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The relationship between sexual assault disclosure reactions and psychological symptoms

Danielle Renee Buckland

THE RELATIONSHIP BETWEEN SEXUAL ASSAULT DISCLOSURE REACTIONS AND PSYCHOLOGICAL SYMPTOMS

A Project

Presented to the

Faculty of

California State University,

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In Partial Fulfillment

of the Requirements for the Degree

Master of Social Work

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ABSTRACT

The purpose of the study was to investigate sexual assault disclosure reactions and psychological symptoms. It was predicted that negative disclosure reactions would be positively correlated with psychological symptoms and positive disclosure reactions would be negatively correlated with psychological symptoms. Participants included twenty-nine females who had previously experienced a sexual assault. Each participant filled out several on-line questionnaires. The questionnaires included, demographics, Beck Anxiety Inventory (BAI), Beck Depression Inventory II (BDI), Rosenberg Self-Esteem Questionnaire (SES), Posttraumatic Stress Disorder Checklist (PCL), Sexual Assault Disclosure Questionnaire (SADQ) and Social Reactions Questionnaire (SRQ). In support of the hypothesis, the negative disclosure reactions being treated differently and having control taken away by someone were significantly correlated with depression, and PTSD symptoms. Distraction was significantly correlated with anxiety, and it was also correlated with PTSD symptoms. The hypothesis was not supported concerning positive disclosure reactions and increasing psychological symptoms. All other relationships were not found significant.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER ONE

INTRODUCTION

Research indicates sexual assault survivors experience an increased risk of developing psychological symptoms including: Posttraumatic Stress Disorder (PTSD), Depression, Anxiety and Low Self-Esteem. It is extremely important for social workers to be familiar with the literature and be aware of existing relationships between sexual assault and psychological symptoms. This study investigated the relationship between positive and negative disclosure reactions and psychological symptoms. The hypothesis states: negative disclosure reactions would be positively correlated with psychological symptoms and positive disclosure reactions would be negatively correlated with psychological symptoms.

Problem Statement

Research suggests that experiencing a sexual assault places an individual at an increased risk for developing psychological symptoms (Resick, 1993). Specifically, Resick found that sexual assault survivors were more likely to develop posttraumatic stress disorder (PTSD), depression, low self-esteem, social adjustment problems, sexual

disorders, anxiety, and obsessive compulsive disorder. It is difficult to determine an accurate prevalence of sexual assault due to a number of factors; regardless, it appears that a significant number of individuals have experienced a sexual assault. According to Elliott, Mok and Briere's (2004) sexual assault prevalence study, 22% of female participants report having experienced a sexual assault as an adult. The need for research involving sexual assault and recovery outcome is great.

The high prevalence rate of sexual assault has attracted wide attention in the social service industry. Several crisis centers, organizations and professionals are focused on education and treatment of sexual assault. Some of the national organizations focused on sexual assault include: Rape Abuse and Incest National Network (RAINN), California Coalition Against Sexual Assault (CALCASA), and Womenshealth.gov sponsored by the U.S. Department of Health and Human Services. Many clinical social workers are also highly involved in the treatment and education of sexual assault.

Understanding the affect of sexual assault and the development of psychological symptoms is vital to the field of clinical social work. Clinical social workers need to be

aware of what factors affect the psychological health of the assault survivor. Social workers providing services to sexual assault survivors need to know information about the relationship between sexual assault disclosure reactions and psychological symptoms. Overall, knowledge of the development of psychological symptoms following a sexual assault will help clinical social workers come up with an effective treatment plan.

Purpose of the Study

The purpose of the study was to investigate the relationship between sexual assault disclosure and psychological symptoms. It was expected that positive disclosure reactions would be negatively correlated with psychological symptoms. Specifically, positive disclosure reactions included: *emotional support/belief* (others demonstrating care, positive regard, providing helpful advice/information), *and tangible aid/information support* (receiving tangible aid from others). Psychological symptoms included PTSD, anxiety, depression and low self-esteem.

Concerning negative disclosure reactions, it was expected that negative disclosure reactions would be positively correlated with psychological symptoms. Specifically, negative disclosure reactions included: *being*

treated differently, having control taken away by someone (telling the victim what to do), *victim blame* (implying the victim was at fault for the assault), *egocentrism* (others responding in ways that put their own needs before the victims need), and *distraction* (changing the subject or telling the victim to get over it). Psychological symptoms included PTSD, anxiety, depression and low self-esteem.

Significance of the Project for Social Work

Research on sexual assault and the development of psychological symptoms is extremely important to the field of social work. Clinical social workers are often actively involved in the treatment and advocacy of sexual assault survivors. Research findings contribute to the field of clinical social work by providing valuable information to the existing body of sexual assault literature. Clinicians will be able to apply the findings of the research to their practice with sexual assault survivors.

Research on the relationship between sexual assault and psychological symptoms also contributes to the field of macro social work. With the knowledge from research, macro social workers advocate and educate the general population. Education for families and friends of sexual assault

survivors may improve the quality of support provided to the sexual assault survivor.

CHAPTER TWO

LITERATURE REVIEW

Introduction

Experiencing a sexual assault places a person at risk for experiencing PTSD, anxiety, depression and low self-esteem. Research has demonstrated that talking about a traumatic experience and receiving positive disclosure reactions buffers the psychological symptoms associated with sexual assault. Negative disclosure reactions are correlated with increased psychological symptoms following an assault.

