public outcry for accountability of all batterers, not just those who were "unfortunate" enough to be sentenced to treatment by a flip of a coin. Also, the overwhelming evidence suggests that the completion of treatment works in preventing recidivism (Bennett and Williams, n.d.) and that the outcomes of utilizing treatment as a part of judicial intervention are exceptionally positive (Coulter, Byers, & Jayakumar, 2002). Furthermore, and perhaps most importantly, the greater public believes that treatment works. Withholding treatment from those who may benefit is not best practice, to say the least. So it is not surprising that most men charged in the same crime category in courts that routinely implement treatment as part of their sentence have a sentence that includes some type of

intervention (Robertson, 1999). Hillsborough County is no exception.

There is the possibility of obtaining a comparison group of individuals receiving no sentence to a batterer's intervention program, but to another sort of intervention, such as anger management or community service. However, a comparison group of this type is much farther from the ideal "control group" in experimental studies than a comparison group of those who are not offered any intervention at all. This is due in part to the type of men to which this is offered as an option. Men composing this "alternative program" group may be the ones whose offenses were relatively minor, or first time offenders. Qualitatively, they would be different from those in the same court who were sentenced to a batterer's intervention program. Also, any intervention given as part of a sentence is likely (and obviously expected) to have some effect. Whether it makes the batterer better able to understand and manage his anger, or whether it makes the batterer more empathetic and vigilant, it is quite possible that this would have an effect on future battering behavior, even if the causal link is not readily apparent.

To obtain a more valid comparison group for this population, future research in this area may want to consider recruiting from different courts in similar geographic areas. It is unlikely to find a court that will sentence an offender to no service (Bennett and Williams, n.d.), but there may be courts that provide only some sort of usual and customary intervention, such as probation. This chronic monitoring by the criminal justice system may have a deterrent effect in itself, and may serve to make the offender more self-aware, but it may be the closest realistic option to a court-identified control group. Of course, a research project of this type, which would look at different levels of intervention across neighboring counties, would require considerable planning, resources,

and experimenter coordination. For example, the experimenter would have to have access to meeting locations in each county which were accessible to each participant at times which were convenient for each participant.

Another alternative, one implemented in this study, was to request the participation from men who were domestically violent and who had not at that time come to the attention of the criminal justice system. The assumption is that these are men who, if their actions were made public, would be assigned to the same type of intervention as their cohorts, whose behavior was publicly known. There are two possible ways of determining whether each of the participants in the comparison group has a history of domestic violence. One is to ask them, either directly or through an instrument questioning the presence of violent behavior, such as the Conflict Tactics Scale. However, given that not only do male perpetrators tend to underreport violence (Kessler et al, 2001), and that the majority of male perpetrators (75%) who are identified by society as being domestically violent, when asked, actually deny ever being domestically violent (Porter, 1999), a compelling argument could be made that those who do admit to battering represent an unusual type of batterer, one who has acknowledged and has taken responsibility for his actions. Furthermore, obtaining this population is labor and resource intensive, given that the odds are that the researcher will have to screen and reject three domestically violent men denying their behavior for every one man admitting to his behavior. The other possibility, which was used in this study, is to use collateral evidence – social identification. By using this method, the treatment participants and the comparison participants are more similar in how they are identified. Men found guilty of domestic violence and court-ordered to treatment are charged and convicted because

there is some evidence (either their own admission or someone else's testimony) that they actually engaged in battering behavior. In this study, men in the comparison group were referred for participation and their data was included in the analyses if there was evidence that they had "ever been in a physical fight with their live-in girlfriends, fiancées, or wives." The evidence came either from their own report, as included as a true or false question in the preliminary questionnaires, or more often, by the identification of the agency directors given their knowledge of the participant's psycho-social history. These community agency directors, who had been providing services to and advocating for residents of the area for up to 40 years, were considered "community mothers and fathers" who had intimate knowledge of family interactions in their neighborhoods. They were trusted sympathetic ears for victims of violence, and they knew which families kept the neighbors up at night with their fighting. They were also the liaisons between the researcher and the potential participants, assuring them that the researcher, with her clipboard, abundance of questionnaires, tape recorder, and consent forms, could be trusted. The value of this resource for the researcher – community involvement and trust, cannot be overstated, as it facilitated the collection of sensitive and critical data from this population, which most likely would not have been obtained.

Retention

This study followed participants for six months. It would be advisable for researchers in this area to obtain as many forms of contact for the participant as possible, for batterers court-ordered to treatment tend to be a very transient population. If they do complete treatment, many of them prefer to psychologically distance themselves from the

treatment program and any associated experience (including related research participation) (Stewart, 2002). Therefore, if the researcher cannot complete the study administration prior to the participant completing his treatment program, he or she may have to rely on other sources as a point of contact. The participant's probation officer, who, during the duration of their probation supervision, is required to always have their current address and phone number, can be one resource in tracking a participant. Much of the potential data in this study was lost due to participants changing their residence and completing treatment elsewhere. There was no formal permission granted by the participant to contact him either through his probation officer, another treatment provider, or any other friend or relative, so there was no way to contact the participant within the limits of confidentiality.

Another retention consideration is the participant's incentive for participation. Researchers in this area should ensure that if compensation is monetary, it is sufficient enough to encourage participation and not make involvement a hardship for the participant. Each participant in this study was paid a compensatory fee of \$5 for his participation in each part of the study, whether he completed the study or not. This was a limitation of the project resources, but some participants had concerns about missing work, or travel expenses, to participate in a study for which they were paid only \$5. They determined that it was not worth their effort to participate, and opted out of the study. In the future, researchers should consider the practical needs of the potential participants, and try to meet those needs in order to increase the participation rate.

Cultural Issues

Cultural mores are variables that should be considered in any study. As previously stated, in this particular study, the comparison group was composed almost entirely of individuals who self-identified as “Black”, while the experimental group was more ethnically diverse. While there were no between-group differences found in the dependent variables included in this particular study when controlling for race in the analyses, this may have been more a factor of having a sample which was too small to detect an effect. There is research that suggests that individuals of different cultural groups experience and express emotions differently (Ratner, 2000). Therefore, it is possible that the first administration finding that the comparison group found it more difficult to enact a passive response towards women overall than did the treatment group, may be related to the different ethnic groups’ comfort with a passive reaction. Even if it is possible to have an equal cultural / ethnic distribution, it would be worthwhile to always consider the potential inter- and intra-group differences.

Defining Behavior

Future studies in this area should very carefully consider the various types of behavior that are utilized by batterers. Technically, the term “batterers” refers to a subset of abusive behaviors. Other abusive behaviors against one’s dyadic partner include direct and indirect verbal aggression, and various forms of psychological abuse. However, only the abuse or aggression of a physical nature is likely to cause any legal trouble in a cohabitating dyadic relationship. Batterer’s intervention programs have long been aware of the existence of these other types of abuse in the batterer’s behavioral repertoire and generally address these behaviors in their curriculum, but according to the law, only a

physical assault is “wrong.” Therefore in measuring outcomes, it would be helpful to know if batterers are routinely replacing all abusive behaviors with prosocial ones, or just the abusive behaviors that will cause them trouble with the law. This issue may help to explain a counterintuitive finding in the current study. During the third administration men who had completed treatment reported that they would be more likely to choose an aggressive response than their comparison group counterparts. However, upon review of the raw data, most of the “aggressive” responses that the treatment group chose were things other than physical aggression. For example, they included pointed sarcasm ((say to her) “Be careful of what you wish for, you just might get it.”), hostile accusations ((ask her) “Was this some kind of a set up? I know... you were trying to pull me into anger.”), verbal insults (“I’d probably tell her to shut up and leave me alone.”; (tell her) “I hate you.”), and teasing (“I’d laugh at the b*tch.”).

Clinicians and developers of treatment curricula should continue to investigate this phenomenon carefully, and ideally, outcomes measures of success should ultimately include a decrease in verbal aggression as well. It is important to emphasize that reducing verbal aggression should not be the primary focus of treatment, as physical aggression has more serious consequences.

Typology Issues

It would be helpful to know that the men in the group that one plans to study is (and remains) similar in as many psychological characteristics as possible. There has been much research support for the existence of various types of men who batter (Holtzworth-Monroe and Stuart, 1994; Dixon & Browne, 2003) Subsequently, certain

types of treatment may work better for various types of men. A similar pattern may exist for cognitive processing variables as well. One type of domestically violent man may be more likely to exhibit a cognitive and a behavioral change in response to treatment than the other. If the group that one plans to study is mixed, so will be the outcome results.

Typology stability presents a particular challenge for individuals doing research with men court-ordered to treatment for domestic violence (or batterer intervention programs). Defendants are court-ordered to treatment programs based on the facts (with respect to the criminal justice system) of the particular crime. A first-time, family-only batterer who is charged and found guilty is sentenced to the same intervention curriculum as a generally violent / antisocial batterer who has eluded conviction (and even criminal justice system attention) until this point. Unless a researcher has access to the psychological variables and behavioral history of the participant, it is hard to know what type of batterer he or she is observing.

