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Lack of Control as a Predictive Factor for Stress-related Symptoms in Rape Victims

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LACK OF CONTROL AS A PREDICTIVE FACTOR FOR STRESS-RELATED SYMPTOMS IN RAPE VICTIMS

by

Chad Sombke

A thesis submitted in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

in

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Logan, Utah

1993
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Chad Sombke
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Scatterplot of SRS and PC scores for victims and nonvictims
Researchers have agreed that most rape victims experience stress-related symptoms similar to post-traumatic stress disorder. There have also been numerous studies that have tried to predict the severity of those stress-related symptoms, but the literature is inconclusive. Lack of perceived control is consistently mentioned in the rape research literature as being present in rape victims, but no study has empirically examined the relationship between perceived control and a rape victim's stress-related symptoms.

The purpose of this study was to empirically examine the relationship between perceived control and stress-related symptoms in rape victims. This was accomplished by comparing a group of 33 subjects who reported being victims of rape with a group of 50 subjects who did not report being victims of rape. Mean stress-related symptom scores were
correlated with perceived control scores; also, factors, including group membership and the time elapsed since a rape, were regressed onto the subjects' stress-related symptom scores.

The correlations between stress-related symptoms and perceived control in the rape victim group were statistically significant, but the relationship was not present for the nonvictim group. Also, nonsignificant results were obtained for joint effects between perceived control and group membership, along with perceived control and time since a victim had been raped.

The results suggest that low perceived control is a good predictor for elevated stress-related symptoms. Further research may clarify the relationship between perceived control and stress-related symptoms in rape victims.
CHAPTER I
INTRODUCTION

Many rape victims tend to exhibit considerable stress-related symptoms that disrupt their emotional, behavioral, and social well-being. There is general agreement that being raped is distressing, but there is much less agreement about the extent of the trauma (Hanson, 1990). Most researchers who have studied the effects of rape on victims agree that many experience stress-related symptoms similar to manifestations of post-traumatic stress disorder (PTSD). The general symptoms of PTSD typically experienced by rape victims include unwanted and distressing recollections of the traumatic event, either through flashbacks or disturbing dreams, phobic avoidance of cues that remind them of the rape experience, and increased arousal (including elevated heart rate and exaggerated startle responses) (American Psychiatric Association, 1987).

Most researchers agree that rape victims show signs of PTSD. However, in the present study those symptoms will be referred to as "stress-related symptoms," since it was not feasible to make a formal psychiatric diagnosis of PTSD for logistical reasons. Also, rape will be defined as nonconsenting, forced intercourse including vaginal, anal, and/or oral penetration (Dahl, 1989).

Many variables have been thought to contribute to the nature and severity of stress-related symptoms, including
threatened, whether the rape episode involved multiple episodes of intercourse, number of sex acts the victim was forced to perform, number of assailants, and demographics (age, race, religion, education, etc.).

Since victims vary in the extent to which they show adjustment difficulties, researchers have sought to identify specific characteristics of the rape situation or of the victims that could predict which victims are likely to have the most difficulty recovering from a rape experience. Hanson (1990), in his review of the literature, stated that the search for these moderator variables has generated surprisingly few significant findings. He also stated that the effects of specific rape characteristics and victim characteristics tend to be small, and noted that conflicting research results are common.

There has been disagreement about the extent to which characteristics of the victims and the offenses themselves influence the impact and recovery from sexual assault. A number of literature reviews have evaluated studies that examined variables predictive of stress-related symptoms (Burgess, 1983; Ellis, 1983; Foa, Steketee, & Rothbaum, 1989; Hanson, 1990; Steketee & Foa, 1987). Again, these reviews have found little consistency in the factors related to the presence or absence of various psychological effects in rape victims.
Findings from longitudinal assessments of PTSD following rape indicate that it may be possible to make predictions about the course of PTSD on the basis of initial symptoms and responses on self-report measures (Resnick, Kilpatrick, & Lipovsky, 1991). Effective treatment of stress-related symptoms will be facilitated by understanding specific predictive variables of those symptoms.

The Problem

The present author found no published research that specifically examined feelings of perceived lack of control in rape victims as a predictor of stress-related symptoms. Most clinicians and researchers who have studied predictors or rape responses, nevertheless agree that many victims experience a sense of lack of control. For example, Foa et al. (1989) suggested that guilty feelings about being raped may reflect an attempt to increase or regain perceived controllability. These researchers also stated that the relationship between PTSD and victim perceptions of the predictability and controllability of the traumatic event should be further explored in rape victims.

Research does, in fact, verify that there is perceived lack of control following a rape (e.g., Janoff-Bulman, 1979; Foa et al., 1989). The next logical question to address is the extent to which perceived lack of control by rape victims is related to stress-related symptomatology.
Specifically, the problem to be addressed in the present study is whether perceived lack of control is associated with greater stress-related symptomatology, and whether perceived control is a unique predictor for stress-related symptoms in rape victims.

Purpose of the Study

The present thesis is based on three premises, namely:

1. Stress-related symptoms may be conceptualized in terms of symptoms associated with PTSD. Thus, just as in PTSD, stress-related symptoms can range from those that are less-to-more severe.

2. The victim’s perception of control after having been raped may be a significant predictor of stress-related symptom severity.

3. Greater symptom severity after being raped bodes poorly for the rape survivor’s ability to cope or adjust to being victimized.

The three premises were examined in this thesis by testing four research questions. The first question addressed was whether rape victims experience elevated degrees of PTSD-like symptoms when compared to a group of individuals who do not report having been raped. The second question examined was whether rape victims experience lower levels of perceived control when compared to a group of individuals who do not report having been raped. The third
question addressed was whether there is a relationship between reporting PTSD-like symptoms and perceived control and whether this relationship was unique to rape victims or was also a general characteristic of a sample of women who were not raped. The fourth question examined was whether the time span since a victim was raped was also a variable to be considered when analyzing the relationship between victims' PTSD-like symptoms and their perceived control.

Finding that rape victims who experience severe feelings of lack of control also experience an increase in stress-related symptomatology has important clinical ramifications. If an association exists, then treatment for rape victims might profitably focus on increasing victims' sense of control over their lives, including relaxation training, problem solving techniques, assertiveness training, and reality therapy.

The operational definition for perceived lack of control in this study will include the belief that gaining desired outcomes or avoiding undesired ones is not contingent upon what one feels, thinks, says, or does.
CHAPTER II
REVIEW OF LITERATURE

Empirical studies have examined numerous factors that are predictive of stress-related symptomatology. However, no research has specifically focused on the victim's feelings of perceived lack of control as a predictive factor for stress-related symptoms and the relationship that those feelings may have to the severity of overall stress-related symptomatology.

Several literatures will be reviewed in this section. First, the relationship between PTSD and stress-related symptoms will be examined. Attention will focus next on variables that have been used to predict stress-related symptoms. Then literature regarding the relationship between perceived lack of control as such, and the constructs of predictability, self-blame, and learned helplessness will be discussed in order to elucidate the similar effects the constructs have on stress-related symptoms and to elaborate on the fundamental differences in the constructs.

The studies examined in this section were compiled by using a computer search (CD-ROM), by manually examining Psychological Abstracts, and by searching the reference lists of the articles found in the computer and manual searches. Key words used in the search included control,
emotional trauma, learned helplessness, perceived lack of control, post-traumatic stress disorder, rape, and self-blame. The articles were obtained through the Utah State University library along with an interlibrary loan service at USU. Finally, as relevant articles were obtained, the reference lists were searched for further studies about PTSD, rape, and perceived lack of control.

To have been included in this review, the articles must have reported results concerning the effects of rape on victims and/or have discussed the presence of stress-related symptoms in rape victims. Also included were review and research articles addressing perceived lack of control, learned helplessness, predictability, and self-blame, which have all been implicated as potential predictive factors in stress-related symptoms.

**Relationship Between PTSD and Stress-related Symptoms**

In conducting a search of the Psychological Abstracts on CD-ROM covering the years 1985 to September 1992, 884 articles were located under the topic PTSD. Of these, only 25 articles discussed PTSD in rape victims and 19 of the 25 have been published since 1989. Thus, it is only recently that psychologists have recognized the value of conceptualizing post-rape symptoms as a form of PTSD.
The DSM-III-R diagnostic criterion for PTSD includes the development of characteristic symptoms caused by a variety of traumatic life events. The stress of the traumatic event would be markedly distressing or traumatic to almost anyone and is usually associated with intense fear, terror, and helplessness. The traumatic event is also persistently reexperienced through vivid recollections, dreams, feelings, and cues that expose the victims to the trauma. Persistent avoidance of stimuli associated with the trauma is exhibited by efforts to avoid thoughts, activities, and memories of the trauma. A numbing of general responsiveness through feelings of detachment, diminished interest in significant activities, restricted range of affect, and sense of foreshortened future is also present. Finally, PTSD is classified when victims exhibit persistent symptoms of increased arousal, such as insomnia, hypervigilance, and difficulty concentrating (APA, 1987).

The following PTSD symptoms are specifically known to be symptoms associated with rape victims (Becker, Skinner, Abel, Howell, & Bruce, 1983; Burge, 1988; Burgess, 1983; Burgess & Holmstrom, 1974; Dahl, 1989; Ellis, Atkeson, & Calhoun, 1981; Steketee & Foa, 1987). These associated PTSD and stress-related symptoms include (a) difficulty sleeping due to, or associated with, recurrent dreams of the rape; (b) reexperiencing the rape with flashbacks and intrusive
thoughts; (c) phobic avoidance of thoughts, feelings, activities, and situations associated with the rape; (d) diminished interest in significant activities; (e) anger and depression; (f) difficulty concentrating; and (g) exaggerated startle response.

Hanson (1990) has stated that persistent effects of rape have typically been assessed by either long-term follow-up of rape victims, or by measuring the psychological adjustment of women who had been raped many years earlier. In general, these studies have found lasting negative impacts in about 25% of the victims studied. The two most common long-term symptoms of rape are (a) problems in sexual relationships, and (b) general fears, which are symptoms consistent with PTSD and other anxiety disorders.

Burge (1984, 1988) found in two studies that 72.4% and 86% of rape victims showed moderate to severe PTSD symptoms. Also, Bownes, O'Gorman, and Sayers (1991) showed that 70% of their sample of rape victims displayed PTSD symptomatology. This percentage is likely a valid reflection of the overlap between PTSD and post-rape symptoms, since the diagnosis was made after the victims participated in a medico-legal assessment. This assessment included completing an extensive psychiatric interview and a comprehensive checklist including the characteristic symptoms of PTSD as defined in the DSM-III-R.
An actual diagnosis of PTSD will not be made in this study because the assessments being used are in a questionnaire format, which is not sufficient for making a DSM-III-R diagnosis alone. Because of the absence of a formal diagnosis, the term stress-related symptoms will be used instead of the diagnostic classification of PTSD when referring to the symptoms reported by the subjects who participated in this study.

The associated PTSD and stress-related symptoms will now be discussed in further detail.