Theories Guiding Conceptualization

The mental health community has long recognized the impact rape has on the victim. Veronen, Kilpatrick and Resick conducted the first major study on the effect of rape in 1979. The study was groundbreaking because it followed the reactions of rape victims after they experienced an assault. The researchers found the participants were exhausted, terrified, confused, restless and depressed. This research paved the way for further research including the Rothbaum, Foa, Murdock, Riggs, and Walsh (1992) study. Rothbeum et al. (1992) found that one-week following the

assault, 94% of participants experienced PTSD symptoms and were clinically depressed. Three months later 47% of the participants met full criteria for PTSD.

Other studies have continued examining the development of psychological symptoms following a sexual assault. Kilpatrick and Veronen (1984) looked at anxiety levels in sexual assault victims post assault. Consistently sexual assault victims had higher levels of anxiety as measured by the Symptoms Checklist-90 Revised and the Modified Fear Survey. Frank and Stewart (1984) examined depression in sexual assault survivors following the assault. Results showed that 56% of the participants were moderately or severely depressed as measured by the Beck Depression Inventory. Another study investigated long-term effects on self-esteem in a treatment-seeking group of sexual assault survivors. Results showed that assault survivors had significantly lower self-esteem scores as measured by the Tennessee Self-Concept Scale (Resick, 1993).

Buffering the Effects of Sexual Assault

Research has established a connection between sexual assault and psychological symptoms. It has also been determined that not every sexual assault victim will develop every psychological symptom. The question remains what

factors serve as a buffer for the development of psychological symptoms. Pennebaker, Kiecolt-Glaser and Glasser (1988) investigated confrontation of traumatic experiences and its effect on physical health and stress. They found that talking and writing about traumatic experiences led to an increase in physical health including immune functioning as well as a decrease in stress levels. Expressing feelings and emotions concerning a traumatic event can be a physically and emotionally liberating.

Further research conducted by Ruggiero et al. (2004) examined the effects of delayed disclosure on childhood rape victims. Individuals who disclose their childhood rape soon after it occurs experience fewer psychological symptoms and psychosocial difficulties then individuals who wait one month or longer to disclose. Specifically, those who waited longer than one month experienced a higher prevalence of PTSD and major depression.

Talking about a traumatic event such as a sexual assault can be helpful in the healing process. Other studies have examined the effect the listener can have on the person disclosing a traumatic experience. Hyman, Gold and Cott (2003) conducted research concerning what forms of social support buffer the development of PTSD in childhood sexual

assault survivors. Four types of social support were examined using the Interpersonal Support Evaluation List. The types of support measured included: Appraisal Support (assistance and advice with coping), Self-Esteem Support (expressing that the survivor is important and valued), Tangible Support (providing physical resources and aid), and Belonging Support (letting the survivor know they belong and are part of a group). The results showed Appraisal Support and Self-Esteem Support served as significant buffers in preventing the development of PTSD.

A study completed by Testa, Miller, Downs and Panek (1992) looked at the buffering effects of supportive disclosure reactions on childhood sexual assault survivors. The measured used in the study included the Symptoms Checklist-90 and Determination of Social Support Following Disclosure. The results demonstrated that participants who experienced supportive disclosure reactions had fewer psychological symptoms and higher levels of self-esteem.

Negative Disclosure Reactions

Ullman, Filipas, Townsend and Starzynski (2007) published an article narrowing in on the correlates of PTSD. Previously an emphasis has been placed on assault characteristics such as the perpetrator's relationship to

the victim, and the use of weapons or force during the assault. The Ullman, Filipas, Townsend and Starzynski study compared assault characteristics with psychosocial variables. The study found negative social reactions were more predictive of PTSD than assault characteristics.

Ullman (1999) reviewed multiple studies involving sexual assault and social support. It was determined that negative social support was consistently significantly correlated with negative effects and psychological symptoms; increased psychological symptoms included anxiety, depression, fear, and adjustment difficulties. Negative social support included victim blame, disbelief, anger, lack of support and unhelpful responses.

Davis, Brickmen and Baker (1991) investigated supportive and unsupportive behavior of rape victim's significant others. The goal of the study was to determine the relationship between supportive and unsupportive behavior on psychological adjustment following rape. The Symptoms Checklist-90 was used to measure the victim's psychological adjustment while the author constructed Crime Impact Social Support Inventory measured supportive and unsupportive behavior. Results of the study found that unsupportive behavior was significantly related to poor

psychological adjustment following rape, while supportive behavior was not related to psychological adjustment.

Ullman (1996) decided to investigate positive and negative disclosure reactions. Ullman constructed the "Social Reactions Questionnaire" to include four positive (*validation/belief, tangible aid/information, emotional support, listened/encouraged talking*) and four negative (*victim blame, being treated differently, having control taken away by someone, distraction*) reactions. Ullman found that *being treated differently, having control taken away by someone* and *distraction* were all strongly associated with an increase in psychological symptoms. *Aid/information* and *being listened to* were significantly negatively correlated with psychological symptoms.

In 2007 Ullman, Townsend, Filipas, and Starzynski completed an extensive study to determine what sexual assault factors are most strongly correlated with PTSD. The study investigated assault severity, social support, avoidance coping, and self-blame. The results found negative social reactions and avoidance coping were most strongly related to PTSD. Furthermore it was discovered that the common relationship between victim self-blame and PTSD is dependent on negative social reactions. The significance of

this study is tremendous and suggests that future research should focus on the effect of negative social reactions.

Although there are numerous studies involving social support for sexual assault victims, few studies have looked at timing of assault disclosure. Golding, Siegel, Sorenson, Burnam and Stein (1989) found that 33% of sexual assault victims had not previous told anyone about their assault. Out of the 67% who did disclose their assault, 66% of the participants indicated that telling a friend or family member was helpful to them.

