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Effectiveness of Psychoeducation for Adult Survivors of Sexual and Domestic Violence

Sophia Laun
Philadelphia College of Osteopathic Medicine, sophiama@pcom.edu

Philadelphia College of Osteopathic Medicine

Department of Psychology

EFFECTIVENESS OF PSYCHOEDUCATION FOR ADULT SURVIVORS OF SEXUAL AND DOMESTIC VIOLENCE

By Sophia Laun

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Dissertation Approval

This is to certify that the thesis presented to us by Sophia Laun

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Committee Members' Signatures:

Beverly White, PsyD, Chairperson

Robert A DiTomasso, PhD, ABPP, Chair, Department of Psychology

Dawn DeBrocco, PsyD

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Abstract

The current study investigated psychoeducational programs for adult, female survivors of sexual violence and domestic violence in a community-based, nonprofit organization in the Northeastern United States. Participants' trauma symptoms were measured by the Trauma Symptom Checklist-40 (Briere & Runtz, 1989) and knowledge of interpersonal violence was measured by a Client Questionnaire developed by the organization. The study used the intent-to-treat analysis, using paired-samples t-tests to examine changes from pretest to posttest. There were 35 participants in the sexual violence sample and 61 participants in the domestic violence sample. The results indicated that for participants in both the sexual violence psychoeducational program and the domestic violence psychoeducational program, knowledge significantly increased and trauma symptoms significantly decreased from pretest to posttest. Limitations inherent with conducting research in real-world community-based settings make it difficult to draw definitive conclusions. The results, although promising, therefore highlight the importance of continued research regarding the effectiveness of psychoeducation for survivors of interpersonal violence.

Keywords: psychoeducation, sexual violence, domestic violence, community-based organizations

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Introduction

Statement of the Problem

Interpersonal violence is often a traumatic experience that can severely diminish an individual's ability to function in all areas of life. Sexual and domestic violence are forms of interpersonal violence that have been consistently correlated with traumatic stress symptoms and other comorbid conditions (American Psychiatric Association, 2013). Many sexual and domestic violence survivors turn to community-based organizations for support and assistance.

Services offered by these organizations often include a 24-hour crisis hotline; advocacy and accompaniment services to hospitals, police departments and court; crisis-counseling; therapy, and support groups. Such programs typically receive a combination of local, state, and federal grants that enable them to provide services free of charge to survivors in their community. Although research has demonstrated the utility of the services offered at sexual violence (Campbell, 2006) and domestic violence (Allen, Bybee, & Sullivan, 2004). programs, these community-based organizations are not without limitations. Due to inadequate or restricted resources, many of these organizations are unable to have a sufficient number of clinicians to meet the need in their community.

Although empirically-supported therapies exist for this population, many survivors are not able to access this type of treatment. This is especially true for survivors in underserved areas, who often lack the insurance coverage and the financial means to pay for such services. In addition, these empirically supported treatments are not practical for many community-based organizations because they require clinicians

with specialized training, and these can be costly and time consuming. As a result, community-based organizations often provide psychoeducation as a cost-effective intervention to survivors of sexual and domestic violence.

As one component of treatment, psychoeducation appears to play an important role in reducing posttraumatic stress symptoms (Creamer & O'Donnell, 2008). Psychoeducation has also been shown to be effective as a stand-alone intervention for trauma survivors (Phoenix, 2007). However, these programs were developed for highly specialized subgroups and are therefore not appropriate for community-based sexual and domestic violence programs. Similar research on psychoeducation has demonstrated its effectiveness at decreasing symptoms of depression (Christensen, Griffiths, & Jorm, 2004) and the reducing the frequency of manic episodes (Donker, Griffiths, Cuijpers & Christensen, 2009; Stafford & Colom, 2013). Despite these promising results, psychoeducation has not yet been investigated as a stand-alone intervention for survivors of sexual and domestic violence. As a result, its effectiveness with this population remains unclear.

Purpose of the Study

The current study investigated psychoeducational programs for adult, female survivors of sexual violence and domestic violence in a community-based nonprofit organization in the Northeastern United States. Although provided regularly, due to its cost-effectiveness, these psychoeducational programs have not been evaluated to determine, the effects that they may have on survivors. An outcomes evaluation may help community-based organizations better understand its impact on survivors of sexual violence and domestic violence as well as the practicality and utility of using

psychoeducation as an intervention for this population. The purpose of the current study was to examine the effectiveness of psychoeducation on trauma-related symptoms and knowledge of interpersonal violence in a sample of survivors of sexual and domestic violence.