**Difficulty sleeping.** Ellis et al. (1981) found that virtually all of the rape victims in their study experienced nightmares and sleeplessness. Other studies show similar results, with victims reporting recurrent dreams of the rape and insomnia (Burgess & Holmstrom, 1974; Norris & Feldman-Summers, 1981). Burge (1988) also found that women who had been raped in their own beds tended to be plagued more with insomnia than women raped in other situations. Also, insomnia was reported by 76% of the subjects in the Bownes et al. (1991) study.

Victims of traumatic events may have difficulty sleeping because they reexperience the trauma in their dreams as nightmares. Victims also present with depressed mood, which is commonly associated with insomnia (APA, 1987). In addition, victims may be experiencing elevated
amounts of anxiety, which is also associated with the inability to sleep soundly.

Again, there may be many reasons why people who experience a traumatic event experience difficulty sleeping. Other reasons not yet discussed are inherent in the additional symptoms that are exhibited after a traumatic event. The remainder of those symptoms will be discussed further.

Reexperiencing the rape. Reexperiencing the rape is a symptom that is highly disturbing and disruptive to victims. Reexperiencing the trauma includes thoughts and feelings, which can be significantly debilitating because they can create phobic reactions to situations in which the reexperiencing of the trauma took place. Kilpatrick and Veronen (1983) have measured the frequency and content of recollections of rape and found that victims experienced significant amounts of intrusive imagery in their daily lives.

Furthermore, flashbacks of the rape itself have been documented in rape victims by Ellis et al. (1981). Bownes et al. (1991) found that 92% and 88% of the rape victims in their study reported recurrent intrusive recollections of the rape and recurrent dreams of the rape, respectively. Norris and Feldman-Summers (1981) found that many victims tended to reexperience the rape during intercourse with a
consenting lover, which created many problems with the couple's continuing sex lives.

Another area to consider in reexperiencing the rape is the physiological underpinnings of PTSD symptomatology. Van der Kolk (1991) stated that one of the hallmarks of PTSD is the intrusive reexperiencing of elements of the trauma in nightmares, flashbacks, or somatic reactions. These traumatic memories are triggered by autonomic arousal and are thought to be mediated via hyperpotentiated noradrenergic pathways originating in the locus coeruleus of the brain. Van der Kolk (1988) has also postulated that a long-term augmentation of memory pathways following trauma underlies the repetitive intrusive reliving of the trauma under conditions of subsequent stress. If this hypothesis is accurate, then treatment might focus on changing the existing traumatic memory pathways into more positive memory pathways through imagery or completely deleting the memory traces altogether.

Because reexperiencing the rape includes thoughts, feelings, and images, it is very difficult to control from the victim's standpoint. Flashbacks can present at any time, usually without warning and with varying intensity. This unpredictability of the flashbacks can cause phobic avoidance of cues contributing to the flashbacks.
Phobic avoidance. Calhoun, Atkeson, and Resick (1982) stated that fear reactions are among the longest lasting of all problems experienced by rape victims. Rape victims will avoid activities, situations, and places that may elicit thoughts and feelings about the rape. For example, victims who are raped outdoors (e.g., in parks) and victims raped in their own bed at home show fear responses to these situations (Brodsky, 1976). Veronen and Kilpatrick (1980) found that 74% of victims showed phobic anxiety after rape, and 65% of the rape victims in the Bownes et al. (1991) study reported phobic avoidance. General fearfulness seems to decline rapidly after a rape, but overall, victims show greater fearfulness and avoidance than nonvictims, even up to one year after the assault. In addition, reduced levels of activity produced by avoidance behavior can contribute to the development of depression (Kilpatrick et al., 1989).

Anxiety in certain situations that remind victims of the rape may create a generalized fear of that situation. Some anecdotal reports indicated that phobias for those anxiety-producing situations may have developed in some victims. Phobic avoidance of those situations can disrupt the lives of many people. Many women move from their homes or quit their jobs if they have been raped in these places or in a situation reminiscent of them. This obviously creates a disruption not just in the victim’s life, but in
the lives of those around the victim, including the spouse, offspring, family, former co-workers, and employers. Phobic avoidance of certain situations (such as a park) is not life-debilitating, but it nevertheless changes the victim's freedom of movement.

**Decreased interest in significant activities.**
Interference with general enjoyment and satisfaction with life may be one of the most common effects of rape (Ellis et al., 1981). Victims of rape tend to display apathetic attitudes toward many once-pleasurable activities (Feldman-Summers, Gordon, & Meagher, 1979). They experience decreased interest in significant activities, including dating, going out with new people, and sex. Norris and Feldman-Summers (1981) found a significant decrease in frequency of oral sex, intercourse, and orgasm in their subjects after rape. Nearly every aspect of formerly pleasurable sexual activity is affected, such as hugging, kissing, caressing, and intercourse.

A decrease in sexual activity after experiencing a rape may stem from the fear of reexperiencing the event. Sexual cues may remind victims of the assault, which may develop into phobic avoidance of sexual activity. Becker, Skinner, Abel, Axelrod, and Cichon (1984) viewed assault situations as an unconditioned stimulus that evokes fear and anxiety. Sexual activities associated with the rape trauma become
conditioned stimuli for anxiety. Via generalization and higher order conditioning, other sexual activities also come to elicit fear. To avoid discomfort, the victims may inhibit sexual feelings or abstain from sex. Foa et al. (1989) stated that Becker et al.'s theory appears to be a parsimonious explanation for the sexual avoidance of rape victims.

Bownes et al. (1991) found that 92% of the victims in their study showed a decline in interests in formerly pleasurable activities. Loss of interest in once pleasurable activities is also a common symptom of depression.

**Anger-depression.** Anger is usually a short-term reaction to rape but can still be evident in victims long after the trauma. Although greater anger was expressed by victims, Ellis et al. (1981) found no significant differences in victims' anger compared with a control group one year after the rape. Anger after a rape experience may be addressed to the self, society, God, and men (Burgess & Holmstrom, 1974). In accordance with this, Janoff-Bulman (1979) found that 74% of the victims in her study showed some self-blame after a rape.

Self-blame is a very prevalent attitude for victims of sexual assault. Victims frequently tell themselves they should have done something more to stop the rape or should
have known better than to get into a situation where they might be raped. Extinguishing self-blaming attitudes is a very important part of therapy for victims. If they continue to blame themselves, it makes the recovery process much more difficult (Nadelson, 1989).

Many victims experience depression after a rape, which has been shown to last up to 4 years (Kilpatrick, Veronen, & Best, 1983). Ellis et al. (1981) showed that victims of rape were significantly more depressed compared to a control group of nonvictims after 1 year. They also found that 50% of victims reported suicidal thoughts during recovery, which is a major sign of depression.

The misperception by society that a woman is typically not raped without her consent also contributes to victims' feelings of guilt, self-blame, and depression about the rape experience. This societal attitude is sometimes called the "Just Universe" myth, which is the custom of blaming the victim because it allows people to feel they are safe from the arbitrariness of acts such as rape and, therefore, are free to continue the patterns of their lives without fear (Earl, 1985).

What people in society and victims of rape need to realize is that sexual assaults occur to people in all walks of life. Taking precautions does not rule out the possibility that one will be raped. Conversely, just
because one does not take precautions, does not justify the act of rape. If victims accept these ideas, then it may be possible to decrease depression due to self-blaming attitudes about the rape.

**Difficulty concentrating.** Intrusive thoughts associated with the rape are a major cause for the lack of concentration and disrupted thinking experienced by victims. One college victim reported that she had to sit in the front of class to maintain her attention; otherwise, her thoughts would wander to images of the assault (personal communication, Feb. 1990). Furthermore, Bownes et al. (1991) reported that 65% of the subjects they studied reported impaired memory or concentration.

Concentration is being able to focus and direct one's attention. If a person's ability to focus his/her attention is frequently being disrupted by unwanted, intrusive thoughts or images, then the person's concentration will in turn be interrupted. This inability to focus their attention is most likely what happens to rape victims or any victims of traumatic events when they are experiencing difficulties in concentration.

**Exaggerated startle response.** Exaggerated startle response is shown in rape victims in accordance to the intense fear they experience during the attack, the belief that they may be killed during the rape, and the unexpected
and sudden nature of many rapes. These threatening experiences lead victims to be continuously on edge and hyperaware of any perceivable threat following a rape experience.

Dahl (1989) found in his study of 55 rape victims that 22% to 75% showed signs of increased arousal, including tremors, sweating, palpitations, and breathing difficulties in the first few days after the assault. Bownes et al. (1991) stated that 61% of rape victims in their study reported hyperalertness.

Being hyperalert after a rape can be seen as a normal response following a rape, especially a "blitz" rape. Blitz rapes are those that people in society most frequently think about when they imagine a rape experience. In these instances, the person is attacked by a stranger without warning in a situation that takes the victim by surprise, such as in a park at night, walking to a car after work, or being attacked in bed by someone who has broken into a house while the residents are sleeping.

An exaggerated startle response is not an extremely debilitating symptom, but it can create chronic, elevated levels of arousal, which may subsequently lead to more serious problems, such as high blood pressure, ulcers, and/or chronic headaches.
Since most victims experience a number of the symptoms discussed above in conjunction with each other, the combination of these symptoms is experienced as very debilitating for a rape victim. Because of the combination of symptoms experienced by rape victims, rape counselors have referred to the PTSD literature to help add to and elaborate on treatments for stress-related symptoms associated with rape.

PTSD has been treated with numerous types of therapy, including hypnotherapy (Ebert, 1988), implosion and imaginal flooding (Keane & Kaloupek, 1982), systematic desensitization (Wolff, 1977), stress inoculation training (Foa, Rothbaum, Riggs, & Murdock, 1991; Veronen & Kilpatrick, 1983), and eye movement desensitization (Shapiro, 1989; Wolpe & Abrams, 1991). All of these types of therapy include some form of exposure to the traumatic event, usually imaginally. These treatments can by used to ameliorate the PTSD symptoms discussed above that are exhibited in rape victims.

Explaining each individual treatment method and its uses in treating rape victims is not the point of this thesis and will not be undertaken. But, one important detail that is essential to point out is the fact that many of the treatment methods used for treating victims of different traumas are very similar (Foy, 1992). In other
words, victims of natural disasters, war, crimes, and/or rape can all be treated successfully with similar treatment methods, namely, an exposure-based treatment that helps victims experience the traumatic event in a safe setting along with being able to relate cognitive attributions to the event and emotions experienced in, and because of, the trauma (Foy, 1992).

Predictive Variables of Stress-related Symptoms

Rape victims vary in the extent to which they show adjustment difficulties following a rape experience. Because of the variety of adjustment difficulties found in rape victims, researchers have sought to identify specific characteristics of the rape situation and particular characteristics of the victims that may predict those victims who are likely to have the most difficulty recovering from a rape experience. In general, the search for these moderator variables has generated surprisingly few significant findings (Hanson, 1990).