Sudderth (1998) utilized a qualitative method in order to determine why individuals are so hesitant in disclosing. Many of the victims reported feeling shame and fear of others reactions. The majority of individuals did not even recognize the event as rape until some time after the incident. Also, victims who knew the perpetrator were also hesitant to disclose the assault.

Summary

Experiencing a sexual assault places a person at risk for experiencing psychological symptoms including: PTSD, anxiety, depression and low self-esteem. Research recognizes that talking about a traumatic experience and receiving positive disclosure reactions buffers the development of

psychological symptoms associated with sexual assault. Negative disclosure reactions are correlated with increased psychological symptoms following an assault, while positive disclosure reactions may be correlated with a decrease in psychological symptoms.

CHAPTER THREE

METHODS

Introduction

Twenty-nine females participated in the research study. The relationship between sexual assault disclosures and psychological symptoms was investigated using correlation. Participants were recruited with flyers and asked to complete a battery of questionnaires online. The battery of questionnaires included: Demographics, Beck Anxiety Inventory (BAI), Beck Depression Inventory (BDI), Rosenberg Self-Esteem Scale (SES), Posttraumatic Stress Disorder Checklist (PCL), author constructed Assault Disclosure Questionnaire (SADQ), and Social Reaction Questionnaire (SRQ).

Study Design

The purpose of the study was to investigate the relationship between sexual assault disclosure and psychological symptoms. This was achieved using quantitative methods to study data collected through questionnaires. Past research indicates that a relationship between assault disclosure reactions and psychological symptoms exists. The

intention of this study was to contribute to the literature by investigating specific disclosure reactions and psychological symptoms.

When investigating human emotions and behavior there are limitations. The current study recognizes that asking participants to think back and recall specific disclosure reactions leaves room for a level of error. Any conclusions drawn from this study must be taken in context and recognized to be an approximation of the participant's disclosure reactions.

The study hypothesis suggests that negative disclosure reactions would be positively correlated with psychological symptoms and positive disclosure reactions would be negatively correlated with psychological symptoms.

Sampling

Twenty-nine females participated in the current study. Participants were recruited from flyers posted on campus at California State University San Bernardino. The flyers stated that in order to qualify for the study participants must be female age eighteen or older, and have previously

experienced a sexual assault. Participants were also offered a $10 incentive in order to complete the survey.

Data Collection and Instruments

Several questionnaires concerning, psychological symptoms (anxiety, depression, PTSD and self-esteem), sexual assault disclosure reactions, and sexual experiences were administered. The following measures were used:

Demographic Information

Basic demographic information will be collected including: age, gender, marital status, highest level of education completed, and ethnic background. See Appendix A for actual questions.

Beck Anxiety Inventory (BAI)

The BAI has 21 self-report questions concerning symptoms of anxiety. There are four response options 0-3 with 3 indicating more severe anxiety symptoms. The answers are then summed up giving a global anxiety score with higher scores indicating more anxiety. The BAI was found to have satisfactory internal consistency as measured with Cronbach's alpha coefficient for the total of .89 (Contreras, Fernandez, Malcarne, Ingram, & Vaccarino, 2004). See Appendix C for actual test.

Beck Depression Inventory II (BDI)

The BDI is a 21 item self-report questionnaire concerning symptoms of depression. Each question presents a symptom of depression and offers response options 0-3 where a score of 3 indicates the most severe level of depression. The total score is added up in the end giving a global depression score. The BDI was found to have satisfactory internal consistency as measured with Cronbach's alpha coefficient of .83 (Contreras, Fernandez, Malcarne, Ingram, & Vaccarino, 2004). See Appendix D to see the actual test.

Rosenberg Self-Esteem Scale (SES)

The SES contains a total of 10 items. Half of the items are worded positively while the other half are worded negatively. A 4-point likert scale is used to answer each of the items with 1 meaning strongly disagree and 4 meaning strongly agree. All the scores are then added up to produce a global self-esteem score with higher scores indicating a high self-esteem. The SES shows adequate internal consistency with a Cronbach's alpha of 81 (Schmitt & Allik, 2005). See Appendix E for actual test.

Posttraumatic Stress Disorder Checklist (PCL)

The PCL includes 17 PTSD symptoms that are rated by the participant. Each of the 17 items is rated from 1-5 with 5 meaning that the participant is extremely bothered by the

symptoms. The 17 symptoms presented correspond to the DSM-IV diagnosis criteria for PTSD. The PCL has a high degree of internal consistency with a Cronbach's alpha of .939 (Blanchard, Jones-Alexander, Bckley & Forneris, 1996). See Appendix F for actual test.

Sexual Assault Disclosure Questionnaire (SADQ)

The SADQ is an author-constructed questionnaire containing specific questions concerning when the sexual assault occurred, whether the assault was disclosed or not, the number of disclosures, and the amount of time between the assault and the first disclosure. See Appendix G for actual test.

Social Reactions Questionnaire (SRQ)

The SRQ includes 48 possible disclosure reactions that a sexual assault victim may have experienced. The participant rates each disclosure reaction by how often they experienced it using a 5-point likert scale. Within the 48 disclosure reactions are 2 types of positive disclosure reactions and 5 types of negative disclosure reactions (7 total). The 2 positive disclosure reactions include: *emotional support/belief and tangible aid/information support;* while the 5 negative disclosure reactions include: *being treated differently, having control taken away by*

someone, *victim blame*, *egocentrism*, and *distraction*. According to Ullman (1999), Cronbach's alpha for each of the subscales was as follows: ".93 for emotional support/belief, .86 for treat differently, .80 for distraction/discouraged talking, .83 for taking control, .84 for tangible aid/information support, .80 for victim blame and .77 for egocentric reactions" (p, 264). See Appendix G for actual test.