Literature Review

Interpersonal Violence. Sexual violence is a broad term that includes sexual harassment, rape/sexual assault, and drug-facilitated sexual assault. According to the Rape Abuse Incest National Network (RAINN), a woman is raped in the United States once every two minutes. Research has also indicated that one in six women will become victims of sexual violence and 73 percent of sexual assaults are perpetrated by someone the victim knows (RAINN). Domestic violence includes physical, sexual, emotional, economic, or psychological actions or threats by one partner to gain power or control over another. An estimated four million domestic violence incidents occur each year in the United States (AARDVARC); the U.S. Department of Justice has also indicated that there are over two million felony-level stalking cases annually (Miller, 2001).

Symptomology. Much of the research on the effects of trauma focuses on Posttraumatic Stress Disorder (PTSD). PTSD is considered a chronic mental disorder, with episodes that last an average of 11.2 years if left untreated (Pietrzaka, Goldsteinc, Southwicka, & Grant, 2011). PTSD is classified as a Trauma- and Stressor-Related Disorder in the Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM–5; American Psychiatric Association, 2013). A national survey of over 34,000 adults in United States has determined that lifetime prevalence rates of PTSD are estimated at 8.6% for women and 4.5% for men (Pietrzaka et al., 2011), indicating that

females are twice as likely as males to have PTSD. Women with PTSD endorsed sexual assault or domestic violence as their most significant traumatic events, whereas men endorsed military combat or witnessing a severe or fatal injury as their significant traumas. Increased risk of PTSD is correlates with the severity of the trauma (Eadie & Runtz, 2008) and with exposure to multiple traumas (Andreasen, 2010).

In order to warrant a diagnosis of PTSD, an individual must have been directly exposed to, witnessed in-person, learned that a loved one had experienced a traumatic event that caused actual or threatened death or serious injury, or had experienced repeated exposure to details of a traumatic event, as in the case of first responders (American Psychiatric Association, 2013). The clinical expression of symptoms can vary substantially between survivors, as well within each individual over the course of his or her lifetime. Additional factors that influence the presentation of PTSD symptoms include age and developmental level at time of trauma exposure, gender, cultural characteristics, socioeconomic status, and social support. Symptoms often include experiencing intrusive memories, recurrent dreams, and/or dissociative reactions such as flashbacks, as well as marked physiological reactions and efforts to avoid internal or external reminders of the trauma (American Psychiatric Association, 2013). In order to meet criteria for PTSD, the symptoms must last at least one month and cause significant impairment in social, occupational, or other important areas of functioning. Symptoms that occur within one month following a traumatic event are classified as Acute Stress Disorder (American Psychiatric Association, 2013).

Individuals with PTSD may report memory impairment, diminished interest in significant activities, feelings of detachment, persistent negative emotions, and persistent

negative beliefs or expectation about themselves, others, or the world. They may also experience increased arousal, including difficulty falling or staying asleep, difficulty concentrating, hypervigilance, exaggerated startle responses, irritable or angry outbursts, and self-destructive behavior. A meta-analysis conducted by Pole (2007) indicated that reliable relationships exist between PTSD and measures of psychophysiological activity and reactivity in men and women exposed to various forms of trauma. PTSD was significantly associated with persistent hyperarousal, exaggerated startle responses, and elevated responses to internal trauma related cues (Pole, 2007). Falconer et al. (2008) examined changes in autonomic, brain processing and neuropsychological activity to determine if individuals with PTSD can be distinguished from healthy controls. Measures of electrodermal activity, heart rate, and a cognitive test battery revealed that individuals with PTSD showed greater autonomic arousal, impaired attention, reduced cognitive flexibility, altered vigilance, and deficits in executive functioning. These results suggested that individuals with PTSD may have a distinct profile of integrated behavioral, brain and autonomic changes (Falconer et al., 2008).

Comorbid Conditions. Trauma survivors often experience a complex constellation of symptoms, including a range of emotional reactions such as fear, anger, sadness, self-blame, shame, embarrassment, and distorted body image (Briere, 2002). Traumatic experiences such as sexual and domestic violence can also cause survivors to begin perceiving the world as unsafe and unpredictable (Park, Mills & Edmondson, 2010). Furthermore, female survivors of interpersonal violence tend to report an increase in health related concerns (Eadie & Runtz, 2008), self-destructive and impulsive behaviors (Hembree, Street, Riggs, & Foa, 2004), and suicide attempts (Cougle, Resnick,

& Kilpatrick, 2009) when compared with females who were exposed to other forms of trauma. Interpersonal violence has also been associated with symptoms of depression, anxiety, and substance use (Hedtke, et al., 2008; Cerdá, 2012). Although some survivors experience a reduction of symptoms within the first three months after an assault, many experience severe symptoms that persist long after this timeframe (Russell & Davis, 2007).