Dahl (1989) stated that there is a need for more research to identify factors predictive of the development of long-lasting stress-related symptoms associated with rape and other psychosocial problems. Frazier (1991) has presented a few arguments for conducting research that may identify predictive factors of stress-related symptoms.
associated with rape. She declared that identification of preassault, assault, and postassault characteristics that are associated with increased rape trauma can help counselors identify victims who may be at increased risk for stress-related symptoms. Research to date has not examined why these victim and assault characteristics might be related to stress-related trauma in rape victims.

Cognitive processes that might mediate the relationships between victim and assault characteristics have also not been assessed. Identifying such processes could help us better understand the meaning of an assault for victims. In addition, this information on a victim’s cognitive processes might facilitate the development of more effective treatment strategies for victims of rape because these cognitive processes are more amenable to change in therapy than other variables (e.g., severity of the assault).

Although no research has specifically examined the link between stress-related symptoms in rape victims and perceived lack of control, there is sufficient (albeit contradictory) literature on factors involved in predicting stress-related symptoms in rape victims (Hanson, 1990). The variables that have been previously studied in trying to predict these stress-related symptoms will be classified into three categories. The categories include victim
demographics, rape characteristics, and the victim's previous life history.

**Victim demographics.** Virtually all studies and reviews having to do with rape victims incorporate a victim-demographics category. Demographics that have been examined in research studies and reviews of the literature include amount of education, marital status, social supports, and socioeconomic status (Burge, 1988; Burgess & Holmstrom, 1974; Ellis et al., 1981; Janoff-Bulman, 1979; Moscarello, 1990; Norris & Feldman-Summers, 1981; Steketee & Foa, 1987).

Most of these studies found no significant differences in the demographics of victims and the severity of their subsequent stress-related symptoms, which is consistent with Koss and Dinero's (1989) study. Koss and Dinero (1989) found in their study of risk factors for sexual victimization that in the vast majority of instances, rape victims were not different from nonvictimized women on critical individual risk variables. In short, rape vulnerability was either linked to earlier experiences beyond a victim's control or was not predictable.

A few exceptions do exist. Burge (1988) found that victims with higher levels of education exhibit lower distress after rape. Education has been identified as a potential resource to individuals under stress (McCubbin & Patterson, 1983) and may have helped some of the women in
this study to cope with the aftermath of rape (Burge, 1988).

Women with higher levels of education may have exhibited more control in their lives prior to the rape than those with lower levels of education, because acquiring an education is not a passive experience but one that involves considerable effort involving personal control.

Marital status has been reported as an important factor in the recovery of a rape victim. Two studies have suggested that married women show more trauma than unmarried women (McCahill, Meyer, & Fischman, 1979; Ruch & Chandler, 1983). Ellis et al. (1981) reported that four of the five married victims in a group of 27 were divorced within 18 months of the rape. Roehl and Gray (1984) also declared that 60% of married rape victims get divorced as a result of a rape.

The reasons for the increased trauma in married women is unclear. The elevated trauma could be related to the devastating experience of a failed marriage. Another possibility is that the victims' husbands may have abandoned them because of the husbands' inability to cope with the fact that their wives have been raped. Finally, the rape experience may have led to increased difficulties in the marriages and exacerbated prior problems in those marriages. This exacerbation of previous problems may have subsequently lead to divorce, which in itself can be a very traumatic
experience.

Social support received from husbands, as discussed above, is a very important factor in a rape victim's recovery. Victims also need social support from outside the home. Becker et al. (1983), Janoff-Bulman (1979), and Norris and Feldman-Summers (1981) have all found that constructive social support systems (friends, relatives) decreased the number and severity of stress-related symptoms in rape victims. Also, Moscarello (1990) stated that social support is the single most important post-sexual assault factor influencing productive rehabilitation. Availability of positive social supports is a powerful predictor of potential recovery following a rape experience.

In their review of the rape literature, Steketee and Foa (1987) stated that the literature suggests that social support is an important factor in decreasing the immediate impact of rape, and in facilitating recovery from it. Finally, Becker et al. (1983) asked subjects who was the most helpful in the resolution of their rape crisis. Parents, other relatives, and friends were identified by victims as providing the greatest help. Therefore, it is important for family and friends of rape victims to be aware of the critical role they play in the victim's recovery.

Economic status has been looked at as a predictive factor in recovery from rape. An inverse relation between
economic status and recovery was reported by Kilpatrick et al. (1983). Compared to economically wealthier victims, the poorer ones showed more symptoms 4 to 6 years after the assault and more depressive symptoms 1 year later. Some explanations for this relationship could be that poorer victims do not have the financial means to pay for therapy, to visit family members who possibly live far away, or to start or continue educational endeavors. All of these factors have all been shown to help decrease trauma following a rape if they are utilized (Foy, 1992).

Studies show that victim demographics have not proven to be a very consistent variable in predicting the extent of, and recovery from, the traumatic experience of being raped. Other factors instead of demographics apparently play the major part in the extent of stress-related symptomatology.

Characteristics of the rape. Many researchers have looked at how characteristics of the rape experience influence the subsequent stress-related symptoms. Some of the characteristics that have been studied include severity of the rape, threats to the victim's life, method of the rape (blitz or confidence), the victim's reaction after being raped, the presence of a weapon during the rape, and whether the perpetrator was a stranger or known assailant (Becker et al., 1983; Burgess & Holmstrom, 1974; Ellis et

Studies conducted by Ellis (1983), Frank et al. (1980), and Kilpatrick et al. (1983) have not shown a significant relationship between the rape situation and severity of the psychological response. Other studies, however, have shown a significant relationship between characteristics of the rape and severity of exhibited symptoms. For example, Kilpatrick et al. (1989) indicated in their study of crime-related PTSD (CR-PTSD) that a history of completed rape, having sustained physical injury, and the perception of life threat were all significant predictors of crime-related PTSD in a group of 294 women exposed to a variety of crimes. Foa et al. (1989), Foa (1990), and Kilpatrick et al. (1989) incorporated the variable "threat to life" in predicting stress-related symptoms after a rape. They found significantly more stress-related symptomatology when the victim's life was threatened during a rape. Norris and Feldman-Summers (1981) also discovered that the severity of the assault had significant negative effects on rape victims' psychological functioning. The more severe the assault, the more psychological disturbance shown by the victim.

In general, throughout the literature, the expected relationship between severity of the assault and victim's
adjustment has received surprisingly little consistent support (Hanson, 1990). The meager support for a direct relationship between the severity of the assault and rape victim adjustment suggests that there may be other specific factors associated with rape trauma.

Bowie, Silverman, Kalick, and Edbril (1990), in their study of "blitz" and "confidence" rape, stated that blitz rape may be a qualitatively different experience from confidence rape in some respects. For example, blitz rape victims are more likely to suffer from symptoms associated with PTSD such as nightmares, flashbacks, heightened startle response, sleep disturbances, and anxiety or depressive reactions than confidence rape victims. Furthermore, confidence rape victims tend to exhibit more self-blame than blitz rape victims (Bowie et al., 1990). This self-blame is most likely manifested because victims feel betrayed by a once trusted person. The trust that becomes irreclaimable then leads the victims to mistrust many other once trusted people, including themselves.

A victim's reaction following a rape experience has been studied as a predictive variable of subsequent stress-related symptoms (Burgess & Holmstrom, 1974). Some of the reactions listed by Burgess and Holmstrom (1974) include fear, anger, crying, self-blame, embarrassment, humiliation, and revenge. Women who react with these symptoms are
classified with an "expressed style." About half of assault victims report with what is called a "controlled style," in that they are generally calm, composed, subdued, and apathetic. Burgess and Holmstrom have proposed that victims exhibiting a controlled style of reacting are just as likely to possess postassault symptoms as those with expressed styles of reacting.

What is important to realize is that many people generally assume that a bona fide rape victim will appear highly emotionally distraught, but this is not borne out by observations of actual victims. Delayed onset of many stress-related symptoms is also common, meaning that a rape victim may initially appear calm after being raped but present with stress-related symptoms at a later time (Burgess & Holmstrom, 1974).

The use of a weapon was related to negative victim adjustment in one study (McCahill et al., 1979) but not in another study (Frank et al., 1980). The evidence regarding whether victims experience more trauma when raped by a stranger or an acquaintance is also inconsistent. McCahill et al. (1979) found more trauma for victims of acquaintance rapes, and Ellis et al. (1981) found more trauma for victims raped by strangers.

Frank et al. (1980) and Kilpatrick et al. (1989) have hypothesized that, while no single rape situation variable
consistently predicts the nature of response to rape, effects of these variables might be cumulative. In other words, victims that experience many of the potential predictive variable in a rape, such as threat to life, unknown blitz rape, use of a weapon, and increased severity, may exhibit more trauma than victims not experiencing as many predictive variables.

Overall, the relationships among rape characteristics and victim adjustment appear to be weak (Hanson, 1990). Resnick et al. (1991) also stated that, at present, there are not enough data available to reach solid conclusions about the relationship between specific rape characteristics and the development of specific stress-related symptoms.

The inconsistencies in the predictive abilities of specific rape characteristics have led researchers to explore other areas for predictive variables for stress-related symptoms associated with rape. One other area being examined is the attributions victims make after being raped. These attributions include the degree of personal control that victims feel they possess over their lives, an area that will be examined in a subsequent section of this thesis.

Victim's previous history. Victims' previous histories have also been studied by authors trying to predict stress-related symptomatology associated with rape. Some of the
variables examined include prior life stress and mental health, substance abuse, psychosocial competence, and self-esteem.

Steketee and Foa (1987) stated that prior victimization, other life stressors, and past psychiatric treatment are vulnerability factors following a rape. Victims with these factors more often than victims without these factors develop psychological distress, poorer social adjustment, or both following a rape. Calhoun et al. (1982) also stated that the existence of psychological problems and/or maladaptive coping patterns prior to rape increases the likelihood of maladaptive coping patterns following a rape. Frank, Turner, Stewart, Jacob, and West (1981) reported a similar finding, that is, victims with histories of psychiatric treatment had poorer initial adjustment than those without such histories. McCahill et al. (1979) also found that victims with a prerape history of adjustment problems had more severe stress-related problems.

In contrast to the studies discussed above, Frank and Anderson (1987) found that one third of the women in their study had some previous contact with mental health professionals, which did not predict a more severe stress-related response after a rape. Kilpatrick et al. (1983) also found no differences in a victim's trauma with regard to previous psychological difficulties and/or treatment for
such problems.

Prior substance abuse by victims has also been studied as a predictive factor in stress-related symptoms after rape. The idea here is that victims who have a history of drug abuse are also more likely to have a history of other difficulties, such as prior psychological difficulties or low psychosocial competence. Moscarello (1990) stated that there is a direct correlation between more severe stress responses and a history of substance abuse in victims. In addition, Richardson and Campbell (1982) found that people derogated the character of a female rape victim and assigned her greater responsibility when she was drunk than when she was sober, potentially creating a self-blaming attitude in the victim, which could in turn increase the severity of the trauma.