Procedures

Participants were recruited through flyers placed on California State University San Bernardino campus. The flyers invited female individuals who have experienced a sexual assault to participate in an online research study. The flyer specified that participants must be females over the age of 18 who have experienced a sexual assault at some time during their life. The flyer also advertised that participants would receive ten dollars for participating.

On the website basic demographics were completed first, followed by the BAI, BDI, SES, PCL, SADQ and SRQ in that order. Upon completion, a debriefing statement appeared explaining the purpose of the study and thanking the participants for their cooperation. The debriefing statement also included a link to crisis hotline information for

individuals who are experiencing depression or anxiety. Participation in the study took approximately 45 minutes.

Protection of Human Subjects

On the website a short description of the research as well as an informed consent was displayed. Participants were required to read the informed consent and place a check in the designated box to indicate their informed consent. During the study, a link to the California Suicide and Crisis hotline was available. The crisis hotline recommendation will also occurred if a participant expressed that they may be suicidal as determined by an answer of number two or three on the Beck Depression Inventory question number nine.

At the conclusion of the questionnaires and debriefing statement, the last screen to display had a place for the participant to enter a name and address for the incentive money. The website cataloged this information completely separate from the questionnaires so at no time can a persons name or address be matched to their questionnaires. The participants name and address were password protected. The researcher and adviser were the only persons with access to the names and addresses. Throughout the study participants were treated in accordance with the Ethical Principles of

the American Psychological Association (American Psychological Association, 2002).

Data Analysis

The relationship between sexual assault and psychological symptoms was investigated using Pearson bivariate correlational analyses. The correlation between positive disclosure reactions and psychological symptoms was examined. Specifically, positive disclosure reactions included: *validation/belief, tangible aid/information support, emotional support listened/encouraged talking, validation/belief and emotional support*. Psychological symptoms included: PTSD, anxiety, depression and self-esteem.

The relationship between negative disclosure reactions and psychological symptoms was also investigated. Specifically, negative disclosure reactions included: *being treated differently, having control taken away by someone, victim blame* and *distraction*. Psychological symptoms included: PTSD, anxiety, depression, and self-esteem.

Summary

Participants were recruited with flyers and than asked to complete a battery of questionnaires online. The battery

of questionnaires included: Demographics, Beck Anxiety Inventory, Beck Depression Inventory, Rosenberg Self-Esteem Scale, Posttraumatic Stress Disorder Checklist, Assault Disclosure Questionnaire, and Social Reaction Questionnaire. Twenty-nine female participants completed the questionnaires. The relationship between sexual assault disclosures and psychological symptoms was investigated using correlation.

CHAPTER FOUR

RESULTS

Introduction

The hypothesis concerning negative disclosure reactions and the development of psychological symptoms was supported. Negative disclosure reactions of *"being treated differently"* and *"having control taken away by someone"* were significantly correlated with depression and PTSD symptoms. *"Distraction"* was significantly correlated with anxiety, and with PTSD symptoms. The hypothesis was not supported concerning the relationship between positive disclosure reactions and psychological symptoms.

Presentation of the Findings

Among the 29 female sexual assault survivors, 44.8% were single, 10.3% were cohabiting, 34.5% were married, 6.9% were divorced and 3.4% were widowed. The ages of the participants are as follows: 52% were age 18-25, 31% were age 26-35, 7% were age 36-45, and 10% were age 46-55. Thirty-nine percent were Caucasian, 3% were Native American, 10% were African American, 41% were Hispanic/Latino, 3% were Asian, and 3% selected Other for their ethnicity. Seven percent of the participants did not finish high school, 66%

were still in college, 21% were college graduates, and 7% had a graduate degree.

The average age that the assault took place was age 15. Fourteen percent of the participants had not previously disclosed their assault to anyone, while 86% of the participants had told someone. Eighty-six percent of the participants disclosed to someone in their family about the assault, 83% disclosed to their friends, 28% disclosed to law enforcement, 31% disclosed to a counselor or crisis hotline, 35% told a doctor, and 24% told their religious/spiritual leader.

The hypothesis predicted that negative disclosure reactions would be positively correlated with psychological symptoms. There was a significant relationship between the negative disclosure reaction *being treated differently* and depression, such that the more sexual assault survivors were *treated differently,* the greater the level of depression $r(27)=.44, p<.05$. Nineteen percent of the variance in depression was accounted for by *being treated differently. Being treated differently* was significantly related to PTSD, such that as disclosure reactions of *being treated differently* increase, PTSD symptoms increase $r(27)=.53$,

$p<.05$. Twenty-eight percent of the variance in PTSD was accounted for by being treated differently.

There was a significant relationship between negative disclosure reactions of *distraction* and PTSD, such that as disclosure reactions of distraction increased, PTSD Symptoms also increased $r(27)=.41, p<.05$. Seventeen percent of the variance in PTSD symptoms was accounted for by negative disclosure reactions of *distraction*. *"Distraction"* was significantly related to anxiety, such that as disclosure reactions of *distraction* increase, anxiety also increased $r(27)=.44, p<.05$. Nineteen percent of the variance in anxiety was accounted for by distraction.