According to the American Psychiatric Association (2013), 80% of individuals with PTSD also meet criteria for at least one other mental disorder. Such comorbid conditions include Major Depressive Disorder, Substance-Related Disorders, Bipolar Disorder, and Anxiety Disorders (American Psychiatric Association, 2013). Research also indicated that a link exists between trauma and Borderline Personality Disorder (Linehan, 1993), Dissociative Disorders (Glodsmith, Barlow, & Freyd, 2004), and Eating Disorders (Brewerton, 2007). Given the fact there is such high comorbidity, many researchers and clinicians have argued that the diagnosis of PTSD does not fully account for the symptoms experienced by survivors, especially those who have endured longstanding and/or childhood abuse. New diagnoses of complex PTSD or disorders of extreme distress not otherwise specified (DENOS) have been proposed; these could include other common symptoms, such as alterations in the regulation of affective impulses, attention and consciousness, self-perception, systems of meaning, and interpersonal relationships, somatic complaints, medial problems, and personality changes (Courtois, 2004; Carleton, Mulvogue, & Duranceau, 2015). Although these proposed changes were not included in the DSM-5, it is clear that high comorbidity

makes it difficult to develop interventions for trauma survivors that can be used across clinical settings (Robertson, Humphreys, & Ray, 2004).

History of Sexual and Domestic Violence Programs. Community-based sexual and domestic violence services initially grew out of grassroots movements in the 1970s and rely heavily on volunteers and/or paid staff with minimal credentials (Macy, Giattina, Sangster, Crosby, & Montijo, 2009). Over the past few decades, there have been efforts to improve the coordination of services and professionalize the field through increased training for staff and volunteers (Woody & Beldin, 2012). Although the requirements vary by state, direct service staff is often mandated by legislation to receive between 24 to 40 hours of training for each population, sexual violence and domestic violence. With this level of training, advocates and residential staff are often able to answer the 24-hour hotline and provide advocacy and accompaniment services. Many sexual and domestic violence programs have also moved towards using master's level or licensed clinicians to provide therapeutic services to survivors (Macy et al., 2009). Despite these efforts, there remain disagreements within the field regarding the training and experience needed to provide services to this population (Macy et al., 2009).

Sexual and domestic violence programs are often nonprofit organizations that receive grant funding to provide specialized services to this population. The majority of these organizations throughout the United States are considered dual agencies, because they provide both sexual violence and domestic violence services in a particular geographic area. However, due to separate streams of funding, sexual violence services and domestic violence services are sometimes provided by different organizations. Recent research has investigated the core services, treatment goals, and intervention

strategies provided by community-based sexual and domestic violence programs. Macy, Johns, Rizo, Martin, and Giattina (2011) surveyed the directors and other personnel at these organizations and found that there are general consistencies regarding the type of services available to survivors, as well as the perceived importance of such services (Macy et al., 2009). Specific interventions, however, were ranked differently depending on the type and geographic location of the organization (Macy et al., 2011). For example, programs located in urban/suburban areas tended to perceive referrals to community resources and safety planning as more important interventions than do their rural counterparts. In addition, respondents at sexual violence programs ranked emotional and social support as more important than safety planning, whereas those at domestic violence and dual agencies ranked safety planning as more important than emotional and social support (Macy et. al, 2011).

Such research highlights considerable differences in the way in which some services are delivered by community-based organizations. These inconsistencies seem to fuel ongoing skepticism that community based sexual and domestic violence programs do not provide adequate, trauma-informed care to survivors. On the other side of this debate, however, community-based service providers question the degree to which mental health professionals can provide accurate information to survivors regarding their medical and legal rights and options (Woody & Beldin, 2012).

Utility of Core Services. Throughout the United States, survivors of sexual and domestic violence and their supporting family members receive services from community-based organizations. Such organizations are often based on an empowerment model and offer a comprehensive continuum of care, ranging from emergency,

stabilization, and long-term services. Emergency services are those that are available 24 hours a day, seven days a week. Emergency services often include a crisis and informational hotline, safe housing, and advocacy. Short-term or stabilization services typically include case management, housing and legal advocacy, and crisis-counseling. Further along the continuum, survivors may be offered individual therapy, utilizing empirically supported treatment protocols, support groups, and transitional housing.