Theoretically, the components of their sentence received can be a clue. Some criminal justice systems have some kind of hierarchy of treatment type – the “least dangerous” offenders are assigned to the minimal level of a treatment type, and the “most dangerous” offenders are assigned to a more intense (in frequency or duration) type of treatment. The researcher need only learn which levels match which type of offender (as judged by the court), and he or she will have an idea about what type of the type of batterer he or she is observing. However, this does not always work. In addition to the reasons explained above regarding behavior that may be frequent, intense, and simultaneously hidden, the classification system itself can shift due to political and cultural forces. Judges are elected officials, who have opinions about what will work best

as a deterrent for a certain type of crime. In the case of batterer treatment intervention, they may choose to sentence a defendant in part based on that to which they have been exposed either by direct program marketing, public opinion, or personal convictions. Therefore, one court, handling one type of crime, during a particular judge's tenure, may alter its sentencing practices significantly. Longer term studies may span the tenures of two or more judges, with their respective sentencing practices for the same type of crime. This was an issue in the current study. By the end of data collection for this research project (2002), the number of batterers assigned to the Hillsborough County Domestic Violence Intervention Program had dropped to one-half of what it was during the project's inception (Coulter et al., 2002). Recall that at the beginning of data collection efforts for this project, the trend was for the court's sentence to include Level One (14 weeks of) treatment for first offense battery-only offenders, Level Two (26 weeks of) treatment for a second (or higher) and/or more serious offense, and Level Three (52 weeks of) treatment for assault with a weapon, extreme violence, and/or for batterers with co-occurring mental health issues. Within the first few months of data collection, legislation was passed in Florida that dictated that domestic violence programs be state-monitored with a "standard" (26 week) curriculum, which swiftly eliminated the shorter duration Level One programs. So this meant that convicted perpetrators of domestic violence, be they first time offenders of pushing their partners while in a heated argument, or repeat offenders of planned and sustained physical assault, found themselves students of the same standard core programming (additional programming was still required in Hillsborough county for severe violence batterers or those with mental health issues). However, judges have some flexibility in sentencing options, and

subsequently, there has been an increasing trend for judges to sentence offenders whom they feel have less serious offenses to other programs such as anger management classes, as long as they indicate their reasons (Coulter, 2004). Several months after this project began, a new judge was appointed, who may have followed this trend, because over the past few years in Hillsborough County, Domestic Violence Program enrollment decreased while Anger Management Program enrollment increased. This may be a result of fewer domestic violence convictions, or more likely, it may reflect the trend to sentence mild and moderate levels of domestic violence to anger management classes and reserve Level Two (or Levels Two and Three) treatment programs for more serious cases. Finally, at the time of this writing, there is a two-tier Domestic Violence program system in place in Hillsborough County – Level Two, the “standard” domestic violence program, and Level Three, which is the standard (26 week) program, plus additional specialized classes up to one year, facilitated by professionals with a higher level of expertise. Assuming that the conviction rate for domestic violence has stayed the same, it is reasonable to assume that the experimental sample collected at the beginning of this study may have had moderate offenses, or may have offended more than once, mid-study participants may have been a combination of mild and moderate cases, and end-study participants may have been a combination of moderate and severe cases. Milder case counterparts did not get the opportunity to participate early in the study because they were enrolled in Level One programs which were destined for extinction, and they didn’t get a chance to participate late in the study because they were enrolled in anger management classes at the time. Obviously, this not only affects this sample’s external validity with respect to the comparison sample, and to the larger population of

domestically violent men (who can be assumed to be representative of all typologies), but it affects this sample's internal validity as well, as the group may not even be similar to itself at various points in time.

Another potential influential set of variables that was not accounted for was whether each group whom we identified as "batterers" were generally sole perpetrators of violence or reciprocators of violence or whether there was a mixture of categories. This is particularly important. We can be reasonably certain that they were not victims only – only a person who had made significant physical impact would have either (1) been charged with a crime, (2) been identified as being in a fight, or (3) have admitted to being in a fight. But bi-directional violence may be a very common occurrence (Mills, Mills, Taliaferro, Zimbler, & Smith, 2003). Kessler and his colleagues (2001) in their nationally representative survey found that most domestic violence is reciprocal and that men are equally as likely to report victimization as are women. Although it cannot be concluded from this finding that intimate partner violence involves both partners engaging in violent acts to the same extent, and one must consider the possible mediating issue of verbal aggression, these findings do warrant a more comprehensive view of circumstances which precede violent patterns within relationships.

Summary

This study investigated the cognitive processing patterns found in men receiving treatment for domestic violence. The results suggest that after receiving treatment, men have developed a larger repertoire of positive ways of interacting with women, and that they are less comfortable with enacting aggressive responses. These findings have

implications for practice and future research in this area.

Tables

Table 1

Differences Between Groups on Cognitive Processing Variables at First Administration.

Variable	<u>Treatment</u>		<u>Comparison</u>		t
	M	SD	M	SD	
Intimates					
Encoding Accuracy Score	91.36%	16.45	76.67%	25.16	0.24
Perception of Intent	4.75	2.16	5.12	2.19	-0.44
Perception of Hostility	5.00	2.51	5.16	1.99	-0.19
Percentage of Possible Aggressive Responses	1.10%	4.26	5.96%	12.00	-1.47
Percentage of Possible Passive Responses	27.20%	31.55	30.93%	31.07	-0.32
Percentage of Possible Prosocial Responses	71.67%	33.32	63.11%	36.66	0.66
Percentage of Probable Aggressive Responses	12.77%	22.68	0.00%	0.00	1.47
Percentage of Probable Passive Responses	23.30%	26.92	14.29%	24.40	0.75
Percentage of Probable Prosocial Responses	63.90%	36.83	85.71%	24.40	-1.42
Ability to Enact an Aggressive Response	5.00	2.65	4.60	3.68	0.33
Ability to Enact an Passive Response	5.23	3.22	7.60	3.36	-1.90
Ability to Enact an Prosocial Response	3.08	2.81	3.94	3.17	-0.78
Non-Intimates					
Encoding Accuracy Score	91.42%	15.26	62.50%	17.68	2.45 *
Perception of Intent	6.86	1.94	6.36	2.70	0.49
Perception of Hostility	6.11	2.48	6.36	1.40	-0.31
Percentage of Possible Aggressive Responses	13.28%	21.15	11.19%	21.84	0.26
Percentage of Possible Passive Responses	49.72%	30.6	51.96%	37.44	-0.18
Percentage of Possible Prosocial Responses	37.00%	28.07	36.77%	37.71	0.02
Percentage of Probable Aggressive Responses	15.83%	30.05	36.29%	37.61	-1.38
Percentage of Probable Passive Responses	55.83%	39.21	29.14%	25.36	1.64
Percentage of Probable Prosocial Responses	28.33%	36.43	34.50%	20.68	-0.41
Ability to Enact an Aggressive Response	6.38	3.99	6.20	3.86	0.12
Ability to Enact an Passive Response	4.92	3.71	7.33	3.42	-1.79
Ability to Enact an Prosocial Response	3.85	4.04	3.29	3.54	0.38
Women Overall					
Encoding Accuracy Score	89.92%	14.83	50.00%	n/a	2.55 *
Perception of Intent	5.80	1.32	5.71	1.72	0.13
Perception of Hostility	5.55	1.70	5.89	1.23	-0.53
Percentage of Possible Aggressive Responses	7.63%	11.61	8.81%	14.32	-0.24
Percentage of Possible Passive Responses	38.45%	23.00	42.64%	29.89	-0.42
Percentage of Possible Prosocial Responses	53.90%	21.87	48.52%	32.64	0.52
Percentage of Probable Aggressive Responses	12.64%	15.64	18.14%	18.80	-0.71
Percentage of Probable Passive Responses	40.61%	20.02	21.71%	8.17	2.38
Percentage of Probable Prosocial Responses	46.73%	23.87	60.11%	18.30	-1.30
Ability to Enact an Aggressive Response	5.69	2.53	5.25	2.85	0.43
Ability to Enact an Passive Response	5.08	2.29	7.47	2.59	-2.57 *
Ability to Enact an Prosocial Response	3.46	2.57	3.04	2.21	0.46

* $p < .05$.

Table 2
Differences Between Groups on Cognitive Processing Variables at Second Administration.

Variable	<u>Treatment</u>		<u>Comparison</u>		t
	M	SD	M	SD	
Intimates					
Encoding Accuracy Score	87.50%	17.68	78.13%	6.25	1.04
Perception of Intent	3.83	1.44	4.17	1.04	-0.32
Perception of Hostility	3.33	0.58	4.13	1.89	-0.69
Percentage of Possible Aggressive Responses	37.50%	33.07	10.38%	12.47	1.54
Percentage of Possible Passive Responses	27.83%	25.48	27.13%	20.85	0.04
Percentage of Possible Prosocial Responses	34.67%	16.74	62.50%	25.00	-1.65
Percentage of Probable Aggressive Responses	27.83%	25.48	0.00%	0.00	2.26
Percentage of Probable Passive Responses	25.00%	25.00	25.00%	28.87	0.00
Percentage of Probable Prosocial Responses	47.17%	20.89	75.00%	28.87	-1.40
Ability to Enact an Aggressive Response	7.00	5.20	6.75	3.94	0.07
Ability to Enact an Passive Response	7.00	3.00	6.50	3.70	0.19
Ability to Enact an Prosocial Response	1.00	0.00	3.50	1.91	-2.21
Non-Intimates					
Encoding Accuracy Score	75.00%	n/a	95.83%	7.22	-2.50
Perception of Intent	2.67	2.57	4.38	1.60	-1.10
Perception of Hostility	2.17	1.76	5.00	0.00	-2.80 *
Percentage of Possible Aggressive Responses	0.00%	0.00	9.38%	11.97	1.32
Percentage of Possible Passive Responses	11.67%	12.58	34.38%	27.72	-1.30
Percentage of Possible Prosocial Responses	88.33%	12.58	56.25%	37.50	1.40
Percentage of Probable Aggressive Responses	16.67%	28.87	15.63%	23.66	0.05
Percentage of Probable Passive Responses	0.00%	0.00	46.88%	41.30	-1.92
Percentage of Probable Prosocial Responses	83.33%	28.87	37.50%	25.00	2.26
Ability to Enact an Aggressive Response	6.33	4.73	6.75	2.36	-0.16
Ability to Enact an Passive Response	2.67	2.08	7.00	2.00	-2.79 *
Ability to Enact an Prosocial Response	4.67	3.51	5.25	4.03	-0.20
Women Overall					
Encoding Accuracy Score	87.50%	n/a	87.50%	0.00	n/a
Perception of Intent	3.25	1.98	4.67	0.58	-1.19
Perception of Hostility	2.75	1.15	5.00	0.43	-3.18 *
Percentage of Possible Aggressive Responses	18.75%	16.54	9.88%	12.18	0.83
Percentage of Possible Passive Responses	19.75%	6.49	30.75%	15.38	-1.14
Percentage of Possible Prosocial Responses	61.50%	11.03	59.38%	25.77	0.13
Percentage of Probable Aggressive Responses	22.25%	25.45	7.81%	11.83	1.02
Percentage of Probable Passive Responses	12.50%	12.50	35.94%	16.44	-2.05
Percentage of Probable Prosocial Responses	65.25%	24.38	56.25%	12.50	0.65
Ability to Enact an Aggressive Response	6.67	4.93	6.75	2.90	-0.03
Ability to Enact an Passive Response	4.83	2.02	6.75	1.44	-1.48
Ability to Enact an Prosocial Response	2.83	1.76	4.38	2.43	-0.92

* $p < .05$.