Ellis et al. (1981) reported that some of the subjects in their study resumed an old pattern of alcohol and drug abuse after becoming a victim of rape. Myers, Templer, and Brown (1984) found that rape victims were more likely to have a history of drug or alcohol abuse than a control group of nonvictims. Two other studies reported that a history of drug and alcohol abuse were strong predictors of increased stress-related symptomatology (Burgess & Holmstrom, 1978; Ruch & Leon, 1983).

Myers et al. (1984) looked at certain aspects of rape
victims' previous histories to predict who would most likely become rape victims. They discovered that low psychosocial competence was the strongest predictor of becoming a rape victim. Psychosocial competence was described as the combination of social presence, assertiveness, and dominance. Low psychosocial competence refers to people who are limited in their ability to act in their own best interest, to stand up for themselves, and to protect their own rights when they are threatened by others, and who are unlikely to be dominant in their interpersonal relationships.

Low psychosocial competence could be construed as including low self-esteem. Kilpatrick et al. (1983), Burgess and Holmstrom (1978), and Myers et al. (1984) found that self-esteem was negatively correlated with distress, in that victims with the highest self-esteem reported the least distress following a rape. The question could be asked, which comes first, the low self-esteem or the distress?

Victims' trauma experienced after a rape can be partly explained by the predictive variables discussed in this section, including differences in personal demographics, rape experience characteristics, and previous life histories. The studies reviewed in this section suggest that victims can experience an accumulation of stressors and that recovery becomes increasingly more difficult as the
number of stressors present increases. In addition, most of the variables considered in this section have been shown to be inconsistently predictive of stress-related symptomatology associated with rape.

Wortman and Dintzer (1978) proposed that assessments of the controllability of the causal factors in stress-related events may be of the utmost importance in predicting the nature and magnitude of subsequent deficits from the event. Given this proposition, a victim's perceived lack of control would be a logical area to study as a mediating factor in stress-related symptomatology. Lack of control and related concepts will be reviewed in the next section.

**Perceived Lack of Control and Related Concepts**

No consensus exists in the literature regarding an acceptable theoretical or operational definition for the construct of "control" and its opposite, "lack of control." Generally speaking, control has been conceptualized in the literature as the ability to influence a person's behavior (Liebert & Spiegler, 1990). Control has been operationalized in many different ways in the empirical literature, including taking control away from research participants or by giving them the ability to terminate, avoid, and regulate aversive stimuli. For example, control in one experiment was defined as the ability to influence
the manner of experiencing aversive stimuli (Staub, Tursky, & Schwartz, 1971).

Interest in the concept of control was stimulated by Rotter's (1966) analysis of internal versus external control of reinforcement. Rotter defined someone exhibiting internal locus of control as a person perceiving that an event is contingent upon his/her own behavior or his/her own relatively permanent characteristics. In contrast, someone with an external locus of control believes that forces outside (e.g., luck, chance, powerful others) impact the outcome of his/her actions.

Research indicates that the concept of control is multidimensional in nature and includes considerations such as how predictable the event was, how helpless the person feels, and how blameworthy the person perceives himself or herself to be (Wortman & Dintzer, 1978). It is important to distinguish between predictability, learned helplessness, and self-blame in regards to control because these constructs are similar in that they all have an effect on stress-related symptoms, and it is difficult to differentiate the affects each construct has on the extent of stress-related symptoms. Some ways the constructs are similar and different will be discussed next.

Control is inherently connected to predictability because it is logically impossible to manipulate the factors
of controllability and predictability completely independently, because controllable events necessarily involve a certain amount of predictability (Mineka & Kihlstrom, 1978).

Control is also a part of the construct self-blame. Janoff-Bulman (1979) has distinguished between two types of self-blame: behavioral and characterological. Behavioral self-blame focuses on behaviors, which are relatively controllable and modifiable. Individuals will blame themselves for the negative consequences that occur as a result of certain actions that they may have knowingly performed. They therefore experience behavioral self-blame. On the other hand, characterological blame involves making attributions to relatively unchangeable, uncontrollable characteristics of individuals. For example, someone who is responsible for a car accident may blame the accident on personal characteristics ("I’m stupid or careless") instead of blaming the accident on behavioral aspects ("I failed to look both ways").

Self-blame has traditionally been a common attitude after victimization. Following victimization, victims may react to their own circumstances by overestimating the predictability and controllability of their own victimization, thereby engaging in an unwarranted degree of self-blame (Janoff-Bulman, Timko, & Carli, 1985). This
overestimation may be a coping method victims use in order to bring some meaning to the event.

Society also tends to blame victims. In blaming the victim, society assumes that the victim had enough information available to properly assess the risk in the rape situation. We fail to realize that the information that we as observers use to assess the risk is the very information unavailable to the victim at the time of the event (Janoff-Bulman et al., 1985). The tendency for society to blame the victim could precipitate characterological self-blame by victims. Such self-blame could subsequently increase the trauma they experience following victimization.

Since perceived control is thought to mediate self-blame ascriptions, the research on the relationship between self-blame and severity of stress-related symptomatology is of interest (Janoff-Bulman, 1979). Janoff-Bulman (1979) found that 74% of rape victims show behavioral and characterological self-blame; however, she hypothesized behavioral self-blame to be a positive coping method for establishing control in victims' lives. Janoff-Bulman stated that if the rape victim engages in behavioral self-blame, he/she is likely to maintain a belief in the future avoidability of a similar misfortune, while simultaneously maintaining a belief in personal control over important life
outcomes. Empirical evidence of this relationship has been provided in prior research (Janoff-Bulman, 1979; Peterson, Schwartz, & Seligman, 1981).

The Janoff-Bulman self-blame hypothesis met with mixed results in subsequent studies. Frazier (1991), Hill and Zautra (1989), Meyer and Taylor (1986), and Norris & Feldman-Summers (1981) have shown that victims who engage in any type of self-blame have worse adjustment and diminished psychological functioning, and exhibit more stress-related symptoms associated with rape than victims who do not engage in self-blame. These findings at least indirectly support the notion that perceived lack of control by a rape victim predicts greater symptom severity, as far as self-blame ascriptions are concerned.

Learned helplessness is a related concept that includes personal control as a central issue. In the reformulated learned helplessness model proposed by Abramson, Seligman, and Teasdale (1978), people are seen as seeking explanations for the occurrence of seemingly uncontrollable, aversive events. In general, people who make attributions to internal, stable, and global factors will suffer more anxiety (learned helplessness) than those whose attributions reflect external, unstable, and specific causes.

This hypothesis regarding internal versus external attributions is reflected in Seligman’s (1975) theory, in
which depression is seen as eventually resulting when people experience repeated exposure to aversive events that are uncontrollable. Weiss (1971) also stated that the helplessness syndrome observed after exposure to inescapable shock is due to the lack of control an organism has in terminating shock and that the behavioral and biochemical sequelae of escapable shock tend to be in the opposite direction of those of inescapable shock.

To understand the difference between difficulties due to learned helplessness and deficits occurring because of lack of control, one must look at the factors contributing to the two conditions. In lack of control, an aversive event must be experienced and perceived as noncontingent on a person’s actions, which may subsequently lead to deficits such as PTSD. In learned helplessness, an aversive event must be experienced and perceived as uncontrollable, but then the person must also assign internal, global, and/or stable attributions to the event, which will lead to the learned helplessness deficits similar to PTSD.

Now that concepts related to perceived lack of control have been discussed, the more specific issue of lack of control as it is related to stress-related rape symptoms will be outlined.

Perceived lack of control. Perceived lack of control is conceptualized in this thesis as the belief that outcomes
are not contingent upon what one feels, thinks, says, or does. Reviewed in this section are various views on the concept of control and how it impacts the individual.

Averill (1973) stated that there are three types of control. The first type is behavioral control, which is described as the availability of a response which may directly influence or modify the objective characteristics of a threatening event. A second type of control is cognitive control, which is also described as the way in which an event is interpreted, appraised, or incorporated into a cognitive "plan." Finally, the third type of control is decisional control, which can be described as the opportunity to choose among various courses of action and also to the range of choices or number of options open to an individual. The effects of perceived lack of control in these three contexts are reviewed below.

A perceived lack of control in any or all three of these modes has deleterious effects on people. For example, when subjects possess behavioral control, they experience less anxiety in potentially stressful situations than when they have no control (Averill, 1973). Also, it has been found that emotional reactions to events are determined, in part, by judgments of control (Weiner, 1985). In other words, judgments of lack of control are related to negative emotional reactions, such as depression and anxiety.
Newcomb and Harlow (1986) predicted that uncontrollable, stressful life events create a sense of loss of personal control over one’s environment and on the person. Because a belief in one’s power, control, and impact on the direction of one’s life is necessary to feel that life is worthwhile and meaningful, perceived lack of control gives rise to a pervasive lack of meaning in life. This feeling of meaninglessness is often experienced as uncomfortable and distressful. Also, in a subsequent study, Heath and Davidson (1988) found that low perceived control was related to heightened personal distress.

Corah and Boffa (1970) suggested that a sense of control is a determinant of the cognitive appraisal of threat. A procedure which gives the subject the choice of avoiding or not avoiding the aversive consequences of a stimulus is equivalent to giving him or her perceived control over the potential threat. In this sense, control or lack of control is determined by whether a person interprets a situation as threatening and whether or not he/she decides to avoid and/or has the ability to avoid the situation. If individuals feel they do not have the ability to avoid the threatening situation, then a sense of perceived lack of control may be experienced.

Exposure to uncontrollable aversive events can create a variety of profound affective, cognitive, and physiological
disturbances for the organism (Mineka & Kihlstrom, 1978). A personal perception of uncontrollability may be necessary in order for a person to exhibit the variety of disturbances Mineka and Kihlstrom discussed. For example, Stegman and McReynolds (1978) found that subjects given response-independent outcomes developed superstitious behavior and reported perceived control of events even though they did not actually have control over those events.

Typically, subjects given a degree of actual or perceived control over aversive stimuli perform better on subsequent tasks and show less affective response than subjects who do not perceive that they have control (Burger & Arkin, 1980). Also, Wortman and Brehm (1975) suggested that individuals will react more strongly to a lack of perceived control when the importance of that control is high. Furthermore, Wortman and Brehm stated that if an organism does not feel that it has freedom, then it will not experience reactance when exposed to outcomes beyond its control.

Experiments repeatedly demonstrate that deleterious aftereffects of stress arousal are reduced when subjects believe they have control over the onset or offset of aversive stimuli (Geer, Davidson, & Gatchel, 1970; Glass & Singer, 1972). Subjects do not necessarily have to utilize this control in order to experience the reduced sense of
arousal, but the fact that they believe they have control is a sufficient factor to reduce arousal. Along these lines, Glass and Singer (1972) demonstrated that individuals with perceived control over aversive noise were more resistant to frustration following noise exposure than individuals with no perception of control, even though control was unexercised. Glass and Singer argued that perceived control reduces the "behavioral residues" of stressful environments.