There was a significantly relationship between negative disclosure reactions of *having control taken away* and depression, such that as *having control taken away* from the sexual assault victim increased, the level of depression also increased $r(27)=.45$, $p<.05$. Twenty percent of the variance in depression was accounted for by *having control taken away*. *"Having control taken away"* was also significantly related to PTSD, such that *having control taken away* from the sexual assault victim increased, the level of PTSD symptoms also increased $r(27)=.45$, $p<.05$.

Twenty percent of the variance in PTSD was accounted for by *having control taken away.*

All other correlations were not found significant. Furthermore, the hypothesis was not supported concerning positive disclosure reactions and negative psychological symptoms. See table 1 for a summary of the results.

Table 1. Zero Order and Partial Correlations

		Anxiety	Depression	PTSD Symptoms	Low Self-Esteem
Negative Disclosure Reactions					
	Behaving Egocentric	.31	.15	.22	-.33
	Distracting the Victim	.44*	.37	.50*	-.32
	Treating Differently	.40	.44*	.53**	-.35
	Having Control Taken	.37	.45*	.45*	.27
Positive Disclosure Reaction					
	Emotional Support/Belief	-.23	-.24	-.38	.08
	Information/ Aid	-.03	.00	-.16	-.05

*p<.05 **p<.01

Summary

The hypothesis stated that negative disclosure reactions would be correlated with an increase in

psychological symptoms. The hypothesis was only partially supported. *Distracting the victim, treating the victim differently, and having control taken away,* were all significantly correlated with an increase in psychological symptoms. All other correlations both positive and negative were not found significant.

CHAPTER FIVE

DISCUSSION

Introduction

The current study examined negative and positive sexual assault disclosure reactions. Negative disclosure reactions were related to an increase in psychological symptoms while positive disclosure reactions were not related to psychological symptoms. Limitations of the current research include the fact that the sample was college students, the small sample size, and the simplicity of the research design. Future sexual assault disclosure research should focus on context, ecological theory and resiliency.

Discussion

Sexual assault disclosure elicits either a positive or negative reaction. The results of this study showed there was no significant relationship between positive disclosure reactions and psychological symptoms. In support of the hypothesis there was a significant relationship between negative disclosure reactions and psychological symptoms. *Distracting the victim* was significantly related to psychological symptoms of anxiety and depression, such that

as distracting the victim increased, the psychological symptoms of anxiety and depression also increased. There was also a significant positive relationship between *treating the victim differently*, depression, and PTSD symptoms; such that the more the victim was *treated differently*, the higher the levels of depression and PTSD. The negative disclosure reaction *having control taken away* was related to psychological symptoms of depression and PTSD. As *having control taken away* increased, psychological symptoms of depression and PTSD also increased.

According to the literature, sexual assault is consistently associated with an increase in psychological symptoms. Research suggests: depression, anxiety, PTSD, and low self-esteem are all related to sexual assault. (Rothbeum et al., 1992; Kilpatrick, and Veronen, 1984; Frank and Stewart, 1984; Resick, 1993). The current study investigated social disclosure reactions of sexual assault and the development of psychological symptoms. The relationship between negative disclosure reactions and psychological symptoms was found to be significant.

Sexual assault and the development of psychological symptoms is an extremely complex topic. Several factors determine the strength of the relationship between sexual

assault and psychological symptoms. Past research found that disclosing information about trauma can be therapeutic (Pennebaker, Kiecolt-Glaser, and Glasser, 1988). Recent research is beginning to investigate the specific factors that contribute to resiliency in sexual assault survivors. Ullman (2011) published a cutting edge study that states disclosing sexual trauma may not always be beneficial to the assault survivor. Ullman's recent study suggests that assault disclosure is not always as beneficial as originally thought; specifically, whether the disclosure reaction is negative or positive may play a pivotal roll in determining if the assault disclosure is beneficial. Ullman's research suggests that there is no relationship between positive disclosure reactions and psychological symptoms.

Contrary to the hypothesis, there was no significant relationship between positive disclosure reactions, decreased psychological symptoms, and increased self-esteem. Testa, Miller, Downs and Panek (1992) conducted research on disclosure reactions, self-esteem, and psychological symptoms; results showed that participants who experienced supportive disclosure reactions had fewer psychological symptoms and higher levels of self-esteem (Testa, Miller, Downs, and Penek, 1992). More recent research suggests that

negative disclosure reactions may have a greater impact on sexual assault recovery then previously thought (Ullman, 2011). Ullman's research suggests negative disclosure reactions may account for more variance in psychological symptoms than originally thought. Ullman, Filipas, Townsend and Starzynski (2007) found that negative social reactions were more predictive of PTSD symptoms than assault characteristics.

Limitations

One of the limitations to the current study is the college sample. Research concerning sexual assault is often conducted on college students (Ullman, 2011). Ullman found that studies using college students vs. clinical samples receive very different results when investigating assault disclosure reactions. The small sample size of the current study is also a limitation. Whenever conducting research, it is necessary to consider if the research can generalize to the larger population. The small sample size, and college student sample, limit the study making it more difficult to generalize to the population.

Another limitation to the current study is that the hypothesis only investigated the relationship between assault disclosure reactions and psychological symptoms. A

more sophisticated study design would have made it possible to further investigate what factors are related to resiliency concerning sexual assault and psychological symptoms.