Table 3

Differences Between Groups on Cognitive Processing Variables at Third Administration.

Variable	<u>Treatment</u>		<u>Comparison</u>		t
	M	SD	M	SD	
Intimates					
Encoding Accuracy Score	100.00%	n/a	75.00%	33.07	0.66
Perception of Intent	5.50	3.91	6.25	0.65	1.39
Perception of Hostility	4.00	1.32	5.75	1.66	0.66
Percentage of Possible Aggressive Responses	16.67%	28.87	18.75%	23.94	-0.11
Percentage of Possible Passive Responses	9.67%	8.61	10.38%	12.47	-0.08
Percentage of Possible Prosocial Responses	73.67%	32.39	70.88%	25.03	0.13
Percentage of Probable Aggressive Responses	33.33%	19.09	4.13%	8.25	2.80 *
Percentage of Probable Passive Responses	9.67%	8.61	16.63%	23.57	-0.48
Percentage of Probable Prosocial Responses	57.00%	15.72	79.25%	20.99	-1.53
Ability to Enact an Aggressive Response	9.33	1.15	5.00	3.27	2.16
Ability to Enact an Passive Response	2.33	2.31	4.25	3.95	-0.74
Ability to Enact an Prosocial Response	1.00	0.00	3.75	3.20	1.45
Non-Intimates					
Encoding Accuracy Score	100%	0.00	72.50%	26.30	-0.39
Perception of Intent	4.33	1.61	6.88	3.57	-1.13
Perception of Hostility	4.83	3.40	5.13	2.17	-1.00
Percentage of Possible Aggressive Responses	40.00%	52.92	25.00%	35.36	0.45
Percentage of Possible Passive Responses	0.00%	0.00	34.38%	42.54	-1.37
Percentage of Possible Prosocial Responses	60.00%	52.92	40.63%	27.72	0.64
Percentage of Probable Aggressive Responses	0.00%	0.00	31.25%	23.94	-2.21
Percentage of Probable Passive Responses	23.33%	25.17	27.13%	20.85	-0.22
Percentage of Probable Prosocial Responses	76.67%	25.17	41.63%	26.41	1.77
Ability to Enact an Aggressive Response	10.00	0.00	8.50	2.38	1.07
Ability to Enact an Passive Response	5.67	3.06	3.50	1.91	1.17
Ability to Enact an Prosocial Response	2.67	1.53	1.25	0.50	1.78
Women Overall					
Encoding Accuracy Score	100.00%	n/a	77.50%	29.76	-1.50
Perception of Intent	4.92	2.57	6.56	1.83	-0.14
Perception of Hostility	4.42	2.27	5.44	1.897	-0.65
Percentage of Possible Aggressive Responses	28.33%	40.72	21.88%	27.72	0.25
Percentage of Possible Passive Responses	4.83%	4.30	22.38%	24.86	-1.18
Percentage of Possible Prosocial Responses	66.83%	42.63	55.75%	24.87	0.44
Percentage of Probable Aggressive Responses	16.67%	9.55	17.69%	14.55	-0.11
Percentage of Probable Passive Responses	16.50%	15.70	21.88%	19.07	-0.40
Percentage of Probable Prosocial Responses	66.83%	7.08	60.44%	21.66	0.48
Ability to Enact an Aggressive Response	9.67	0.58	6.75	2.02	2.38
Ability to Enact an Passive Response	4.00	1.73	3.88	2.25	0.08
Ability to Enact an Prosocial Response	1.83	0.76	2.50	1.78	-0.60

* $p < .05$.

Table 4

Treatment Group. Cognitive Processing Variables by First and Second Administration Times.

Variable	<u>First</u>		<u>Second</u>		t
	M	SD	M	SD	
Intimates					
Encoding Accuracy Score	85.00%	22.36	95.00%	11.18	-0.78
Perception of Intent	3.40	2.63	4.80	1.89	-0.86
Perception of Hostility	3.20	2.64	4.30	1.40	-0.73
Percentage of Possible Aggressive Responses	5.50%	9.53	37.50%	33.07	-2.33
Percentage of Possible Passive Responses	27.67%	34.63	27.83%	25.48	-0.01
Percentage of Possible Prosocial Responses	66.67%	44.22	34.67%	16.74	1.32
Percentage of Probable Aggressive Responses	13.83%	12.71	27.83%	25.48	-1.39
Percentage of Probable Passive Responses	47.17%	20.89	25.00%	25.00	1.84
Percentage of Probable Prosocial Responses	38.83%	19.34	47.17%	20.89	-1.75
Ability to Enact an Aggressive Response	3.50	1.91	7.25	4.27	-1.64
Ability to Enact an Passive Response	4.25	2.22	6.25	2.87	-1.55
Ability to Enact an Prosocial Response	2.50	1.91	1.00	0.00	1.57
Non-Intimates					
Encoding Accuracy Score	96.00%	8.94	95.00%	11.18	1.00
Perception of Intent	7.30	2.49	3.90	2.53	1.86
Perception of Hostility	6.20	3.27	3.20	1.96	1.83
Percentage of Possible Aggressive Responses	29.17%	26.02	0.00%	0.00	1.94
Percentage of Possible Passive Responses	29.17%	19.09	11.67%	12.58	0.97
Percentage of Possible Prosocial Responses	41.67%	38.19	88.33%	12.58	-1.74
Percentage of Probable Aggressive Responses	45.83%	50.52	16.67%	28.87	0.82
Percentage of Probable Passive Responses	4.17%	7.22	0.00%	0.00	1.00
Percentage of Probable Prosocial Responses	50.00%	50.00	83.33%	28.87	-1.00
Ability to Enact an Aggressive Response	6.50	4.36	6.75	3.95	-0.24
Ability to Enact an Passive Response	6.50	4.12	3.00	1.83	1.46
Ability to Enact an Prosocial Response	3.25	4.50	4.00	3.16	-0.23
Women Overall					
Encoding Accuracy Score	90.50%	15.25	95.50%	15.25	-0.75
Perception of Intent	5.35	1.29	4.35	2.18	0.71
Perception of Hostility	4.70	1.70	3.75	1.60	0.92
Percentage of Possible Aggressive Responses	17.33%	15.04	18.75%	16.54	-0.20
Percentage of Possible Passive Responses	28.42%	9.83	19.75%	6.49	0.95
Percentage of Possible Prosocial Responses	54.17%	23.28	61.50%	11.03	-0.99
Percentage of Probable Aggressive Responses	29.83%	18.91	22.25%	25.45	0.35
Percentage of Probable Passive Responses	25.67%	13.51	12.50%	12.50	1.69
Percentage of Probable Prosocial Responses	44.42%	26.81	65.25%	24.38	-1.42
Ability to Enact an Aggressive Response	5.00	2.92	7.00	4.08	-1.32
Ability to Enact an Passive Response	5.38	1.55	4.63	1.70	0.81
Ability to Enact an Prosocial Response	2.88	1.93	2.50	1.58	0.24

* $p < .05$. ** $p < .0167$ (Bonferroni Adjustment)

Table 5

Treatment Group. Cognitive Processing Variables by Second and Third Administration Times.

Variable	Second		Third		t
	M	SD	M	SD	
Intimates					
Encoding Accuracy Score	93.75%	12.50	100.00%	0.00	-1.00
Perception of Intent	4.50	1.32	5.50	3.91	-0.48
Perception of Hostility	4.17	1.26	4.00	1.32	1.00
Percentage of Possible Aggressive Responses	37.50%	33.07	0.00%	0.00	1.96
Percentage of Possible Passive Responses	27.83%	25.48	5.50%	9.53	1.11
Percentage of Possible Prosocial Responses	34.67%	16.74	94.50%	9.53	-7.13 *
Percentage of Probable Aggressive Responses	27.83%	25.48	29.17%	26.02	-0.16
Percentage of Probable Passive Responses	25.00%	25.00	5.50%	9.53	1.26
Percentage of Probable Prosocial Responses	47.17%	20.89	65.33%	30.09	-0.94
Ability to Enact an Aggressive Response	9.33	1.15	9.33	1.15	0.00
Ability to Enact an Passive Response	5.00	1.73	2.33	2.31	1.32
Ability to Enact an Prosocial Response	1.00	0.00	1.00	0.00	-0.79
Non-Intimates					
Encoding Accuracy Score	93.75%	12.5	100.00%	0.00	-1.00
Perception of Intent	4.17	1.89	4.33	1.61	-0.50
Perception of Hostility	3.83	1.76	4.83	3.40	-1.00
Percentage of Possible Aggressive Responses	0.00%	0.00	6.67%	11.55	-1.00
Percentage of Possible Passive Responses	11.67%	12.58	8.33%	14.43	0.23
Percentage of Possible Prosocial Responses	88.33%	12.58	85.00%	13.23	0.31
Percentage of Probable Aggressive Responses	16.67%	28.87	0.00%	0.00	1.00
Percentage of Probable Passive Responses	0.00%	0.00	6.67%	11.55	-1.00
Percentage of Probable Prosocial Responses	83.33%	28.87	93.33%	11.55	-1.00
Ability to Enact an Aggressive Response	8.67	1.15	10.00	0.00	-2.00
Ability to Enact an Passive Response	3.33	2.08	5.67	3.06	-0.79
Ability to Enact an Prosocial Response	5.00	3.00	2.67	1.53	2.65
Women Overall					
Encoding Accuracy Score	93.75%	7.22	100.00%	0.00	-1.73
Perception of Intent	4.33	1.61	4.92	2.57	-1.50
Perception of Hostility	4.00	1.50	4.42	2.27	-0.90
Percentage of Possible Aggressive Responses	18.75%	16.54	3.33%	5.77	2.45
Percentage of Possible Passive Responses	19.75%	6.49	6.92%	6.36	2.54
Percentage of Possible Prosocial Responses	61.50%	11.03	89.75%	9.33	-14.47 **
Percentage of Probable Aggressive Responses	22.25%	25.45	14.58%	13.01	0.64
Percentage of Probable Passive Responses	12.50%	12.50	6.08%	10.54	0.68
Percentage of Probable Prosocial Responses	65.25%	24.38	79.17%	19.09	-1.26
Ability to Enact an Aggressive Response	9.00	1.00	9.67	0.58	-1.00
Ability to Enact an Passive Response	4.17	1.76	4.00	1.73	0.09
Ability to Enact an Prosocial Response	3.00	1.50	1.83	0.76	2.65

* $p < .05$. ** $p < .0167$ (Bonferroni Adjustment)

Table 6
Treatment Group. Cognitive Processing Variables by First and Third Administration Times.