Although research is limited, many services provided by community-based sexual and domestic violence programs have been shown to be effective. One study surveyed over 3,000 survivors of sexual violence and found that 94% of those who received services from a community-based organization found the services to be helpful (Gloding, Siegel, Sorenson, Burnam, & Stein, 1989). A conceptual model of help-seeking among survivors of sexual and domestic violence can be used to understand the importance of this study. According to the model, the perceived helpfulness of the intervention, regardless of when it was delivered, can have a positive impact on the survivor's mental health outcomes and can increase future help seeking behaviors (Kennedy et al., 2012). Given the fact that most survivors perceived the services as being helpful, this model illustrates how community-based programs are able to impact the survivors positively at various stages of the healing process.

Advocacy is considered a core service for most sexual and domestic violence programs. Advocacy typically involves supporting survivors and providing information about their rights and options. Advocates often accompany survivors to the hospital, to police departments, and to court proceedings related to the sexual or domestic violence incident. The importance and utility of advocacy and accompaniment services have been

demonstrated by research with survivors who have received such services. Campbell (2006) found that sexual violence survivors who had received medical and legal advocacy were more likely to report the incident to the police, receive medical care, and have fewer negative interactions with medical and legal personnel, when compared with survivors who did not receive advocacy services. In addition, Allen et al. (2004) found that advocacy improved domestic violence survivors' effectiveness in obtaining assistance from community resources six months after they exited emergency shelters.

A pilot study has been conducted to examine the effectiveness of utilizing motivational interviewing (MI) in domestic violence shelters. Survivors in this setting have been recently exposed to interpersonal violence, may have comorbid substance abuse or other mental health concerns, and are likely to experience ambivalence about permanently ending the abusive relationship or changing maladaptive coping behaviors. Preliminary results suggest that shelter staff members who are trained in motivational interviewing techniques can increase the survivor's motivation to change and improve treatment outcomes. This is especially noteworthy because these organizations are plagued by scarce resources, and MI may represent a short-term, cost-effective, and efficacious treatment for female victims of interpersonal violence (Rasmussen, Hughes, & Murray, 2008).

Many sexual and domestic violence programs also consider crisis-counseling one of their core services (Woody & Beldin, 2012). Despite this, the term itself is only loosely defined and is often used interchangeably with crisis-intervention and supportive counseling. Due to inconsistencies in the way that crisis-counseling is defined and delivered across community-based settings, it has been difficult to evaluate the

effectiveness of this intervention (Woody & Beldin, 2012). In order to address this problem, some sexual and domestic violence programs have defined crisis-counseling as a psychoeducational intervention offered to survivors who seek services at their organizations.

In addition to emergency and stabilization services, many sexual and domestic violence programs offer a range of therapeutic services for survivors. Cognitive behavioral therapy (CBT) has been extensively researched. Several versions of CBT have been established as empirically supported treatments for trauma, these include prolonged exposure (PE), eye-movement desensitization and reprocessing (EMDR), trauma focused cognitive behavioral therapy (TF-CBT), Seeking Safety, and cognitive processing therapy (CPT).

PE has the greatest empirical support to treat PTSD symptoms. PE incorporates psychoeducation, breathing retraining, in vivo exposure, and imaginal exposure (Foa, Hembree & Rothbaum, 2007). Psychoeducation in this context includes an explanation of the treatment rationale, common reactions to trauma, and PTSD symptomology. Breathing retraining is necessary because it helps the survivor to learn the skills necessary to reduce anxiety that may interfere with exposure and with daily functioning. Imaginal exposure involves using imagery to process the traumatic memories and helps survivors learn that they can safely confront trauma related cues. In vivo exposure involves exposing survivors to reminders of the trauma that have previously been avoided (Foa et al., 2007).

CPT focuses on techniques that serve to identify and replace negative automatic thoughts and beliefs about the traumatic event. Iverson et al. (2011) examined the

relationship between the CPT, the reduction of PTSD symptoms, and interpersonal trauma. Results indicated that a decrease in PTSD and depression symptoms during CPT treatment were associated with decreased rates of intimate partner violence at a six-month follow-up. The results suggested that successful CPT may have led to more accurate perceptions of the abusive relationship as well as to increased safety behaviors, self-efficacy, and emotional regulation (Iverson et al., 2011).

EMDR includes eight phases in the original treatment protocol (Shapiro & Forrest, 2004). Although some research has demonstrated the effectiveness of EMDR in treating PTSD, many other studies suggest that the eye movements are not necessary to achieve results, and that the treatment gains are often not maintained at follow-up assessments (Ponniah & Hollon, 2009).