Recommendations for Social Work Practice, Policy and Research

Clinical social work, crisis intervention, and forensics, are all fields of social work that could greatly benefit from knowledge gained from the current study. Research suggests that formal providers of support such as clinical social workers do not always provide positive disclosure reactions (Ahrens, Cabral and Abeling, 2009). Clinical social workers need to be aware of the correlates involved in sexual assault disclosure. When providing services to sexual assault survivors, clinical social workers need to be the first line of defense against the development of psychological symptoms such as depression, anxiety and PTSD. In order to provide outstanding service to assault survivors it is necessary for clinical social workers to consistently offer positive assault disclosure reactions.

Social workers must also take the responsibility to educate the general population concerning sexual assault

disclosure reactions. On average, sexual assault survivors disclose the assault to three people (Ullman & Filipas, 2001). When a person discloses information about a sexual assault it can be shocking and frightening for the person listening and offering support. Research suggests that providing a safe supportive environment is important to sexual assault disclosure and to the future psychological health of the survivor. Most importantly, the person listening to the assault disclosure should avoid negative disclosure reactions such as: *distracting the victim, treating the victim differently,* and *taking control away from the victim.*

Future research should focus on theories concerning trauma disclosure and the development of psychological symptoms. Focusing on contextual models and ecological theory should provide a substantial amount of information concerning risk and resiliency factors of sexual assault. Past research on sexual assault has focused a great deal on the pathologies associated with sexual assault. Future research needs to place an emphasis on resiliency and protective factors.

Conclusions

When a sexual assault survivor shares information concerning the assault they are participating in sexual assault disclosure. Sexual assaults are associated with an increase in psychological symptoms. The current study found that positive sexual assault disclosure reactions are not related to psychological symptoms. Negative disclosure reactions were related to an increase in psychological symptoms. Clinical social workers need to not only avoid negative disclosure reactions in their practice, but they are also responsible for educating the general population concerning supportive disclosure reactions. Future research should continue to examine the context of the assault, assault disclosure, risk factors, and resiliency.

APPENDIX A

DEMOGRAPHIC INFORMATION

DEMOGRAPHIC INFORMATION

1. Age _____

2. Marital Status

- ☐ Single
- ☐ Cohabiting
- ☐ Married
- ☐ Divorced
- ☐ Separated
- ☐ Widowed

3. Education

- ☐ High School
- ☐ Trade or Tech School
- ☐ Some College
- ☐ College Graduate
- ☐ Graduate Degree

4. Ethnicity

- ☐ Caucasian
- ☐ Native American
- ☐ African American
- ☐ Hispanic/Latino
- ☐ Asian
- ☐ Pacific Islander
- ☐ Other

5. Annual Income

- ☐ 10,000 or less
- ☐ 10,001-20,000
- ☐ 20,001-30,000
- ☐ 30,001-40,000
- ☐ 40,001-50,000
- ☐ 50,001-60,000
- ☐ 60,001-70,000
- ☐ 70,001-80,000
- ☐ 80,001-90,000
- ☐ 100,000 or more

Developed by Danielle Buckland

APPENDIX B

BECK ANXIETY INVENTORY

Beck Anxiety Inventory

By Beck and Steer 1993

Below is a list of common symptoms of anxiety. Please carefully read each item in the list. Indicate how much you have been bothered by that symptom during the past month, including today, by circling the number in the corresponding space in the column next to each symptom.

	Not At All	**Mildly but it didn't bother me much.**	**Moderately - it wasn't pleasant at times**	**Severely – it bothered me a lot**
Numbness or tingling	0	1	2	3
Feeling hot	0	1	2	3
Wobbliness in legs	0	1	2	3
Unable to relax	0	1	2	3
Fear of worst happening	0	1	2	3
Dizzy or lightheaded	0	1	2	3
Heart pounding/racing	0	1	2	3
Unsteady	0	1	2	3
Terrified or afraid	0	1	2	3
Nervous	0	1	2	3
Feeling of choking	0	1	2	3
Hands trembling	0	1	2	3
Shaky / unsteady	0	1	2	3
Fear of losing control	0	1	2	3
Difficulty in breathing	0	1	2	3
Fear of dying	0	1	2	3
Scared	0	1	2	3
Indigestion	0	1	2	3
Faint / lightheaded	0	1	2	3
Face flushed	0	1	2	3
Hot/cold sweats	0	1	2	3

Beck, A.T., & Steer, R.A. (1993). *Beck Anxiety Inventory Manual*. San Antonio, TX: Psychological Corporation.

APPENDIX C

BECK DEPRESSION INVENTORY

BDI

By Beck, Steer, and Brown, 1996

Read each question carefully, and circle the one statement in each grouping that best describes the way you have been feeling during the past two weeks, including today

1. Sadness
0 I do not feel sad.
1 I feel sad much of the time
2 I am sad all of the time.
3 I am so sad or unhappy that I can't stand it.

2. Pessimism
0 I am not discouraged about my future.
1 I feel more discouraged about my future than I used to be.
2 I do not expect things to work out for me.
3 I feel my future is hopeless and will get only worse.

3. Past Failure
0 I do not feel like a failure.
1 I have failed more than I should have.
2 As I look back I see a lot of failures.
3 I feel I am a total failure as a person.

4. Loss of Pleasure
0 I get as much pleasure as I ever did from the things I enjoy.
1 I don't enjoy things as much as I used to.
2 I get very little pleasure from the things I used to enjoy.
3 I can't get any pleasure from the things I used to enjoy.

5. Guilty Feelings
0 I don't feel particularly guilty.
1 I feel guilty over many things I have done or should have done.
2 I feel quite guilty most of the time.
3 I feel guilty most of the time.

6. Punishment Feelings
0 I don't feel I am being punished.
1 I feel I may be punished.
2 I expect tot be punished.
3 I feel I am being punished.