Variable	<u>First</u>		<u>Third</u>		t
	M	SD	M	SD	
Intimates					
Encoding Accuracy Score	87.50%	25.00	100.00%	0.00	-1.00
Perception of Intent	3.17	2.93	5.50	3.91	-0.66
Perception of Hostility	3.50	3.46	4.00	1.32	-0.21
Percentage of Possible Aggressive Responses	4.13%	8.25	12.50%	25	-0.58
Percentage of Possible Passive Responses	33.25%	30.40	7.25%	8.53	2.35
Percentage of Possible Prosocial Responses	62.50%	37.06	80.25%	29.54	-1.02
Percentage of Probable Aggressive Responses	10.38%	12.47	25.00%	22.82	-2.65
Percentage of Probable Passive Responses	35.38%	29.11	7.25%	8.53	1.90
Percentage of Probable Prosocial Responses	54.13%	34.42	67.75%	25.04	-0.83
Ability to Enact an Aggressive Response	3.67	2.31	9.33	1.15	-8.50 **
Ability to Enact an Passive Response	4.00	2.65	2.33	2.31	0.59
Ability to Enact an Prosocial Response	2.33	2.31	1.00	0.00	1.00
Non-Intimates					
Encoding Accuracy Score	95.00%	10.00	100.00%	0.00	-1.00
Perception of Intent	6.83	3.25	4.33	1.61	1.25
Perception of Hostility	5.33	4.04	4.83	3.4	0.29
Percentage of Possible Aggressive Responses	21.88%	25.77	30.00%	47.61	-0.25
Percentage of Possible Passive Responses	46.88%	38.70	6.25%	12.5	2.03
Percentage of Possible Prosocial Responses	31.25%	37.50	63.75%	43.85	-2.08
Percentage of Probable Aggressive Responses	34.38%	47.19	0.00%	0.00	1.46
Percentage of Probable Passive Responses	28.13%	48.28	17.50%	23.63	0.80
Percentage of Probable Prosocial Responses	37.50%	47.87	82.50%	23.63	-2.14
Ability to Enact an Aggressive Response	8.33	2.89	10.00	0.00	-1.00
Ability to Enact an Passive Response	5.33	4.16	5.67	3.06	-0.12
Ability to Enact an Prosocial Response	4.00	5.20	2.67	1.53	0.35
Women Overall					
Encoding Accuracy Score	91.25%	17.50	100.00%	0.00	-1.00
Perception of Intent	5.00	0.50	4.92	2.57	0.07
Perception of Hostility	4.42	1.89	4.42	2.27	0.00
Percentage of Possible Aggressive Responses	13.00%	15.03	21.25%	36.14	-0.36
Percentage of Possible Passive Responses	40.06%	24.64	6.75%	5.20	2.68
Percentage of Possible Prosocial Responses	46.88%	23.96	72.00%	36.31	-2.11
Percentage of Probable Aggressive Responses	22.38%	21.47	12.50%	11.41	0.70
Percentage of Probable Passive Responses	31.75%	16.42	12.38%	15.24	7.38 **
Percentage of Probable Prosocial Responses	45.81%	22.06	75.00%	17.68	-1.78
Ability to Enact an Aggressive Response	6.00	2.60	9.67	0.58	-3.14
Ability to Enact an Passive Response	4.67	0.76	4.00	1.73	0.92
Ability to Enact an Prosocial Response	3.17	2.25	1.83	0.76	0.77

* $p < .05$. ** $p < .0167$ (Bonferroni Adjustment)

Table 7

Comparison Group. Cognitive Processing Variables by First and Second Administration Times.

Variable	First		Second		t
	M	SD	M	SD	
Intimates					
Encoding Accuracy Score	80.00%	24.49	68.75%	15.31	1.32
Perception of Intent	3.93	2.34	4.64	2.63	-0.81
Perception of Hostility	5.54	2.92	5.50	2.61	0.06
Percentage of Possible Aggressive Responses	11.70%	16.30	18.30%	20.75	-0.81
Percentage of Possible Passive Responses	26.60%	24.53	30.00%	21.76	-0.32
Percentage of Possible Prosocial Responses	61.70%	38.93	51.70%	41.03	0.54
Percentage of Probable Aggressive Responses	0.00%	0.00	18.75%	23.94	-1.57
Percentage of Probable Passive Responses	0.00%	0.00	37.50%	25.00	-3.00
Percentage of Probable Prosocial Responses	100.00%	0.00	43.75%	42.70	2.64
Ability to Enact an Aggressive Response	6.17	3.54	5.83	3.43	0.18
Ability to Enact an Passive Response	6.17	3.25	5.83	3.06	0.30
Ability to Enact an Prosocial Response	4.50	3.33	3.67	1.63	0.46
Non-Intimates					
Encoding Accuracy Score	54.17	33.23	85.42	20.03	-3.48 *
Perception of Intent	5.64	3.40	5.21	2.41	0.44
Perception of Hostility	5.29	3.18	5.43	1.27	-0.10
Percentage of Possible Aggressive Responses	15.80%	28.85	17.50%	20.92	-0.22
Percentage of Possible Passive Responses	36.80%	38.51	32.50%	24.37	0.40
Percentage of Possible Prosocial Responses	47.30%	41.04	50.00%	35.36	-0.19
Percentage of Probable Aggressive Responses	26.00%	28.86	18.75%	23.94	1.70
Percentage of Probable Passive Responses	38.50%	21.40	56.25%	31.46	-2.12
Percentage of Probable Prosocial Responses	35.38%	17.24	25.00%	20.41	1.20
Ability to Enact an Aggressive Response	8.33	3.61	6.83	2.23	0.73
Ability to Enact an Passive Response	6.17	2.86	6.17	2.04	0.00
Ability to Enact an Prosocial Response	4.33	3.50	5.00	3.52	-0.76
Women Overall					
Encoding Accuracy Score	67.08%	15.03	77.08%	9.41	-2.62 *
Perception of Intent	4.79	2.47	4.93	2.42	-0.18
Perception of Hostility	5.41	1.55	5.46	1.88	-0.07
Percentage of Possible Aggressive Responses	13.75%	19.15	17.90%	20.82	-0.76
Percentage of Possible Passive Responses	31.70%	29.50	31.25%	19.70	0.04
Percentage of Possible Prosocial Responses	54.50%	37.26	50.85%	36.51	0.24
Percentage of Probable Aggressive Responses	13.00%	14.43	18.75%	23.94	-1.08
Percentage of Probable Passive Responses	19.25%	10.70	46.88%	6.25	-7.02 **
Percentage of Probable Prosocial Responses	67.69%	8.62	34.38%	18.75	3.77 *
Ability to Enact an Aggressive Response	7.25	2.62	6.33	2.52	0.65
Ability to Enact an Passive Response	6.17	2.88	6.00	1.64	0.22
Ability to Enact an Prosocial Response	4.42	2.35	4.33	2.18	0.07

* $p < .05$. ** $p < .0167$ (Bonferroni Adjustment)

Table 8

Comparison Group. Cognitive Processing Variables by Second and Third Administration Times.