Lefcourt (1973) has reviewed a number of studies which indicate that control over an aversive stimulus helps reduce stress reactions. Lefcourt concluded:

The perception of control would seem to be a common predictor of the response to aversive events regardless of species... the sense of control, the illusion that one can exercise personal choice, has a definite and a positive role in sustaining life. (cited in Averill, 1973, p. 286)

Loss of control produces heightened reactions to stress, and individuals usually engage in attempts to restore control, especially under aversive conditions (Averill, 1973). However, Averill (1973) stated that having control does not always lead to a decrease in anxiety. For example, Weiss (1971) found, using rats as subjects, that ulceration increases proportionately with the number of coping responses emitted by an animal, but inversely with the amount of positive feedback regarding the success of the response. In other words, the most stressful conditions are those in which many responses are demanded but the responses
result in negative or inconsistent feedback.

Many times the reduction of uncertainty in a situation is a better stress reliever than actually having behavioral control. For example, people who are told they have some kind of behavioral control over a situation still exhibit more physiological stress than people who do not have behavioral control but who are told when or how an aversive situation will occur.

There may be situations in which perceived loss of control is more stressful than never having control (Hanson, Larson, & Snowden, 1976; Mineka & Kihlstrom, 1978; Staub et al., 1971). Staub et al. (1971) reported that subjects who had control over shock intensity but then lost it rated shock as more painful and tolerated it less than subjects who never had control over the shock intensity. It is easy to imagine that rape victims may be likely candidates for perceiving that they have lost previous control over their lives. When perceived control is lost by the rape victim, excessive stress-related symptoms may appear. In contention with this idea, Foa et al. (1989) hypothesized that prior control may immunize against long-term stress responses, because victims who have had prior control may be more able to regain that control after having lost it.

Averill (1973) concluded that there is no simple relationship between personal control and stress. About the
only general statement that can be made with confidence is that the stress-inducing or stress-reducing properties of personal control depend upon the meaning of the control response for the individual, and what lends a response meaning is largely the context in which it is embedded.
CHAPTER III
PURPOSE AND OBJECTIVES

The relationship between lack of control and stress-related symptomatology has yet to be investigated empirically with actual rape victims. Examining this relationship is the purpose of this study.

The objectives of this thesis included comparing a clinical sample of rape victims to a representative control sample of college students who have reportedly not been raped. Comparisons between the two samples were made on demographic characteristics, control scores, and stress symptom severity. These comparisons were expected to enlighten researchers and clinicians as to how perceptions of lack of control influence stress-related symptom severity associated with rape. With this added knowledge, researchers and clinicians should be able to make more knowledge-based decisions regarding research directions and therapy interventions for rape victims.

The present thesis is based on three premises, namely:

1. Stress-related symptoms associated with rape may be conceptualized in terms of symptoms identified with post-traumatic stress disorder (PTSD). Thus, just as in PTSD, stress-related symptoms following rape can range from those that are less to more severe.
2. The victim's perception of control after having been raped may be a significant predictor of stress-related symptom severity.

3. Greater symptom severity bodes poorly for the rape survivor's ability to cope or adjust to being victimized.

The three premises were examined in this thesis by testing four research questions. The first question addressed was whether rape victims experience elevated degrees of PTSD-like symptoms when compared to a group of individuals who do not report having been raped. The second question examined was whether rape victims experience lower levels of perceived control when compared to a group of individuals who do not report having been raped. The third question addressed was whether there is a relationship between reporting PTSD-like symptoms and perceived control, and is this relationship unique to rape victims or more generalizable to other populations? Finally, the fourth question examined whether elapsed time since the rape was also a variable to be considered when analyzing the relationship between victim's PTSD-like symptoms and their perceived control.
CHAPTER IV
METHODOLOGY

Subjects

In the present investigation, rape was defined as nonconsenting forced intercourse including vaginal, anal, and/or oral penetration (Dahl, 1989). The accessible sample included female rape victims who sought help from rape crisis centers.

The clinical sample consisted of 33 rape victims, who were asked to fill out three self-report questionnaires. With this sample size, a statistically significant relationship at the .05 level accounts for 11% of the variance. Although small, a significant relationship would nevertheless suggest that the variables are of clinical interest.

Also included in this study was a control group of 50 female undergraduates at Utah State University who agreed to participate in the study for extra credit points in their psychology classes. The female undergraduates in this study were used as a comparison sample to the rape victim sample. Comparisons between the two groups were made on demographic characteristics including age, race, education, marital status, religion, general perceived control, and general pathological symptoms exhibited, measured by the Symptoms Checklist 90 Revised (SCL-90-R).
Procedure

Rape centers from Salt Lake City, Utah, Ogden, Utah, Provo, Utah, Brainerd, Minnesota, and Grand Forks, North Dakota were contacted by the principal investigator and their cooperation was obtained in participating in this study. The rape centers' responsibilities included distributing questionnaire packets to their rape clients and making sure that they were completed and sent back to the investigator.

The rape crisis centers who participated in this study were mailed questionnaire packets for their counselors to distribute to each client (if the client’s rape experience conformed to the definition of rape presented earlier). No other restrictions were presented. The questionnaire packets for victims included a consent form, victim demographics questionnaire, a measure of general control, and the SCL-90-R (see Appendix A). The counselors were instructed to have clients read and sign a consent form that explained confidentiality procedures and asked about their willingness to participate. Consenting participants completed the questionnaires either in the presence of the counselors or they took them home to complete. When the packets were completed, the victims returned them to their counselors and the counselors then mailed them to the principal investigator.
Questionnaires in each packet were number coded so as to match the codes on the consent forms. Once the consent forms were signed, they were gathered by the counselors and kept separately from the questionnaires, to help ensure confidentiality.

Response rate estimates would have been more accurate if the number of victims at each rape center invited to participate versus those actually participating had been tracked. However, counselors at each rape center did not record these numbers. Therefore, the response rates for each center were determined as follows. The actual number of sent and completed questionnaires from each center is presented in parentheses: Salt Lake City, 20% (25,5), Provo, 30% (10,3); Ogden, 25% (20,5); Brainerd, MN, 100% (15,15); Grand Forks, ND, 33% (15,5). The total response rate was 39%, which was viewed by the present investigator as satisfactory, considering the sensitive nature of the topic.

The control group questionnaire packets consisted of a student consent form; a demographics questionnaire including age, race, education, marital status, religion, and traumatic life events experienced; a measure of general control; and the SCL-90-R (see Appendix A).

The traumatic life events experienced included events such as being in an accident, natural disaster, death of a loved one, hospitalization, loss of a job, relationship
break up, IRS audit, and rape. Rape was incorporated into the demographics questionnaire in order to make sure no one in the control group had experienced a rape situation, which would potentially bias their SRS and PC scores.

Each subject read and signed the consent form explaining confidentiality procedures relevant to willingness to participate. The consent forms were separated from the questionnaire packets by having the students hand in the consent forms before they left class that day. They were instructed to hand in the questionnaire packets in class the next class day. Again, each packet was number coded with all four sections of the packet having corresponding numbers. Each subject received extra credit points in class for participating in the study.

Measures

The self-report measures for the rape victims included the Symptoms Checklist 90 Revised (SCL-90-R), a nine-item measure of perceived control, and a demographics questionnaire that queried age, race, education, marital status, religion, traumatic events experienced, length of counseling, and time since being raped.

The SCL-90-R. The SCL-90-R developed by Derogatis (1977) has become widely used as a self-report measure of distress. Each of the 90 items is rated on a 5-point scale of distress, ranging from 1 = "not at all" to 5 =
"extremely." The SCL-90-R provides a profile of scores based on nine subscales that are related to categories of psychological disorders as well as three global indices of distress related to the number and intensity of individual symptoms endorsed.

Reliability and validity data on the SCL-90-R have been reported by Derogatis and Cleary (1977). Internal consistency and test-retest reliability measures range from .77 to .90 (Derogatis, 1977). Validity measures correlated with other multidimensional measures of psychopathology ranging from .40 to .75 (Derogatis, 1977). Normative data have been collected from various populations, including psychiatric inpatients (N=310), psychiatric outpatients (N=1002), nonpatient adults (N=719), and nonpatient adolescents (N=2408).

Since the purpose of this study was to use the SCL-90-R to assess the severity of certain PTSD symptoms, an individual item analysis was conducted on the SCL-90-R by four Ph.D.-level graduate students in psychology. These judges were asked to read the DSM-III-R diagnostic criteria for PTSD, and instructed to match items on the SCL-90-R with one of the subsections of the diagnostic criteria for PTSD. The subsections included (a) persistently reexperiencing the trauma, (b) persistent avoidance, and (c) increased arousal. If an item on the SCL-90-R did not correspond to one of the
PTSD diagnostic sections, judges were not to include that item. Inclusion of an individual item on the SCL-90-R pertaining to stress-related symptoms was determined by majority agreement of the four graduate students. Specifically, when three of the four graduate students agreed that an item loaded on a specific section of the DSM-III-R diagnostic criteria for PTSD, it was then included as part of the stress-related symptom analysis.

Thirty-four of the 90 items in the SCL-90-R were judged as being representative of the diagnostic criteria for DSM-III-R PTSD. Four items corresponded to the DSM-III-R section having to do with "persistently reexperiencing the traumatic event"; 14 items corresponded to the section having to do with persistent avoidance of the trauma or numbing of general responsiveness; and 16 items corresponded to the DSM-III-R section having to do with symptoms of increased arousal. Items on each of the three scales rated by subjects using a five-point scale ranging from 1 = "not at all," to 5 = "extremely." Therefore, the range of scores on each scale was 4-20, 14-70, and 16-80 for the Reexperiencing, Avoidance, and Increased Arousal scales, respectively. The higher the score, the more stress reportedly exhibited. Every item on the three scales is reproduced in Table 1.
Table 1

Stress-related Symptoms (SRS) from the SCL-90-R

**Scale 1: Persistent Reexperiencing of Trauma**

1. Repeated unpleasant thoughts that won't leave your mind
2. Feelings of being trapped or caught
3. Having thoughts about sex that bother you a lot
4. Thoughts and images of a frightening nature

**Scale 2: Persistent Avoidance and Numbing of General Responsiveness**

5. Loss of sexual interest or pleasure
6. Feeling afraid in open spaces or on the streets
7. Feeling low in energy or slowed down
8. Feeling afraid to go out of your house alone
9. Feeling lonely
10. Feeling blue
11. Feeling no interest in things
12. Feeling others do not understand you or are unsympathetic
13. Feeling inferior to others
14. Having to avoid certain things, places, or activities because they frighten you
15. Feeling hopeless about the future
16. Feeling very self-conscious with others
17. Feeling lonely even when you are with people
18. Never feeling close to another person

**Scale 3: Persistent Symptoms of Increased Arousal**

19. Nervousness or shakiness inside
20. Feeling easily annoyed or irritated
21. Trembling
22. Suddenly scared for no reason
23. Temper outbursts that you could not control
24. Feeling fearful
25. Heart pounding or racing
26. Trouble falling asleep
27. Having to check and double check what you do
28. Difficulty making decisions
29. Your mind going blank
30. Trouble concentrating
31. Feeling tense or keyed up
32. Awakening in the early morning
33. Sleep that is restless or disturbed
34. Getting into frequent arguments.
The general control measure was a nine-item self-report questionnaire. Each item was rated on a 7-point scale ranging from 1 = "strongly disagree" to 7 = "strongly agree." The items were compiled by the investigator from available research, in which the construct of perceived loss of control was being measured (Heath & Davidson, 1988; Hill & Zautra, 1989; Newcomb & Harlow, 1986). Four of the items specifically addressed the amount of control an individual feels he/she has over his/her life at the time the subjects filled out the questionnaire. The measure of general perceived control in this study consists of the sum of the four scored items, as shown in Table 2. The possible scores ranged from 4-28, with 4 representing the lowest perceived control and 28 representing the highest. The other five items were distractor items and not scored. Since perceived control has typically been assessed using only one or two items (Newcomb & Harlow, 1986), there are no available data regarding the test-retest reliability and validity of individual items in this questionnaire. Information concerning internal consistency is presented in the Results section.