7. Self-Dislike
0 I feel the same about myself as ever.
1 I have lost confidence in myself.
2 I am disappointed in myself.
3 I dislike myself.

8. Self-Criticisms
0 I don't criticize or blame myself more than usual.
1 I am more critical of myself than I used to be.
2 I criticize myself for all of my faults.
3 I blame myself for everything bad that happens.

9. Suicidal Thoughts or Wishes
0 I don't have any thoughts of killing myself.
1 I have thoughts of killing myself, but I would not carry them out.
2 I would like to kill myself.
3 I would kill myself if I had the chance.

10. Crying
0 I don't cry anymore than I used to.
1 I cry more than I used to.
2 I cry over every little thing.
3 I feel like crying, but I can't.

11. Agitation
0 I am no more restless or wound up man usual.
1 I feel more restless or wound up than usual.
2 I am so restless or agitated that it's hard to stay still.
3 I am so restless that I have to keep moving or doing something.

12. Loss of Interest
0 I have not lost interest in other people or activities.
1 I am less interested in other people or things than before.
2 I have lost most of my interest in other people or things.
3 It's hard to get interested in anything.

13. Indecisiveness
0 I make decisions about as well as ever.
1 I find it more difficult to make decisions than usual.
2 I have much greater difficulty in making decisions than usual.
3 I have trouble making any decisions.

14. Worthlessness
0 I do not feel I am worthless.
1 I don't consider myself as worthwhile and useful as I used to.
2 I feel more worthless as compared to other people.
3 I feel utterly worthless.

15. Loss of Energy
0 I have as much energy as ever.
1 I have less energy than I used to have.
2 I don't have enough energy to do very much.
3 I don't have enough energy to do anything.

16. Changes in Sleeping Pattern
0 I have not experienced any change in my sleeping pattern.
1 I sleep somewhat more/less than usual,
2 I sleep a lot more/less than usual.
3 I sleep most of the day.
I wake up 1-2 hours early and can't get back to sleep.

17. Irritability
0 I am no more irritable than usual.
1 I am more irritable than usual.
2 I am much more irritable than usual.
3 I am irritable all the time.

18. Changes in Appetite
0 I have not experienced any change in my appetite.
1 My appetite is somewhat greater/lesser than usual.
2 My appetite is much greater/lesser than usual.
3 I crave food all the time or I have no appetite at all.

19. Concentration Difficulty
0 I can concentrate as well as ever.
1 I can't concentrate as well as usual.
2 It's hard to keep my mind on anything for very long.
3 I find I can't concentrate on anything.

20. Tiredness or Fatigue
0 I am no more tired or fatigued than usual.
1 I get more tired or fatigued more easily than usual.
2 I am too tired or fatigued to do a lot of the things I used to do.
3 I am too tired or fatigued to do most of the things I used to do.

21. Loss of Interest in Sex
0 I have not noticed any recent change in my interest in sex.
1 I am less interested in sex than I used to be.
2 I am much less interested in sex now
3 I have lost interest in sex completely.

Beck A. T., Steer RA, Brown G. K.: *Manual for Beck Depression Inventory II (BDI-II)*. San Antonio, TX, Psychology Corporation, 1996.

APPENDIX D

ROSENBERG SELF ESTEEM SCALE

Rosenberg Self-Esteem Scale (SES)					
	STATEMENT	Strongly Agree	Agree	Disagree	Strongly Disagree
1.	I feel that I am a person of worth, at least on an equal plane with others.				
2.	I feel that I have a number of good qualities.				
3.	* All in all, I am inclined to feel that I am a failure.				
4.	I am able to do things as well as most other people.				
5.	*I feel I do not have much to be proud of.				
6.	I take a positive attitude toward myself.				
7.	On the whole, I am satisfied with myself.				
8.	*I wish I could have more respect for myself.				
9.	*I certainly feel useless at times.				
10.	*At times I think I am no good at all.				

Rosenberg, M. 1965. *Society and the Adolescent Self-Image.* Princeton, New Jersey: Princeton University Press.

APPENDIX E

POST TRAUMATIC STRESS DISORDER CHECKLIST

PTSD Checklist Civilian version (PCL) □

INSTRUCTIONS TO PARTICIPANT: Below is a list of problems and complaints that people sometimes have in response to stressful experiences. Please read each one carefully, then circle the frequency that best describes how much you have been bothered by this problem in the past month. *1. Not at all 2. A little bit 3. Moderately 4. Quite a bit 5. Extremely*

1. Repeated, disturbing *memories, thoughts,* or *images* of a stressful experience?
2. Repeated, disturbing *dreams* of a stressful experience?
3. Suddenly *acting* or *feeling* as if a stressful experience *were happening again* (as if you were reliving it)?
4. Feeling *very upset* when *something reminded you* of a stressful experience?
5. Having *physical reactions* (e.g., heart pounding, trouble breathing, sweating) when *something reminded you* of a stressful experience?
6. Avoiding *thinking about* or *talking about* a stressful experience or avoiding *having feelings* related to it?
7. Avoiding *activities* or *situations* because *they reminded you* of a stressful experience?
8. Trouble *remembering important parts* of a stressful experience?
9. *Loss of interest* in activities that you used to enjoy?
10. Feeling *distant* or *cut off* from other people?
11. Feeling *emotionally numb* or being unable to have loving feelings for those close to you?
12. Feeling as if your *future* will somehow be *cut short*?
14. Feeling *irritable* or having *angry outbursts*?
15. Having *difficulty concentrating*?
16. Being *"super-alert"* or watchful or on guard?
17. Feeling *jumpy* or easily startled?