Variable	Second		Third		t
	M	SD	M	SD	
Intimates					
Encoding Accuracy Score	69.64%	14.17	72.86%	24.60	-0.32
Perception of Intent	4.64	2.63	5.29	1.41	-0.71
Perception of Hostility	5.50	2.61	5.86	1.18	-0.32
Percentage of Possible Aggressive Responses	19.42%	18.76	15.25%	20.01	0.59
Percentage of Possible Passive Responses	29.17%	19.57	20.83%	19.57	0.71
Percentage of Possible Prosocial Responses	51.42%	36.70	63.92%	22.18	-0.88
Percentage of Probable Aggressive Responses	18.75%	23.94	4.13%	8.25	1.70
Percentage of Probable Passive Responses	25.00%	28.87	16.63%	23.57	0.38
Percentage of Probable Prosocial Responses	56.25%	51.54	79.25%	20.99	-0.77
Ability to Enact an Aggressive Response	5.00	3.08	5.00	2.83	0.00
Ability to Enact an Passive Response	5.20	2.95	4.40	3.44	0.46
Ability to Enact an Prosocial Response	3.40	1.67	4.00	2.82	-0.38
Non-Intimates					
Encoding Accuracy Score	87.50	19.09	77.14	21.19	0.89
Perception of Intent	5.21	2.41	5.36	3.38	-0.16
Perception of Hostility	5.43	1.27	4.64	1.75	1.32
Percentage of Possible Aggressive Responses	18.75%	18.96	27.08%	30.02	-1.35
Percentage of Possible Passive Responses	35.42%	22.94	33.33%	38.46	0.11
Percentage of Possible Prosocial Responses	45.83%	33.23	39.58%	22.94	0.36
Percentage of Probable Aggressive Responses	21.88%	21.35	31.25%	23.94	-1.57
Percentage of Probable Passive Responses	53.13%	32.87	27.13%	20.85	1.20
Percentage of Probable Prosocial Responses	25.00%	20.41	41.63%	26.41	-0.75
Ability to Enact an Aggressive Response	6.20	1.79	7.80	2.59	-0.95
Ability to Enact an Passive Response	5.80	2.05	3.80	1.79	1.83
Ability to Enact an Prosocial Response	4.00	2.83	2.00	1.73	1.32
Women Overall					
Encoding Accuracy Score	78.57	9.45	75.00	18.13	0.66
Perception of Intent	4.93	2.42	5.32	2.20	-0.60
Perception of Hostility	5.46	1.88	5.25	1.39	0.28
Percentage of Possible Aggressive Responses	19.08%	18.84	21.17%	21.75	-0.51
Percentage of Possible Passive Responses	32.29%	17.80	27.08%	21.84	0.41
Percentage of Possible Prosocial Responses	48.63%	33.11	51.75%	20.62	-0.21
Percentage of Probable Aggressive Responses	20.31%	22.46	17.69%	14.55	0.53
Percentage of Probable Passive Responses	39.06%	14.77	21.88%	19.07	1.03
Percentage of Probable Prosocial Responses	40.63%	27.72	60.44%	21.66	-1.04
Ability to Enact an Aggressive Response	5.60	1.98	6.40	1.92	-0.89
Ability to Enact an Passive Response	5.50	1.22	4.10	2.01	2.75
Ability to Enact an Prosocial Response	3.70	1.72	3.00	1.90	0.54

* $p < .05$. ** $p < .0167$ (Bonferroni Adjustment)

Table 9

Comparison Group. Cognitive Processing Variables by First and Third Administration Times.

Variable	First		Third		t
	M	SD	M	SD	
Intimates					
Encoding Accuracy Score	80.00%	24.49	70.42%	26.00	0.62
Perception of Intent	3.93	2.34	5.29	1.41	-1.60
Perception of Hostility	5.54	2.92	5.86	1.18	-0.27
Percentage of Possible Aggressive Responses	11.70%	16.30	18.30%	20.75	-1.08
Percentage of Possible Passive Responses	26.60%	24.53	15.00%	14.95	1.15
Percentage of Possible Prosocial Responses	61.70%	38.93	66.70%	23.60	-0.37
Percentage of Probable Aggressive Responses	0.00%	0.00	5.50%	9.53	-1.00
Percentage of Probable Passive Responses	0.00%	0.00	5.50%	9.53	-1.00
Percentage of Probable Prosocial Responses	100.00%	0.00	89.00%	9.53	2.00
Ability to Enact an Aggressive Response	5.40	3.36	5.00	2.83	0.33
Ability to Enact an Passive Response	5.60	3.29	4.40	3.44	2.45
Ability to Enact an Prosocial Response	4.40	3.71	4.00	2.83	0.20
Non-Intimates					
Encoding Accuracy Score	54.17%	33.23	75.00%	22.36	-1.54
Perception of Intent	5.64	3.40	5.36	3.38	0.29
Perception of Hostility	5.29	3.15	4.64	1.75	0.59
Percentage of Possible Aggressive Responses	15.80%	28.85	22.50%	31.12	-1.07
Percentage of Possible Passive Responses	36.80%	38.51	40.00%	38.93	-0.20
Percentage of Possible Prosocial Responses	47.30%	41.04	37.50%	25.00	0.60
Percentage of Probable Aggressive Responses	34.67%	28.27	33.33%	28.87	0.10
Percentage of Probable Passive Responses	34.67%	24.48	19.50%	17.41	0.92
Percentage of Probable Prosocial Responses	30.50%	17.41	47.17%	29.35	1.00
Ability to Enact an Aggressive Response	8.00	3.94	7.80	2.59	0.14
Ability to Enact an Passive Response	5.80	3.03	3.80	1.79	1.09
Ability to Enact an Prosocial Response	3.20	2.39	2.00	1.73	1.18
Women Overall					
Encoding Accuracy Score	67.08%	15.03	72.71%	18.72	-1.02
Perception of Intent	4.79	2.47	5.32	2.20	-0.80
Perception of Hostility	5.41	1.55	5.25	1.39	0.39
Percentage of Possible Aggressive Responses	13.75%	19.15	20.40%	24.23	-1.35
Percentage of Possible Passive Responses	31.70%	29.50	27.50%	24.39	0.35
Percentage of Possible Prosocial Responses	54.50%	37.26	52.10%	23.04	0.17
Percentage of Probable Aggressive Responses	17.33%	14.13	19.42%	17.31	-0.38
Percentage of Probable Passive Responses	17.33%	12.24	12.50%	4.25	0.61
Percentage of Probable Prosocial Responses	65.25	8.71	68.08	18.79	-0.26
Ability to Enact an Aggressive Response	6.70	2.51	6.40	1.92	0.30
Ability to Enact an Passive Response	5.70	2.95	4.10	2.01	1.81
Ability to Enact an Prosocial Response	3.80	2.02	3.00	1.90	1.28

* $p < .05$. ** $p < .0167$ (Bonferroni Adjustment)

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Appendices

Appendix A. Demographic Questionnaire

Participant # _____

*******DEMOGRAPHIC QUESTIONNAIRE*******

LEVEL ONE OR TWO? _____

AGE _____

LENGTH OF MARRIAGE _____

RACE _____

RELIGIOUS AFFILIATION _____

NUMBER OF CHILDREN IN HOUSEHOLD _____

TYPE OF EMPLOYMENT _____

EDUCATION (CHECK ONE)

____ **BELOW HIGH SCHOOL**

____ **HIGH SCHOOL DIPLOMA OR GED**

____ **COLLEGE DEGREE**

____ **GRADUATE OR PROFESSIONAL DEGREE**

ANNUAL HOUSEHOLD INCOME (CHECK ONE)

____ **UNDER \$10,000**

____ **\$10,000-\$20,000**

____ **\$20,000-\$30,000**

____ **\$30,000-\$40,000**

____ **\$40,000-\$50,000**

____ **OVER \$50,000**

ARE YOU CURRENTLY LIVING WITH YOUR SPOUSE? (CIRCLE ONE)

YES NO

IF NO, HOW LONG AGO DID YOU SEPARATE? _____

Appendix B. Marlowe-Crowne Social Desirability Scale (Ballard Short Form)

*******MARLOWE-CROWNE SOCIAL DESIRABILITY SCALE *******

- T F 1. I SOMETIMES FEEL RESENTFUL WHEN I DON'T GET MY WAY.**
- T F 2. ON A FEW OCCASIONS, I HAVE GIVEN UP DOING SOMETHING BECAUSE I THOUGHT TOO LITTLE OF MY ABILITY.**
- T F 3. THERE HAVE BEEN TIMES WHEN I FELT LIKE REBELLING AGAINST PEOPLE IN AUTHORITY EVEN THOUGH I KNEW THEY WERE RIGHT.**
- T F 4. NO MATTER WHO I'M TALKING TO, I'M ALWAYS A GOOD LISTENER.**
- T F 5. I CAN REMEMBER PLAYING SICK TO GET OUT OF SOMETHING.**
- T F 6. THERE HAVE BEEN OCCASIONS WHEN I TOOK ADVANTAGE OF SOMEONE.**
- T F 7. I'M ALWAYS WILLING TO ADMIT IT WHEN I MAKE A MISTAKE.**
- T F 8. I SOMETIMES TRY TO GET EVEN RATHER THAN FORGIVE AND FORGET.**
- T F 9. I AM ALWAYS COURTEOUS, EVEN TO PEOPLE WHO ARE DISAGREEABLE.**
- T F 10. I HAVE NEVER BEEN IRKED WHEN PEOPLE EXPRESSED IDEAS VERY DIFFERENT FROM MY OWN.**
- T F 11. THERE HAVE BEEN TIMES WHEN I WAS QUITE JEALOUS OF THE GOOD FORTUNE OF OTHERS.**
- T F 12. I HAVE BEEN IN A PHYSICAL FIGHT BEFORE WITH MY WIFE OR SIGNIFICANT OTHER***
- T F 13. I AM SOMETIMES IRRITATED BY PEOPLE WHO ASK FAVORS OF ME.**
- T F 14. I HAVE NEVER DELIBERATELY SAID SOMETHING THAT HURT SOMEONE'S FEELINGS.**