Finally, there were two different demographics questionnaires, one tailored specifically for rape victims and one unique to the control group. The victim’s demographics questionnaire included items addressing the
Table 2

Perceived Control (PC) Items

1 - strongly agree
2 - agree
3 - slightly agree
4 - neither agree or disagree
5 - slightly disagree
6 - disagree
7 - strongly disagree

____ 1. I am in full control of my life at this time.
____ 2. I have the power to stop someone from getting what they want from me.
____ 3. What happens to me is under my control.
____ 4. At this time, I feel a sense of power in my life.

The amount of time that had elapsed between the occurrence of the rape and in filling out the questionnaire, along with whether or not the victim had seen a counselor and for how long. The control group demographics questionnaire did not contain the above mentioned items. Questions common to both groups concern age, level of education, marital status, religion, race, and traumas experienced in the last year (see Appendix A).
CHAPTER V
RESULTS

The basic question addressed in this thesis is the extent to which there is a relationship between symptoms of stress and perceived control in rape victims, the idea being that one way of helping them in therapy may be to enhance feelings of control and thereby reduce symptoms of stress and anxiety. Of course, for clinical practice, it is also important to consider an ancillary question regarding the role of perceived control in stress production. This question, specifically, is whether the relationship between stress and lack of control is unique to rape victims or whether it is generalizable across different populations.

These basic and ancillary issues were addressed by conducting a Pearson Product Moment Correlation analysis on the stress-related symptom scores (SRS) and perceived control scores (PC) for rape victims and nonvictims separately, along with regressing the SRS scores on the variables group status (rape victim versus nonvictim), PC scores, and their interaction.

Also of interest was whether a relationship between stress-related symptoms and perceived control existed, regardless of how long ago the victim had been raped. The underlying idea here is that any relationship between SRS and PC might be obviated by unintentional sample variations.
within the variable time elapsed since the rape. This issue was addressed by regressing the victims’ SRS scores on the following variables: (a) time since a victim was raped, (b) perceived control scores, and (c) the interaction between these variables. All regression analyses employed the general linear model procedure.

Analysis of the data was completed using SAS/PC. After describing results concerning demographics and establishing certain psychometric properties of the instruments, answers to each of these questions will be sought below.

Demographic Characteristics

Demographic characteristics of the control (nonvictims) and experimental (rape victims) groups were compared in order to detect any potential biasing differences between the two groups. The average age of the subjects in each group is presented in Table 3 along with the percentage of subjects in each category, which included marital status, education, religion, ethnicity, and traumas experienced. Other demographic characteristics of the rape victim group include age ranges in years of 17-54, and the range for number of years since being raped was .63 - 41.9.

There were significant differences between the two groups in age, education, religion, and ethnicity,
Table 3

Demographic Characteristics for Each Group

<table>
<thead>
<tr>
<th>Group</th>
<th>Victims</th>
<th>Nonvictims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age in years</td>
<td>31.67</td>
<td>25.48</td>
</tr>
<tr>
<td>SD range</td>
<td>(10)</td>
<td>(8.06)</td>
</tr>
<tr>
<td></td>
<td>17-54</td>
<td>18-45</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>single</td>
<td>42% (14)</td>
<td>48% (24)</td>
</tr>
<tr>
<td>married</td>
<td>33% (11)</td>
<td>42% (21)</td>
</tr>
<tr>
<td>divorced</td>
<td>24% (8)</td>
<td>10% (5)</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS Grad</td>
<td>28% (9)</td>
<td>0% (0)</td>
</tr>
<tr>
<td>College</td>
<td>38% (12)</td>
<td>98% (49)</td>
</tr>
<tr>
<td>Coll Grad</td>
<td>34% (11)</td>
<td>2% (1)</td>
</tr>
<tr>
<td>Religion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LDS</td>
<td>25% (8)</td>
<td>80% (40)</td>
</tr>
<tr>
<td>Protestant</td>
<td>34% (11)</td>
<td>12% (6)</td>
</tr>
<tr>
<td>Catholic</td>
<td>13% (4)</td>
<td>2% (1)</td>
</tr>
<tr>
<td>Other</td>
<td>28% (9)</td>
<td>6% (3)</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>88% (29)</td>
<td>100% (50)</td>
</tr>
<tr>
<td>Other</td>
<td>12% (4)</td>
<td>0% (0)</td>
</tr>
<tr>
<td>Traumas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Death</td>
<td>21% (7)</td>
<td>14% (7)</td>
</tr>
<tr>
<td>Accidents</td>
<td>3% (1)</td>
<td>4% (2)</td>
</tr>
<tr>
<td>Relationship end</td>
<td>36% (13)</td>
<td>30% (15)</td>
</tr>
<tr>
<td>Hospitalization</td>
<td>33% (11)</td>
<td>18% (9)</td>
</tr>
<tr>
<td>Natural Disasters</td>
<td>0% (0)</td>
<td>2% (1)</td>
</tr>
<tr>
<td>Raped</td>
<td>100% (33)</td>
<td>0% (0)</td>
</tr>
<tr>
<td>Years since rape</td>
<td>.63-49.1</td>
<td></td>
</tr>
</tbody>
</table>

$t (28) = -2.87, \ p < .01, X^2 (3) = 42.32, \ p < .01, X^2 (4) = 26.17, \ p < .01, X^2 (2) = 7.69, \ p < .05$, respectively.

Specifically, rape victims were older than the nonvictims, were less well-educated, and were not uniformly Caucasian or
LDS. Because of the potential biasing effects due to these four differences, the regression analyses conducted in this study were completed by controlling for the demographic variables in each group.

The differences for age, education, religion, and ethnicity probably reflect the fact that the control group was drawn from a predominantly LDS, Caucasian, college population, whereas the experimental group was drawn from rape centers in three different states.

Item analysis for the SRS and PC Measures

Item analyses were conducted on the SRS and PC measures. The SRS includes three subscale scores and a total SRS score that were all analyzed separately. The three subscales of the SRS include the "reexperiencing" subscale, which has four items related to specific aspects of reexperiencing a trauma; the "avoidance" subscale, which has 14 items associated with specific aspects of avoiding anxiety-producing situations; and the "increased arousal" scale, which has 16 items having to do with subjects experiencing aspects of increased arousal. The total SRS score is the sum of the three subscales of the SRS.

An item analysis was also conducted on the perceived control measure. This measure includes four scored items having to do with how much a person reports having control
over his/her life.

All analyses revealed very satisfactory reliability coefficients with the "reexperiencing," "avoidance," and "increased arousal" subscales of the SRS showing a Cronbach’s alpha coefficient of .89, .95, and .95, respectively. For the total SRS score, item analysis showed a Cronbach’s alpha coefficient of .88. Finally, the item analysis for the perceived control measure revealed a Cronbach’s alpha coefficient of .66.

**Major Questions**

Several assumptions are being made in this thesis. A first assumption to test is whether rape victims experience elevated degrees of stress-related symptoms when compared to a group of individuals who do not report having been raped. To answer this question, a regression analysis (controlling for the demographic variables) was computed on the SRS scores of rape victims versus SRS scores of participants in the control group. Results revealed significantly higher SRS scores for the rape group compared to the nonvictim group (see Table 4). The adjusted $R^2$-square was .49, with $F(1,74) = 28.15, p < .0001$.

The second assumption to examine is whether rape victims do indeed experience lower levels of perceived control (PC) when compared to a group of individuals who do not report having been raped. To answer this question, a
### Table 4

Mean Stress-related (SRS), Perceived Control (PC) Scores, and Correlations Between the Two Scales

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>SRS</th>
<th>PC</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victims</td>
<td>33</td>
<td>60.48</td>
<td>17.64</td>
<td>-.70*</td>
</tr>
<tr>
<td>SD</td>
<td></td>
<td>(35.28)</td>
<td>(6.29)</td>
<td></td>
</tr>
<tr>
<td>Nonvictims</td>
<td>48</td>
<td>20.64</td>
<td>21.92</td>
<td>-.37</td>
</tr>
<tr>
<td>SD</td>
<td></td>
<td>(18.46)</td>
<td>(3.27)</td>
<td></td>
</tr>
</tbody>
</table>

*Note. Standard Deviations are in ()

* p < .001

Regression analysis was computed on the PC scores of rape victims versus PC scores of participants in the control group, also controlling for demographic variables. Results revealed significantly lower PC scores for the rape group compared to the control group (see Table 4). The R-square was .35 after adjusting for the influence of the four demographic variables, with F (1, 75) = 9.37, p < .003.

Having established that rape victims experience more stress and less perceived control than nonvictims, it is appropriate to ask the other questions posed in this thesis.

One research question was whether there is a relationship between reporting stress-related symptoms and perceived control and whether this relationship is unique to rape victims or more generalizable to nonvictims.
To answer this question, two approaches were taken. First, a Pearson Product Moment Correlation analysis was conducted on the SRS and PC scores for rape victims and nonvictims separately. The correlation was strong and significant in rape victims (r = -.70) but not for the nonvictims for whom two outliers were excluded (r = -.37). Second, SRS scores were regressed on PC scores, group status (rape victim versus nonvictim), and their interaction, using a procedure that forced correction of each effect by the removal of the other two effects and controlled for the four demographic variables. Results of the overall regression analysis on the total SRS scores revealed an R-square of .77 with F(3,74) = 49.21, p < .0001. Regression analyses were also computed for each of the three SRS subscale scores. The overall R-squares for the reexperiencing, avoidance, and increased arousal scores were, respectively, .79, F(3,49) = 10.55, p < .0001; .71, F(3,72) = 11.62, p < .0001; and .75, F(3,74) = 13.85, p < .0001.