Blanchard, E. B., Jones-Alexander, J., Buckley, T. C., & Forneris, C. A. (1996). Psychometric properties of the PTSD Checklist (PCL). *Behavior Research and Therapy, 34*(8), 669-673.

APPENDIX F

SEXUAL ASSAULT DISCLOSURE QUESTIONNAIRE

Sexual Assault Disclosure Questionnaire

1. How old were you when the most distressing assault took place? _____

2. Before now, have you ever told anyone about the assault? Yes No

3. How much time passed between the assault and the first time you told someone about the assault?

- ☐ Less then 1 month
- ☐ 1-3 months
- ☐ 3 or more months

4 The following is a list of various people you may have disclosed your assault to. The types of people are broken down into categories for your convenience. Please check each of the boxes that apply and give an approximate number of how many individuals in that particular category you remember disclosing to.

Category	# Disclosures	Was this Group Helpful?	
☐ Family Members	#_____	Yes	No
☐ Friends	#_____	Yes	No
☐ Law Enforcement	#_____	Yes	No
☐ Counselor or Crisis Hotline	#_____	Yes	No
☐ Doctor	#_____	Yes	No
☐ Religions/Spiritual Leader	#_____	Yes	No

Developed by Danielle Buckland

APPENDIX G

SOCIAL REACTIONS QUESTIONNAIRE

Social Reactions Questionnaire *Never, Rarely, Sometimes, Frequently, Always*		
Told you that you were to blame or shameful because of the experience.		Encouraged you to see counseling.
Avoided talking to you or spending time with you.		Told you that you did not do anything wrong.
Was able to really accept your account of your experience.		Told you it was not your fault.
Tried to discourage you from talking about it.		Pulled away from you.
Spent time with you.		Wanted to seek revenge on the perpetrator.
Saw your side of things and did not make judgments.		Told others about your experience without your permission.
Made decisions or did things for you.		Distracted you with other things.
Said he/she feels personally wronged by your experience.		Comforted you by telling you it would be alright or by holding you.
Told you to stop thinking about it.		Told you he/she felt sorry for you.
Listened to your feelings.		Helped you get medical care.
Helped you get information of any kind about coping with experienced.		Told you that you were not to blame.
Told you that you could have done more to prevent this experience from occurring.		Treated you differently in some way then before you told him/her that made you uncomfortable.
Acted as if you were damaged goods or somehow different now.		Tried to take control of what you did/decisions you made.
Treated you as if you were a child or somehow incompetent.		Focused on his/her own needs and neglected yours.
Expressed so much anger at the perpetrator that you had to calm him/her down.		Told you to go on with your life.
Focused on his/her own needs and neglected yours.		Tried to take control of what you did/decisions you made.
Told you to go on with your life.		Reassured you that you are a good person.
Held you or told you that you are loved.		

Ullman, S. E. (2000). Psychometric characteristics of the social reactions questionnaire: a measure of reactions to sexual assault victims. *Psychology of Women Quarterly*, 24, 257-271.

APPENDIX H

INFORMED CONSENT

Informed Consent

The study in which you are being asked to participate is designed to investigate relationships between disclosure of traumatic events and psychological symptoms. Danielle Buckland is conducting the study under the supervision of Dr. Janet Chang, Associate Professor in the School Social Work. This study has been approved by the Institutional Review Board, California State University, San Bernardino.

In this study you will complete several questionnaires concerning your emotions, beliefs, social support, assault disclosure, the assault you experienced and other stressful experiences.

Your participation is expected to last approximately 45 minutes.

You may experience some emotional discomfort when participating in this study. You may experience transient negative mood as a result of recalling the trauma of sexual assault. Throughout the study there will be a link to a toll free crisis hotline. If at any time you feel depressed or anxious please do not hesitate to call the hotline. Remember your participation in this study is totally voluntary.

You are free not to answer any questions and to withdraw at any time during this study without penalty. Upon completing the study, you will receive a debriefing statement that will contain more information about the current study. After reading the debriefing statement there will be a place for you to enter a name and address for the ten-dollar incentive check to be mailed. Your name will not be connected to your answers on the questionnaires at any time. Your participation may also contribute to knowledge that may aid in the development of preventive measures for future assault survivors.

All the questionnaires will remain anonymous. In addition, the final data will be presented in group form only with no names or identifying factors of individual participants. You may receive the group results of this study by visiting the John M Pfau Library after September 10th, 2010.

If you have any questions or concerns about the study, please feel free to contact Dr. Janet Chang at (909) 537-5184.

By checking the appropriate box, I acknowledge that I have been informed of, and that I understand the nature and purpose of this study, and I freely consent to participate. I also acknowledge that I am at least 18 years of age.

☐ Please check here if you agree with the above statement and would like to proceed with the study.

Developed by Danielle Buckland

APPENDIX I

DEBRIEFING STATEMENT

Debriefing Statement

This study you have just completed is investigating sexual assault disclosure and psychological symptoms. Specifically, we are interested in whether negative disclosure reactions are related to an increase in psychological symptoms. We are also investigating the relationship between delayed disclosure and psychological symptoms.

Thank you for your participation. If at this time you are feeling depressed or extremely anxious please do not hesitate to click on the following link and contact the crisis hotline.

http://www.suicidehotlines.com/california.html.

If you have any questions about the study, please feel free to contact Dr. Janet Chang at (909) 537-5184. If you would like to obtain a copy of the group results of this study, please visit the John M Pfau Library after September 10th, 2010.

Developed by Danielle Buckland

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