*question added to measure to identify batterers by self-report

Appendix C. Beck Depression Inventory

*****BECK DEPRESSION INVENTORY*****

- 1 0 I DO NOT FEEL SAD.
 1 I FEEL SAD.
 2 I FEEL SAD ALL THE TIME AND I CAN'T SNAP OUT OF IT.
 3 I AM SO SAD OR UNHAPPY THAT I CAN'T STAND IT.
- 2 0 I AM NOT PARTICULARLY DISCOURAGED ABOUT THE FUTURE.
 1 I FEEL DISCOURAGED ABOUT THE FUTURE.
 2 I FEEL I HAVE NOTHING TO LOOK FORWARD TO.
 3 I FEEL THAT THE FUTURE IS HOPELESS AND THAT THINGS CANNOT IMPROVE.
- 3 0 I DO NOT FEEL LIKE A FAILURE.
 1 I FEEL THAT I HAVE FAILED MORE THAN THE AVERAGE PERSON.
 2 AS I LOOK BACK ON MY LIFE, ALL I CAN SEE IS A LOT OF FAILURES.
 3 I FEEL I AM A COMPLETE FAILURE AS A PERSON.
- 4 0 I GET AS MUCH SATISFACTION OUT OF THINGS AS I USED TO.
 1 I DON'T ENJOY THINGS THE WAY I USED TO.
 2 I DON'T GET REAL SATISFACTION OUT OF ANYTHING ANYMORE.
 3 I AM DISSATISFIED OR BORED WITH EVERYTHING.
- 5 0 I DON'T FEEL PARTICULARLY GUILTY.
 1 I FEEL GUILTY A GOOD PART OF THE TIME.
 2 I FEEL GUILTY MOST OF THE TIME.
 3 I FEEL GUILTY ALL OF THE TIME.
- 6 0 I DON'T FEEL I AM BEING PUNISHED.
 1 I FEEL I MAY BE PUNISHED.
 2 I EXPECT TO BE PUNISHED.
 3 I FEEL I AM BEING PUNISHED.
- 7 0 I DON'T FEEL DISAPPOINTED IN MYSELF.
 1 I AM DISAPPOINTED WITH MYSELF.
 2 I AM DISGUSTED WITH MYSELF.
 3 I HATE MYSELF.
- 8 0 I DON'T FEEL I AM ANY WORSE THAN ANYBODY ELSE.
 1 I AM CRITICAL OF MYSELF FOR MY WEAKNESS OR MISTAKES.
 2 I BLAME MYSELF ALL THE TIME FOR MY FAULTS.
 3 I BLAME MYSELF FOR EVERYTHING BAD THAT HAPPENS.
- 9 0 I DON'T HAVE ANY THOUGHTS OF KILLING MYSELF.
 1 I HAVE THOUGHTS OF KILLING MYSELF, BUT I WOULD NEVER CARRY THEM OUT.
 2 I WOULD LIKE TO KILL MYSELF.
 3 I WOULD KILL MYSELF IF I HAD THE CHANCE.
- 10 0 I DON'T CRY ANY MORE THAN USUAL.
 1 I CRY MORE NOW THAN I USED TO.
 2 I CRY ALL THE TIME NOW.
 3 I USED TO BE ABLE TO CRY, BUT NOW I CAN'T CRY EVEN THOUGH I WANT TO.
- 11 0 I AM NO MORE IRRITATED NOW THAN I EVER AM.
 1 I GET ANNOYED OR IRRITATED MORE EASILY THAN I USED TO.
 2 I FEEL IRRITATED ALL THE TIME NOW.
 3 I DON'T GET IRRITATED AT ALL BY THE THINGS THAT USED TO IRRITATE ME.

Appendix C. Beck Depression Inventory (continued)

- 12 0 I HAVE NOT LOST INTEREST IN OTHER PEOPLE.
1 I AM LESS INTERESTED IN OTHER PEOPLE THAN I USED TO BE.
2 I HAVE LOST MOST OF MY INTEREST IN OTHER PEOPLE.
3 I HAVE LOST ALL OF MY INTEREST IN OTHER PEOPLE.
- 13 0 I MAKE DECISIONS ABOUT AS WELL AS I EVER COULD.
1 I PUT OFF MAKING DECISIONS MORE THAN I USED TO.
2 I HAVE GREATER DIFFICULTY IN MAKING DECISIONS THAN BEFORE.
3 I CAN'T MAKE DECISIONS AT ALL ANYMORE.
- 14 0 I DON'T FEEL I LOOK ANY WORSE THAN I USED TO.
1 I AM WORRIED THAT I AM LOOKING OLD OR UNATTRACTIVE.
2 I FEEL THAT THERE ARE PERMANENT CHANGES IN MY APPEARANCE THAT MAKE ME LOOK UNATTRACTIVE.
3 I BELIEVE THAT I LOOK UGLY.
- 15 0 I CAN WORK ABOUT AS WELL AS BEFORE.
1 IT TAKES AN EXTRA EFFORT TO GET STARTED AT DOING SOMETHING.
2 I HAVE TO PUSH MYSELF VERY HARD TO DO ANYTHING.
3 I CAN'T DO ANY WORK AT ALL.
- 16 0 I CAN SLEEP AS WELL AS USUAL.
1 I DON'T SLEEP AS WELL AS I USED TO.
2 I WAKE UP 1-2 HOURS EARLIER THAN USUAL AND FIND IT HARD TO GET BACK TO SLEEP.
3 I WAKE UP SEVERAL HOURS EARLIER THAN I USED TO AND CANNOT GET BACK TO SLEEP.
- 17 0 I DON'T GET MORE TIRED THAN USUAL.
1 I GET TIRED MORE EASILY THAN I USED TO.
2 I GET TIRED FROM DOING ALMOST ANYTHING.
3 I AM TOO TIRED TO DO ANYTHING.
- 18 0 MY APPETITE IS NO WORSE THAN USUAL.
1 MY APPETITE IS NOT AS GOOD AS IT USED TO BE.
2 MY APPETITE IS MUCH WORSE NOW.
3 I HAVE NO APPETITE AT ALL ANYMORE.
- 19 0 I HAVEN'T LOST MUCH WEIGHT, IF ANY, LATELY.
1 I HAVE LOST MORE THAN 5 POUNDS.
2 I HAVE LOST MORE THAN 10 POUNDS.
3 I HAVE LOST MORE THAN 15 POUNDS.
- I AM PURPOSELY TRYING TO LOSE WEIGHT BY EATING LESS. Yes___ No___
- 20 0 I AM NO MORE WORRIED ABOUT MY HEALTH THAN USUAL.
1 I AM WORRIED ABOUT PHYSICAL PROBLEMS SUCH AS ACHES AND PAINS; OR UPSET STOMACH; OR CONSTIPATION.
2 I AM VERY WORRIED ABOUT PHYSICAL PROBLEMS AND IT'S HARD TO THINK OF MUCH ELSE.
3 I AM SO WORRIED ABOUT MY PHYSICAL PROBLEMS THAT I CANNOT THINK OF ANYTHING ELSE.
- 21 0 I HAVE NOT NOTICED ANY RECENT CHANGE IN MY INTEREST IN SEX
1 I AM LESS INTERESTED IN SEX THAN I USED TO BE.
2 I AM MUCH LESS INTERESTED IN SEX NOW.
3 I HAVE LOST INTEREST IN SEX COMPLETELY.

Appendix D. Mini Mental Status Exam

*******MINI MENTAL STATUS EXAMINATION*******

A. Orientation

1. What is the	YEAR _____	2. Where are we? STATE _____
	SEASON _____	COUNTY _____
	DAY OF MO. _____	TOWN _____
	DAY OF WK. _____	HOSPITAL _____
	MONTH _____	BLDG/FLOOR _____
		Total Orientation _____(10)

B. Registration

1. Can I test your memory? I'll say three words, just listen and then repeat them for me (1 second each).

APPLE _____
 PENNY _____
 TABLE _____

Trials needed for correct recall: _____ (Score = words recalled on first attempt)

Total Registration _____(3)

C. Attention and Calculation (Count 1 or 2 but not both)

1. I would like you to start at 100 and then subtract / take away 7, take away 7 from that and keep taking away 7 until I say STOP. (Demonstrate as needed)

2.
 100 93 86 79 72 65
 _____ (score +/-)

3. (Alternative Item) Please spell the word WORLD for me. Good. Now I would like you to spell WORLD backwards.

Correct: D L R O W

Patient's Order: _____ Total Attention/Concentration _____(5)

D. Recall

Can you tell me the three words that I asked you to remember a few minutes ago?

Ap _____ Pe _____ Ta _____ Total Recall _____(3)

E. Language

1. What is this called? _____ Watch _____ Pencil _____(2)

2. Please listen and repeat after me: "No ifs, ands, or buts." _____(1)

4. Please take this paper in your right hand, fold it in half and put it on the floor
 _____rt. hand _____in half _____on floor _____(3)

4. Please read this and do what it says. "Close your eyes" (score 1 if eyes are closed) _____(1)

5. Please make a copy of this drawing. (score 1 if all 10 angles and proper intersection) _____(1)

6. Here is a pencil & paper. Please make a complete sentence and write it out. _____(1)



Total Language _____(9)

TOTAL MINI MENTAL STATUS SCORE _____(30)

Appendix E. State-Trait Personality Inventory (Anger Subscale)

*****STATE-TRAIT PERSONALITY INVENTORY – ANGER SUBSCALE*****

I will now read some statements that people use to describe themselves. Listen to each statement and let me know how you feel *right now*. There are no right or wrong answers. Give the answer which seems to describe your *present feelings* best. Tell me if you *currently* feel that way “Not at all”, “Somewhat”, “Moderately So”, or “Very Much So”.

	NOT	SOMEWHAT AT ALL	MODERATELY SO	VERY MUCH SO
1. I AM FURIOUS.	1	2	3	4
2. I FEEL LIKE BANGING ON THE TABLE.	1	2	3	4
3. I FEEL ANGRY.	1	2	3	4
4. I FEEL LIKE YELLING AT SOMEBODY.	1	2	3	4
5. I FEEL LIKE BREAKING THINGS.	1	2	3	4
6. I AM MAD.	1	2	3	4
7. I FEEL IRRITATED.	1	2	3	4
8. I FEEL LIKE HITTING SOMEONE.	1	2	3	4
9. I AM BURNED UP.	1	2	3	4
10. I FEEL LIKE SWEARING.	1	2	3	4

I will now read some statements that people use to describe themselves. Listen to each statement and let me know how you *generally* feel. There are no right or wrong answers. Give the answer which seems to describe your *general feelings* best. Tell me if you *generally* feel that way “Not at all”, “Somewhat”, “Moderately So”, or “Very Much So”.