The R-squares for the group, control, and joint interaction effects were .49, F(11,63) = 28.15, p < .0001; .77, F(12,62) = 74.38, p < .0001; and .77, F(13,61) = .31, p < .58, respectively. Stress-related symptoms were thus a positive function of perceived control and prior rape history, but not the interaction between perceived control and group membership. The interaction between group
membership and control scores, in fact, resulted in an R-
square change of .0012, which was not found to be
statistically significant. The interaction was also
inspected using a scatterplot (see scatterplot of SRS and PC
for victims and nonvictims, Figure 1). A restriction of
range for the PC and SRS scores in the nonvictim group was
found when analyzing the scatterplot.

The next basic question addressed is how the time
elapsed since a victim was raped relates to the victim’s SRS
and PC scores. In other words, is the time since a victim
was raped a significant unique variable that should be taken
into account when analyzing the victim’s SRS and PC scores?
At a bivariate level, the SRS and PC scores did not exhibit
a statistically significant relationship to the number of
days since a victim’s rape ($r = -.11$, $r = -.20$,
respectively). SRS scores were regressed on the
victim’s PC scores, time elapsed since a victim was raped,
and the joint effects of the two variables in that order.
Results of the overall regression analysis showed an R-
square of .39, with $F(3,14) = 2.96$, $p = .07$. A significant
effect was found for the PC scores, $t = -2.84$, $p < .01$,
but not for time elapsed since being raped, $t < 1.0$, or the
joint effects, $t < .50$. 
Figure 1. Scatterplots of SRS and PC scores for victims and nonvictims.
Summary

Three major findings were obtained. First, it was found that rape victims exhibit significantly more SRS and significantly less PC than a group of subjects who do not report being raped, which is consistent with the major premises in this thesis. Second, perceived control and stress-related symptoms are strongly related in rape victims but not in nonvictims (when two outliers were eliminated from the correlation). Finally, it was found that the time elapsed since a victim was raped is not a significant factor in the relationship between PC and SRS scores.
This study was conducted in order to elucidate the relationship between perceived control and stress-related symptoms in rape victims. In order to study this relationship, we compared a group of rape victims and nonvictims on specific variables including stress-related symptoms, perceived control, group membership, and, for the victim group only, the elapsed time since a victim was raped.

This study revealed a few significant relationships. It was found that rape victims exhibit significantly more stress-related symptoms (SRS) than a control group of nonvictims. This relationship is not surprising given the fact that rape is a very distressing experience and the measure used to examine stress-related symptoms involved indices of PTSD, which we know appears in rape victims. In addition, other researchers have consistently found elevated degrees of stress-related symptoms in rape victims (Becker et al., 1983; Burge, 1988; Burgess, 1983; Burgess & Holmstrom, 1974; Dahl, 1989; Ellis et al., 1981; Steketee & Foa, 1987). This consistent finding of elevated levels of stress-related symptoms indicative of PTSD in rape victims continues to strengthen the fact that stress reactions following rape are a form of PTSD and should be seen and
treated as such by counselors.

The three subscales for the SRS scores that corresponded to the DSM-III-R diagnostic criteria for PTSD were also analyzed with regression analyses in order to test whether one subscale was a stronger predictor for SRS scores than the other subscales. This was not found since all three subscales showed very high $R^2$-squares when looking at their relationship with subject's SRS and PC scores. This finding would suggest that all three subscales are somewhat equal in their ability to predict SRS and PC scores. More research should be done to clarify this apparent close relationship between subscales.

Another noteworthy finding in this thesis is that rape victims exhibited significantly lower levels of perceived control than nonvictims. This finding was also expected since other researchers have found perceived lack of control in the rape victims they studied (Janoff-Bulman, 1979; Foa et al., 1989). Perceived control was also found to be significantly negatively related to stress-related symptoms in rape victims. This relationship is noteworthy because it had not been empirically studied in earlier research.

Now that a relationship between low PC and SRS scores has been empirically found in rape victims, studies can be undertaken to clarify other aspects of the relationship. This study tried to clarify a few potential important
variables in this relationship by analyzing what the effect on the relationship might be for being a rape victim or nonvictim. Another aspect of the relationship analyzed was whether the elapsed time since a victim was raped had any effect on the relationship between PC and SRS scores. An interaction effect between the group membership and time since a victim was raped was also analyzed. It was found that a significant joint effect for group membership between perceived control and stress-related symptoms did not exist. The findings suggest that perceived control is a good predictor for stress-related symptoms in nonvictims and rape victims alike, but correlational results indicate that the relationship is stronger for rape victims.

Other statistically nonsignificant findings were obtained in the study. The variable "time elapsed since a victim was raped" was not found to be a unique factor when considering the relationship between a victim's PC and SRS scores. This finding is consistent with Burge (1988) and Hill and Zautra (1989), who also found that time since an assault and increased trauma were not associated in their studies. Other variables, such as social support and gaining perceived control, may play a more central part in the victim's recovery.
Limitations

Limitations of the study include factors regarding sampling bias, the instruments involved, data collection, and, most importantly, the demographic differences in the control and experimental groups.

First of all, these data were self-report in nature and therefore may be contaminated by sampling bias. Obviously, only subjects who agreed to complete the questionnaires were included in the study. Whether those who refused to complete a questionnaire may have been fundamentally different than those who did remains unknown. There was wide variability within the victim group for their SRS and PC scores, which could have been an artifact of the self-selection bias. The victim group who completed questionnaires may have felt more control over their lives and more comfortable with divulging information about themselves. On the other hand, it is conceivable that victims felt less control over their lives and were not willing to say "no" to a request from a counselor to complete a questionnaire.

Selection of subjects in the victim group was the responsibility of counselors who saw the victims. Counselors were instructed to ask every victim who was seen as emotionally prepared enough to participate in the study. The openness of the decision from the counselors could have
biased the sample. For example, counselors may have asked only those victims whom they thought were stable enough to complete the questionnaire and not asked the victims who were having more difficulty coping after the rape.

The instruments used included the SCL-90-R and the measure of perceived control devised by the principal investigator. The SCL-90-R is not in question since it showed a very good internal reliability in this study. Derogatis (1977) also demonstrated it to be a valid measure of distress. The measure of control is, however, a questionable instrument. An internal reliability of .66 was found, which is somewhat low. Test-retest reliability should have been established and the measure should be longer than four items. Lengthening the control measure would enhance the potential for higher internal consistency. By lengthening the personal control measure, the size of the relationship between PC and SRS scores may also have been increased by increasing the greater range available in the PC scores.

The personal measure of control includes very general items of control. General items were used for the control measure because specific items addressing issues such as relationships, job or social situations may lend themselves to more variability and potential biasing effects when answering the items. For example, if a specific control
item was "I have total control over who I date," married subjects may bias the sample by saying they have no control over that area because they are married. If more general items are used to measure control, it is more likely up to the subjects to interpret how they want to answer the question as opposed to answering a question by default because their life situations do not correspond to the more specific question.

Data collection for this project was extremely difficult. The difficulty involved the rape centers not following through in giving the questionnaires to their clients and/or the client's not completing the questionnaires and returning them to the rape centers. It was found that center reliability was very idiosyncratic, with some centers following through very well (Brainerd, MN completed all 15 questionnaires sent them) and others not following through (Utah centers only completed 24%). The principal investigator contacted each center by phone and asked for permission before sending questionnaires along with self-addressed stamped envelopes for them to be returned. Directions for distributing the questionnaires were also given to the centers along with a short rationale on why the research is important and that it was for a thesis project (see Appendix B).
To study acutely traumatized subjects is difficult, and the more rigorous the research, the lower the participation rate, a fact clearly seen in rape research (Dahl, 1989). Because of the difficulty in studying rape victims, a 39% response rate must be regarded as adequate. Whether the 61% of the questionnaires not completed is representative of victims not wanting to complete them or the counselors not administering them remains unknown. It would be advisable for researchers to have a closer association with the rape centers they use for their studies in order to help ensure compliance by the centers.

In comparing the control and experimental groups, age, education, religion, and ethnicity were found to be statistically different. The differences in the two groups probably came from using only college-level subjects in the nonvictim group and a more diversified group of victims. Because of the differences, the demographic variables were controlled for in the regression analyses. After controlling for demographic variables, the results still revealed significant findings.

Clinical Implications

An implication for clinical use involves the relationship between perceived control and stress-related symptoms. Since the relationship is correlational in nature, the present author cannot make causal inferences
about PC and SRS, but the fact remains that rape victims with lower levels of PC also report higher levels of SRS. Generalizing from rape victims to other clients presenting in therapy for stress-related symptoms may be undertaken with further research, but we feel confident that the relationship between low PC and high SRS will remain across clients with stress-related problems.

Because of the potential for generalizing the research findings to other clients, it may be beneficial for clinicians to initially assess the perceived control of their clients. If their perceived control is low, the clinicians can then include increasing the client’s perceived control in their treatment plans in order to regulate their client’s decrease in SRS. Further study on the generalizability for the relationship between low PC and high SRS should be undertaken in subsequent research. Another clinical implication from this study is the potential use of a perceived control measure as a screening device for SRS in a clinical population. The four-item perceived control measure may be utilized to assess the degree of distress a rape victim is experiencing. This perceived control measure is less intrusive than some standardized distress indices, including the 90-item SCL-90-R. This idea of using the perceived control measure as a screening device for SRS should be further studied in
subsequent research.

In this study, low perceived control has been shown to be a factor affecting stress-related symptoms in rape victims, which would suggest the importance of increasing one's perceived control in treating stress-related symptoms. It has been suggested by Abramson et al. (1978) that changing a client's expectations from uncontrollability to controllability can ameliorate the effects of helplessness. These authors suggest that assertiveness training and problem-solving techniques can be added to the client's repertoire to facilitate perceptions of control.

From a clinical standpoint, it would make sense to challenge the person's sense of low personal control and help foster a sense of self-efficacy by using cognitive behavioral techniques to confront the dysfunctional belief system (e.g., "I am helpless and have no control over my life") (Newcomb & Harlow, 1986). To help get the desired benefits from the findings in this study, potential treatments for increasing one's perceived control should be incorporated in the treatment for stress-related problems and more specifically in the treatment for rape victims.
REFERENCES


APPENDICES
Appendix A. Victim and Control Group Questionnaire Packets
In this study, you will participate in a study having to do with your rape experience by completing four questionnaires. Your participation is strictly voluntary. These questionnaires will be completed anonymously. This means that the researchers will not know which questionnaires belong to whom. You may withdraw your consent at anytime without penalty or loss of any services, but because of the anonymity you have until the time the counselors give the questionnaires to the principal investigators to withdraw.

We understand that thinking back to your rape experience is difficult and painful but please answer the questions presented on the questionnaires as openly and honestly as possible. This information will be used to help other victims. The researcher recognizes that CONFIDENTIALITY is absolutely critical. We are interested in group data, which means that we will look at responses across many participants. We will not examine information from individual participants.

PLEASE HELP THE RESEARCHERS IN THEIR ATTEMPTS TO PROTECT YOUR CONFIDENTIALITY BY NOT PUTTING YOUR NAME ON ANY OF THE QUESTIONNAIRES.

I have read the above information and agree to participate in this study.