	NOT	SOMEWHAT AT ALL	MODERATELY SO	VERY MUCH SO
11. I AM QUICK-TEMPERED.	1	2	3	4
12. I HAVE A FIERY TEMPER.	1	2	3	4
13. I AM A HOTHEADED PERSON.	1	2	3	4
14. I GET ANGRY WHEN I'M SLOWED DOWN BY OTHERS' MISTAKES.	1	2	3	4
15. I FEEL ANNOYED WHEN I AM NOT GIVEN RECOGNITION FOR DOING GOOD WORK.	1	2	3	4
16. I FLY OFF THE HANDLE.	1	2	3	4
17. WHEN I GET MAD, I SAY NASTY THINGS.	1	2	3	4
18. IT MAKES ME FURIOUS WHEN I AM CRITICIZED IN FRONT OF OTHERS.	1	2	3	4
19. WHEN I GET FRUSTRATED, I FEEL LIKE HITTING SOMEONE.	1	2	3	4
20. I FEEL INFURIATED WHEN I DO A GOOD JOB AND GET A POOR EVALUATION.	1	2	3	4

Appendix F. Emotional Response Scenarios (First Administration)

1 You and your wife have plans to go to dinner and a movie after you get home from work. You have promised her that it would be today, and you know that she really wants to see this movie. Your day at work has been very difficult, and all you want to do is go home and rest, so you call your wife from work and cancel. When you get home, the dinner that she serves you is undercooked in some areas, and burned in others. In fact, it's the worst that you have ever tasted. Your wife offered when you called her to cook dinner at home tonight, and see the movie another time. You remember her mentioning something earlier in the week about the stove not working correctly. From where you are sitting, her food looks fine. She seemed to slam the plate of food in front of you when she served it.

2 Today you found out that you lost a promotion to a co-worker. You could have really used the extra money. She comes over to you later and says, "Hey, I guess the best person won!" The comment was loud enough for other co-workers to hear. You know that the co-worker has a competitive nature. You have heard that this co-worker was angry last month because you received special recognition from your employer for a job well done and she did not. You and this co-worker have been civil in the past.

3 You were supposed to come home early and assist your wife in preparing a holiday dinner. You forgot, and by the time you did arrive home she had cooked the majority of it alone. Later that evening, while she is serving the food to you in front of your family, you think you see a strange expression on her face and she knocks the wine over, soaking your clothes. While cooking the rest of the meal, your wife seemed to be slamming pots and pans. She didn't argue with you about your tardiness. The wine went directly into your lap, and nowhere else. You know that your wife wasn't feeling well today, and taking medication.

4 You are at a football game, wearing your favorite team's paraphernalia and have just watched them lose 35-0. You are leaving the stadium, when you hear a group of the other team's fans laughing and shouting behind you. You look back, and they are getting closer to where you are. Suddenly you feel a nudge. The nudge came from a woman in the group who looked at you during the game and yelled "Loser!" She sounds very intoxicated. The group was shouting obscenities about your team earlier. The group was moving along with the heavy crowd as it poured out of the stadium.

- "In your own words, describe *everything* you remember about what just happened." (cue recall)
- "I want to know if she meant for this to happen. On a scale from 1 to 10, with 1 meaning she definitely did *not* mean for this to happen and 10 meaning she definitely *did* mean for this to happen, please tell me if she meant for this to happen." (perception of intent)
- "I want to know if her motives were hostile. On a scale from 1 to 10, 1 meaning her motives were definitely *not* hostile and 10 meaning her motives definitely *were* hostile, please tell me if her motives were hostile." (perception of hostility)
- "What are some of the things you *could possibly* do or say in this situation?" (response consideration)
- "What would you *probably* do or say in this situation?" (response decision)

5 You and your wife are at holiday party. Your wife says that she doesn't feel like socializing and sits down to hold a table for you, while you go around and mingle. After a few minutes, and from across the room, you see a flirtatious co-worker, kissing your wife in greeting. She allows your co-worker to sit and speaks with him. You look directly at your wife and motion for her to come over to you. She glances toward you but ignores you. You are not really sure that your wife saw you. Your wife seems to be sitting too close to and smiling too much at this co-worker, and appears to be touching this man too frequently. You think that your wife is not dressed provocatively. Your wife knows that you do not like your co-worker, and that he would be at the party.

- "If this happened to them, some men would have chosen to *walk over to her, grab her arm, and pull her out of the room*. I want to know how easy or difficult would it be for you to do this if you tried. On a scale from 1 to 10, 1 meaning very easy and 10 meaning very difficult, how easy or difficult would this be for you to do if you tried?" (perceived ability to enact an aggressive response)
- "What would probably happen after you did that?" (expectation of outcome of aggressive response)
- "If this happened to them, some men would have chosen to *go over and sit next to her, join the conversation, and put their arm around their wife*. I want to know how easy or difficult would it be for you to do this if you tried. On a scale from 1 to 10, 1 meaning very easy and 10 meaning very difficult, how easy or difficult would this be for you to do if you tried?" (perceived ability to enact a prosocial response)
- "What would probably happen after you did that?" (expectation of outcome of prosocial response)
- "If this happened to them, some men would have chosen to *not say or do anything*. I want to know how easy or difficult would it be for you to do this if you tried. On a scale from 1 to 10, 1 meaning very easy and 10 meaning very difficult, how easy or difficult would this be for you to do if you tried?" (perceived ability to enact a passive response)
- "What would probably happen after you did that?" (expectation of outcome of passive response)

6 You are sitting in your car at a red light when you feel a jolt from behind. You get out and see that you have been hit from behind, and there is a huge, ugly dent in the fender. You recognize the other driver as a woman your friend used to be romantically involved with. The relationship ended badly, and this woman knows that you had supported your friend throughout the breakup. Your friend's ex says that her foot slipped off of the brake pedal. You notice that the damage to your car is much worse than hers. She offers to pay for the damage.

- "If this happened to them, some men would have chosen to *just drive home, and try to ignore the dent in the fender* (proposed passive response). I want to know how easy or difficult would it be for you to do this if you tried. On a scale from 1 to 10, 1 meaning very easy and 10 meaning very difficult, how easy or difficult would this be for you to do if you tried?" (perceived ability to enact a passive response)
- "What would probably happen after you did that?" (expectation of outcome of passive act)
- "If this happened to them, some men would have chosen to *say, you stupid cow, why don't you watch where you're going?*" (proposed aggressive response). I want to know how easy or difficult would it be for you to do this if you tried. On a scale from 1 to 10, 1 meaning very easy and 10 meaning very difficult, how easy or difficult would this be for you to do if you tried?" (perceived ability to enact an aggressive response)
- "What would probably happen after you did that?" (expectation of outcome of aggressive act)
- "If this happened to them, some men would have chosen to *let her pay you for the car repair* (proposed prosocial response). I want to know how easy or difficult would it be for you to do this if you tried. On a scale from 1 to 10, 1 meaning very easy and 10 meaning very difficult, how easy or difficult would this be for you to do if you tried?" (perceived ability to enact a prosocial response)
- "What would probably happen after you did that?" (expectation of outcome of prosocial act)

Appendix G. Emotional Response Scenarios (Second Administration)

- 1 You are on your way home from work when you see a man leaving your home. You are too far away to speak with him, but when you come inside your door, you ask your wife about him. She says he was an old friend from high school, but doesn't say anything more. Your wife is putting your bedroom sheets in the wash. You and your wife have been arguing lately. You notice a high school reunion invitation on the table. Your wife had on an apron, and you noticed dishes soaking in the sink.
- 2 You stopped at a fast food restaurant before coming home. When you open your bag, you notice that the cashier has left a few items out of your bag, although you have paid for them. The cashier appeared to be new; she was asking the other cashier a lot of questions about how to ring up food. Many of the customers in line with you were loudly discussing how slow she was. Another man in line quietly told a joke that made you laugh out loud, and the cashier looked up at you silently and frowned. When she gave you the food, the cashier smiled and told you to "have a nice day."
- 3 Your wife recently landed a great job, and for the last two months her paycheck has been twice as much as yours. One night you both go out to dinner with a few friends. When your bill comes, she takes it and says to you, "I'll pay for you. I'm the main breadwinner in the house anyway." The others at the table laugh. People at the table, including your wife, have been joking and laughing during the entire meal. Your wife has commented in the past that you should get a higher paying job. Your wife winks at you when she makes the comment. Prior to her promotion, your wife would occasionally comment that your family was broke.
- 4 You are waiting for an acquaintance to pick you up from your house and give you a ride to the store, as your car is in need of repair. You are dressed in old clothing, because you were doing work around your house. When you pick up your keys and wallet, your acquaintance looks at your clothes and says, "Are you going to wear that?" Your acquaintance commented earlier this week that if you had simply brought a new and expensive car, like she did, you wouldn't have these problems. When she found out that your car broke down, she volunteered to give you a ride anytime you needed it. Your acquaintance is generally somewhat critical of you. You weren't quite ready when she first came to the door, and she waited while you hurried to put your projects away.
- "In your own words, describe *everything* you remember about what just happened." (cue recall)
 - "I want to know if she meant for this to happen. On a scale from 1 to 10, with 1 meaning she definitely *did not* mean for this to happen and 10 meaning she definitely *did* mean for this to happen, please tell me if she meant for this to happen." (perception of intent)
 - "I want to know if her motives were hostile. On a scale from 1 to 10, 1 meaning her motives were definitely *not* hostile and 10 meaning her motives definitely *were* hostile, please tell me if her motives were hostile." (perception of hostility)
 - "What are some of the things you *could possibly* do or say in this situation?" (response consideration)
 - "What would you *probably* do or say in this situation?" (response decision)
- 5 Your wife asked you to do a repair project since today was your day off from work. You agreed, but when you started, a friend of yours called and asked you to help him out of an emergency situation. You spent all day with your friend, and when you came back home, you were so tired that you lay down on the couch to take a nap. Your wife came home a few minutes later and sees you. Later that evening, when she is on the phone with one of her friends, you overhear her tell her friend that she had "worked all day while you lay around." You didn't tell your wife about your friend's emergency. You and your wife have been getting along well lately. Your wife hasn't said much to you all evening. She had asked you to do the repair project the week before, and you forgot.
- If this happened to them, some men would have chosen to go into the room, yank the phone cord out of the wall and say, "Look, lose the attitude." I want to know how easy or difficult it would be for you to do this if you tried. On a scale of one to ten, one meaning very easy and ten meaning very difficult, how easy or difficult would this be for you to do if you tried? (perceived ability to enact an aggressive response)
 - "What would probably happen after you did that?" (expectation of outcome of aggressive act)
 - If this happened to them, some men would have chosen to wait until she was off of the phone and tell her, "I really *have* been working all day." I want to know how easy or difficult it would be for you to do this if you tried. On a scale of one to ten, one meaning very easy and ten meaning very difficult, how easy or difficult would this be for you to do if you tried? (perceived ability to enact a prosocial response)
 - "What would probably happen after you did that?" (expectation of outcome of prosocial act)
 - If this happened to them, some men would have chosen to pretend to be asleep, and hope she didn't bring it up again. I want to know how easy or difficult it would be for you to do this if you tried. On a scale of one to ten, one meaning very easy and ten meaning very difficult, how easy or difficult would this be for you to do if you tried? (perceived ability to enact a passive response)
 - "What would probably happen after you did that?" (expectation of outcome of passive act)
- 6 You are on your way to the "ten items or less" checkout lane in the supermarket. You are walking quickly, as you are in a hurry. A woman in the next line looks up, and swerves her cart over to the lane to which you are headed. Her shopping cart is full, and she is pulling out a checkbook. While you were in the parking lot, this woman walked out in front of your car and you blew your horn at her. While you were still shopping, you both reached for the last of your favorite item that was on sale, and you picked it up first and placed it in your cart. The woman did not look in your direction prior to moving her shopping cart. You have seen this woman around your neighborhood, and she usually wears glasses.
- If this happened to them, some men would have chosen to say nothing at all. I want to know how easy or difficult it would be for you to do this if you tried. On a scale of one to ten, one meaning very easy and ten meaning very difficult, how easy or difficult would this be for you to do if you tried? (perceived ability to enact a passive response)
 - "What would probably happen after you did that?" (expectation of outcome of passive response)
 - If this happened to them, some men would have chosen to say, "Excuse me ma'am. Did you notice that this line is ten items or less? Also, were you aware that you cut in front of me?" I want to know how easy or difficult it would be for you to do this if you tried. On a scale of one to ten, one meaning very easy and ten meaning very difficult, how easy or difficult would this be for you to do if you tried? (perceived ability to enact a prosocial response)
 - "What would probably happen after you did that?" (expectation of outcome of prosocial response)
 - If this happened to them, some men would have chosen to say, "What are you stupid? I was going into that line!" I want to know how easy or difficult it would be for you to do this if you tried. On a scale of one to ten, one meaning very easy and ten meaning very difficult, how easy or difficult would this be for you to do if you tried? (perceived ability to enact an aggressive response)
 - "What would probably happen after you did that?" (expectation of outcome of aggressive response)

Appendix H. Emotional Response Scenarios (Third Administration)

- 1 You have been working on an important project for several days. You come home and notice that it has been damaged. Your wife was complaining when you first started about all the time you were spending on your project. You have moved the project several times yourself. Your wife thoroughly cleaned up today, and rearranged the furniture. Your wife mentioned this morning that you weren't paying enough attention to her.
- 2 You are under a lot of stress at work. Your boss tells you one day that one of your co-workers has mentioned that you have been stressed out for the last couple of weeks. Your boss tells you that he reduced your hours. The co-worker who spoke to your boss has recently become very friendly with him. The co-worker has lunch with you occasionally and has given you advice that was helpful to you. You are wary this co-worker, as she has replaced another employee who was fired. She has never expressed an interest your position.
- 3 Your wife goes out in the evening to pick up the take-out she ordered for dinner. Two hours pass, and she has not returned home. A friend of yours calls and tells you that he has seen your wife at the restaurant with a person that she used to date. When she does get back the food is cold and you are very hungry. Your wife mentioned earlier in the week that she admired her ex. Your wife has recently started complaining about your physical appearance. Your wife volunteered to go out and get the food so that you could relax. She tells you that her ex recently had a personal tragedy.
- 4 You are really looking forward to your favorite sporting event. You are going with a group of your friends. One of your friends is supposed to pick up the tickets for you. The day you are supposed to go, you receive a message on your answering machine from your friend, saying that she cannot make it. As she has both of your tickets, and the event is now sold out, you cannot go either. You try to call her, but there is no answer at her house. You had a disagreement with this friend yesterday. The other day, your friend asked you to do a favor for her but you declined. This friend is the one who informed you about the event and extended the invitation to you. Last week she was speaking to you about how much she was looking forward to the event.
- "In your own words, describe *everything* you remember about what just happened." (cue recall)
 - "I want to know if she meant for this to happen. On a scale from 1 to 10, with 1 meaning she definitely *did not* mean for this to happen and 10 meaning she definitely *did* mean for this to happen, please tell me if she meant for this to happen." (perception of intent)
 - "I want to know if her motives were hostile. On a scale from 1 to 10, 1 meaning her motives were definitely *not* hostile and 10 meaning her motives definitely *were* hostile, please tell me if her motives were hostile." (perception of hostility)
 - "What are some of the things you *could possibly* do or say in this situation?" (response consideration)
 - "What would you *probably* do or say in this situation?" (response decision)
- 5 When you look in the refrigerator for your favorite dessert, which you placed there yesterday, you notice that it is missing. Other than you and your wife, there has been no one else in the house for the last two days. You were really looking forward to eating your dessert. You and your wife had an argument this morning. Your wife cleaned out the refrigerator earlier today. You recently forgot a special anniversary for your wife. Your dessert was in the back of the refrigerator in an unmarked container.
- If this happened to them, some men would have chosen to respond by throwing out his wife's favorite food. I want to know how easy or difficult it would be for you to do this if you tried. On a scale of one to ten, one meaning very easy and ten meaning very difficult, how easy or difficult would this be for you to do if you tried? (perceived ability to enact an aggressive response)
 - "What would probably happen after you did that?" (expectation of outcome of aggressive act)
 - If this happened to them, some men would have chosen to ask his wife what happened to the dessert, and ask if she could bring another one home when she went out again. I want to know how easy or difficult it would be for you to do this if you tried. On a scale of one to ten, one meaning very easy and ten meaning very difficult, how easy or difficult would this be for you to do if you tried? (perceived ability to enact a prosocial response)
 - "What would probably happen after you did that?" (expectation of outcome of prosocial act)
 - If this happened to them, some men would have chosen to respond by just forgetting about the dessert. I want to know how easy or difficult it would be for you to do this if you tried. On a scale of one to ten, one meaning very easy and ten meaning very difficult, how easy or difficult would this be for you to do if you tried? (perceived ability to enact a passive response)
 - "What would probably happen after you did that?" (expectation of outcome of passive act)
- 6 You are walking down the street in your neighborhood after a heavy rain. A car coming towards you drives through a puddle and splashes you, soaking your clothes. You recognize the driver as one of your neighbors. She seems to be looking straight ahead. She has frequent parties, and you have spoken to her on several occasions about the volume of her music. You called the police last night about your neighbor's music, and they came to the door and confronted her. You and this neighbor are generally on friendly terms.
- If this happened to them, some men would have chosen to go home and pretend like it never happened. I want to know how easy or difficult it would be for you to do this if you tried. On a scale of one to ten, one meaning very easy and ten meaning very difficult, how easy or difficult would this be for you to do if you tried? (perceived ability to enact a passive response)
 - "What would probably happen after you did that?" (expectation of outcome of passive response)
 - If this happened to them, some men would have chosen to say to the neighbor, the next time he saw her, "Be careful when you drive. You drove through a puddle and splashed me earlier." I want to know how easy or difficult it would be for you to do this if you tried. On a scale of one to ten, one meaning very easy and ten meaning very difficult, how easy or difficult would this be for you to do if you tried? (perceived ability to enact a prosocial response)
 - "What would probably happen after you did that?" (expectation of outcome of prosocial response)
 - If this happened to them, some men would have chosen to break the neighbor's car windows. I want to know how easy or difficult it would be for you to do this if you tried. On a scale of one to ten, one meaning very easy and ten meaning very difficult, how easy or difficult would this be for you to do if you tried? (perceived ability to enact an aggressive response)
 - "What would probably happen after you did that?" (expectation of outcome of aggressive response)

Appendix I. Coding Worksheet for Qualitative Responses

Coding Instructions

Scenarios 1-4, for the first question

Indicate what part of the scenario the participant was remembering by indicating whether the statement came from section C (core), H (hostile), or B (benign). Also, indicate if the person is recalling H or B correctly by adding “yes” or if not, “no”. If the statement refers to something that is not a part of the scenario, or making a statement that is not coming *directly from the scenario*, or if you are not sure, you can indicate “?” for unknown.

(C) At your request, a friend of yours has videotaped an entire season of your favorite weekly television series because your work schedule changed and doesn’t allow you to be home to watch it. He gives you the tape, you take it home, and insert it into your VCR on the morning of one of your days off. You go out to run some errands and are gone for most of the day. When you get home your wife has the television on. You look at the VCR and see that she has taped over most of your favorite series.

(H) The videotape was clearly marked with the title of your show.

(B) There is one remote for the VCR and the television.

(B) This VCR was recently purchased.

(H) You had a bad argument with your wife the night before.

“In your own words, describe everything you remember about what just happened.”

My favorite show was taped for me

Code (C, H, B) _____

If H or B, is it correct? _____

and my wife taped over it.

Code (C, H, B) _____

If H or B, is it correct? _____

She should have known,

Code (C, H, B) _____

If H or B, is it correct? _____

because the tape had the name of my show on it.

Code (C, H, B) _____

If H or B, is it correct? _____

But maybe not,

Code (C, H, B) _____

If H or B, is it correct? _____

because this was a new VCR

Code (C, H, B) _____

If H or B, is it correct? _____

and maybe she didn't know how to work it.

Code (C, H, B) _____

If H or B, is it correct? _____

Or it could have been the argument.

Code (C, H, B) _____

If H or B, is it correct? _____

About the Author

Amina Porter received her Bachelor of Science degree in Psychology from Florida Agricultural and Mechanical University, and her Master of Arts and Doctor of Philosophy degrees in Clinical Psychology from the University of South Florida. She will never forget her starting point, and will always hold in the highest regard those who paved the way, who lit the path, and who cheered her on to the finish line.