Name: ___________________________  Date: ___________________________

(signature)
AGE_____ MALE_____ FEMALE_____

LEVELS OF EDUCATION:  High School Grad. yes___ no___
                      College Student yes___ no___
                      Level In College fr_so_jr_sr___

CURRENT MARITAL STATUS: Single yes___ no___
                        Married yes___ no___
                        Divorced yes___ no___

RELIGION: Protestant _____
           Catholic _____
           LDS _____
           Other _____

RACE:  Caucasian (white) _____
       Black _____
       Hispanic _____
       Other _____

IF ANY OF THE LISTED EXPERIENCES HAVE HAPPENED TO YOU IN THE LAST YEAR, CHECK THOSE THAT APPLY.

Death in family___ Hospitalization___ Raped___
Serious accident___ Natural disaster___ Lost job___
Relationship ended___ IRS Audit___

IF YOU HAVE BEEN RAPE, ARE YOU CURRENTLY SEEING A COUNSELOR FOR IT?:
                     yes___ no___

IF YES, THEN, FOR HOW LONG? NUMBER OF DAYS _________

IF YES, THEN, NUMBER OF DAYS SINCE RAPE_________
After reading each statement place the number of your answer on the line provided in front of the question. Use the following numbered responses for your answers.

1- strongly disagree  
2- disagree  
3- slightly disagree  
4- neither agree or disagree  
5- slightly agree  
6- agree  
7- strongly agree

For Example:

1-7 ex.) I like chocolate.

If you strongly disagree with this statement, put the number "1" in the blank space. However, if you strongly agree, put the number "7" in the blank space. Use the #’s 2 through 6 to represent intermediate levels of agreement.

____ 1) I am in full control of my life at this time.
____ 2) I sometimes feel bored with my life.
____ 3) I have the power to stop someone from getting what they want from me.
____ 4) I sometimes feel nervous for much of the day.
____ 5) What happens to me is under my control.
____ 6) I exercise just about every day.
____ 7) I like to read for entertainment.
____ 8) At this time I feel a new sense of power in my life.
____ 9) I like to prepare large exotic meals.
CONSENT FORM (students)

In this study you will participate by completing three questionnaires. Your participation is strictly voluntary and you will receive extra credit from your instructor. These questionnaires will be completed anonymously, which means that the researchers and instructors will not know which questionnaires belong to whom. You may withdraw your consent at anytime without penalty up until you hand in the questionnaires.

The researcher recognizes that CONFIDENTIALITY is absolutely critical. We are interested in group data, which means that we will look at responses across many participants. We will not examine information from individual participants.

PLEASE HELP THE RESEARCHERS IN THEIR ATTEMPTS TO PROTECT YOUR CONFIDENTIALITY BY NOT PUTTING YOUR NAME ON ANY OF THE QUESTIONNAIRES.

I have read the above information and agree to participate in this study.

Name: ___________________________ Date: _________________________

(signature)
<table>
<thead>
<tr>
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<th>FEMALE</th>
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<tr>
<td></td>
<td>College Student</td>
<td>yes___ no___</td>
</tr>
<tr>
<td></td>
<td>Level in College</td>
<td>fr_so_jr_sr___</td>
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<tr>
<td>CURRENT MARITAL STATUS:</td>
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</tr>
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<td></td>
<td>Married</td>
<td>yes___ no___</td>
</tr>
<tr>
<td></td>
<td>Divorced</td>
<td>yes___ no___</td>
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<td>___</td>
</tr>
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<td></td>
<td>Other</td>
<td>___</td>
</tr>
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<td>Caucasian (white)</td>
<td>___</td>
</tr>
<tr>
<td></td>
<td>Black</td>
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<td>___</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>___</td>
</tr>
</tbody>
</table>

IF ANY OF THE LISTED EXPERIENCES HAVE HAPPENED TO YOU IN THE LAST YEAR, THEN CHECK THOSE THAT APPLY.

Death in family___ Hospitalization___ Rape___
Serious accident___ Natural disaster___ Lost job___
Relationship end___ IRS Audit___
INSTRUCTIONS: Below is a list of problems and complaints that people sometimes have. For each item, select one of the choices below by number and darken the circle for that choice on the ANSWER sheet. Your answer should describe how much that problem has bothered or distressed you DURING THE PAST WEEK, INCLUDING TODAY. Locate Response #101 ON THE BACK of your answer sheet, and begin.

A = NOT AT ALL
B = A LITTLE BIT
C = MODERATELY
D = QUITE A BIT
E = EXTREMELY

101. Headaches
102. Nervousness or shakiness inside
103. Unwanted thoughts, words or ideas that won’t leave your mind
104. Faintness or dizziness
105. Loss of sexual interest or pleasure
106. Feeling critical of others
107. The idea that someone else can control your thoughts
108. Feeling others are to blame for most of your troubles
109. Trouble remembering things
110. Worried about sloppiness or carelessness
111. Feeling easily annoyed or irritated
112. Pains in heart or chest
113. Feeling afraid in open spaces or on the streets
114. Feeling low in energy or slowed down
115. Thoughts of ending your life
116. Hearing voices that other people do not hear
117. Trembling (body shakes)
118. Feeling that most people cannot be trusted
119. Poor appetite
120. Crying easily
121. Feeling shy or uneasy with the opposite sex
122. Feeling of being trapped or caught

123. Suddenly scared for no reason
124. Temper outbursts that you could not control
125. Feeling afraid to go out of your house alone
126. Blaming yourself for things
127. Pains in lower back
128. Feeling blocked in getting things done
129. Feeling lonely
130. Feeling blue
131. Worrying too much about things
132. Feeling no interest in things
133. Feeling fearful
134. Your feelings being easily hurt
135. Other people being aware of your private thoughts
136. Feeling others do not understand or are unsympathetic
137. Feeling that people are unfriendly or dislike you
138. Having to do things very slowly to insure correctness
139. Heart pounding or racing
140. Nausea or upset stomach

** Check your answer sheet to make sure you have just completed item #140 **. Go on to the next page.
A = NOT AT ALL
B = A LITTLE BIT
C = MODERATELY
D = QUITE A BIT
E = EXTREMELY

141. Feeling inferior to others
142. Soreness of your muscles
143. Feeling that you are watched or talked about by others
144. Trouble falling asleep
145. Having to check and double check what you do
146. Difficulty making decisions
147. Feeling afraid to travel on buses, subways, or trains
148. Trouble getting your breath
149. Hot or cold spells
150. Having to avoid certain things, places or activities because they frighten you
151. Your mind going blank
152. Numbness or tingling in parts of your body
153. A lump in your throat
154. Feeling hopeless about the future
155. Trouble concentrating
156. Feeling weak in parts of your body
157. Feeling tense or keyed up
158. Heavy feelings in your arms or legs
159. Thoughts of death or dying
160. Overeating
161. Feeling uneasy when people are watching or talking about you
162. Having thoughts that are not your own
163. Having urges to beat, injure, or harm someone
164. Awakening in the early morning
165. Having to repeat the same actions such as touching, counting, or washing
166. Sleep that is restless or disturbed
167. Having urges to break or smash things
168. Having ideas or beliefs that others do not share
169. Feeling very self-conscious with others
170. Feeling uneasy in crowds, such as shopping or at a movie
171. Feeling everything is an effort
172. Spells of terror or panic
173. Feeling uncomfortable about eating or drinking in public
174. Getting into frequent arguments
175. Feeling nervous when you are left alone
176. Others not giving you proper credit for your achievements
177. Feeling lonely even when you are with people
178. Feeling so restless you couldn’t sit still
179. Feelings of worthlessness
180. The feeling that something bad is going to happen to you
181. Shouting or throwing things
182. Feeling afraid you will faint in public
183. Feeling that people will take advantage of you if you let them
184. Having thoughts about sex that bother you a lot
185. The idea that you should be punished for your sins
186. Thoughts and images of a frightening nature
187. The idea that something serious is wrong with your body
188. Never feeling close to another person
189. Feelings of guilt
190. The idea that something is wrong with your mind
Appendix B. Purpose of Study and Instructions for Distribution
Purpose: Thesis research project

Most rape researchers agree that many rape victims experience post-rape symptoms similar to Post-traumatic Stress Disorder (PTSD). Many variables have been analyzed as contributing to those post-rape symptoms, including, severity of the rape, threat of life, number of times raped, number of assailants, demographics (age, race, religion, etc.), and general loss of control. There is currently no research that has specifically measured a victims perceived loss of control as a contributing factor to their symptoms. Most researchers agree that many victims experience a sense of loss of control, but they have never measured it. Measuring victims loss of control and comparing it to their post-rape symptoms is the idea we have for this research project.

We would like to measure a rape victim's current level of perceived control over life events and the amount of control they felt they had over the rape experience and compare the two control scores with their post-rape symptoms score. We are expecting to find that victims with a decreased sense of control will exhibit an increased amount and intensity of post-rape symptoms. If this is the case, then treatment for rape victims may be geared to help the survivors gain more control over their lives in hopes of alleviating the intensity and amount of their symptoms. Therefore, helping them cope better and lead better lives.

Your help in distributing the questionnaire packets is absolutely crucial to this project. Rape research has traditionally been difficult to conduct because of the sensitive and intrusive nature of the topic and this project has shown to be no exception. I would like to ensure to you and your clients the utmost in confidentiality and sensitivity with this project. If there is any problems with the questionnaire packets PLEASE let me know and I will do my best to rectify the problem.

Because of your contribution to this thesis I will acknowledge your efforts in the final document. If your organization wants to remain anonymous, just let me know and I will abide by your wishes.

Once again I would like to thank you for your participation and cooperation in this project, it is greatly appreciated.

Chad Sombke, M.S. candidate
Utah State University
Logan, Utah, 84322-2810
(801) 750-1460, or 750-3272
DIRECTIONS FOR QUESTIONNAIRES

STEP 1

Hand each client a questionnaire packet and a pencil. Each packet should include: 1) consent form, 2) demographics, 3) general control, 4) specific control, 5) revised SCL-90-R, and 6) a scantron answer sheet. Have them read and sign the consent form. After they sign the consent form ask them to tear it from the main packet and hand it back to you. Keep the consent forms separately from the packets for confidentiality until you mail them back to me.

STEP 2

The clients are to read the directions on each survey and complete each one of them. Please ask them to answer every question on each survey. When they get to the revised SCL-90-R have them follow the directions at the top and use the scantron sheet for marking their answers.

STEP 3

When they are completed with the questionnaire packet have the subjects hand the packets back to you. Then you can put the completed packets in the pre-addressed envelop. When you get all of the packets back, or all that you think you’ll get back, put the consent forms in with the packets and mail everything in the envelop back to me.

If you have any questions or problems with the questionnaires, please feel free to contact me. Thank you for your cooperation, your participation is greatly appreciated.

Work: 750-1460 or 750 3272 (my advisor)
Home: 752-0580

Tamara J. Ferguson
Utah State University
Psychology Department
UMC 2810
Logan, Utah 84322-2810
(I’m using my advisor’s name for mailing purposes)

Chad Sombke
Masters Candidate