Some variations of CBT have been designed for specific subgroups. For example, TF-CBT is a 16 session program that has been demonstrated to be effective in treating PTSD symptoms in children and adolescents. There are four phases of TF-CBT, which focus on psychosocial strengthening, coping skills, trauma processing, and special issues/completion of therapy. A pilot study investigated TF-CBT in New Zealand and found that PTSD symptoms decreased at post-treatment assessment as well as at 12-month follow-up (Feather & Ronan, 2006). In addition, Seeking Safety was designed to address the unique needs of individuals diagnosed with PTSD and comorbid substance use disorders (Najavits, 2002). Results of a large, randomized, multi-site study indicate that Seeking Safety is an effective treatment to reduce PTSD symptomology among those with at least minimal treatment attendance (Hien et al., 2009).

Ponniah and Hollon (2009) conducted a meta-analysis with studies that examined the effectiveness of individual, trauma-focused, cognitive-behavioral therapy (CBT) for adults with PTSD. They compared CBT with and without prolonged exposure, eye-movement desensitization and reprocessing (EMDR), psychodynamic therapy, hypnotherapy, supportive counseling, stress management, psychoeducation, minimal attention, and wait-list controls. Results demonstrated that CBT with prolonged exposure led to significantly greater improvements on PTSD symptoms than the other conditions at post-treatment assessment and at one year follow-up (Ponniah & Hollon, 2009).

Keller, Zoellner, and Feeny (2010) examined the relationship between treatment adherence, type of trauma, and social support in men and women who received either PE or medication to treat PTSD. At baseline assessment, they found that individuals with a history of childhood sexual abuse reported higher levels of negative trauma-related support, compared with individuals that were exposed to other forms of trauma. Despite this, these individuals were able to develop the same quality relationships with their therapists. Results therefore indicated that regardless of the treatment modality utilized, it may be especially important for clinicians to have an increased focus on early alliance building when treating individuals with PTSD, especially when working with survivors that have experienced childhood sexual abuse (Keller et al., 2010).

Although various empirically supported interventions have been shown to be effective treatments to reduce posttraumatic stress symptoms, each has inherent limitations and, individually, would not be sufficient as a sole intervention for survivors of interpersonal violence. For example, therapies such as PE are not recommended for individuals who are in acute crisis (Foa et al., 2007) and may therefore not be an

appropriate treatment for women who have recently experienced interpersonal violence or who currently engage in maladaptive coping strategies. Likewise, because many of these studies have been randomized control studies with extensive exclusion criteria, it is unclear if the results are generalizable to heterogeneous community-based samples (Spinazzola, Blaustein, & van der Kolk, 2005). Moreover, empirically supported therapies may not be practical as the sole intervention for community-based sexual and domestic violence programs because they lack the funding, resources, and available training opportunities (Woody & Beldin, 2012).

Psychoeducation. Some community-based sexual and domestic violence programs sometimes use psychoeducation as one intervention, in addition to the continuum of services offered to survivors. Existing literature shows that psychoeducation is frequently provided to individuals who suffer from psychological, interpersonal, and behavioral difficulties related to trauma (Pietrzaka et al., 2011) and is often regarded as an essential component in safety and stabilization services (Phoenix, 2007). Psychoeducation has been described as a planned educational activity designed to change psychological health-related knowledge, attitudes, and skills (Creamer & O'Donnell, 2008). The argument for the use of psychoeducation is based on several assumptions, including that it could normalize symptoms, modify perceptions of the traumatic experience, reduce distress, increase knowledge of available resources, empower the survivor, and increase help seeking behaviors (Wessely et al., 2008).

Psychoeducation has been demonstrated to be effective as a stand-alone intervention with several populations. For example, psychoeducation has reduced symptoms and increased knowledge of depression in an internet based treatment for

depression (Christensen et al., 2004). In addition, Stafford and Colom (2013) found that when combined with psychopharmacology, psychoeducation reduced the number of manic, hypomanic, mixed, and depressive episodes in patients with bipolar disorder. A meta-analysis conducted by Donker, Griffiths, Cuijpers, and Christensen (2009) demonstrated that passive psychoeducation produced a small but significant effect in reducing depressive, anxiety and psychological distress symptoms in the intervention group, when compared with controls. In this study, passive psychoeducation was defined as an intervention that provided information, education, and encouragement, but did not include specific instructions or recommendations that the participants were asked to follow.

As one component of treatment, psychoeducation has also been shown to be effective for PTSD (Creamer & O'Donnell, 2008). According to Robertson, Humphreys, and Ray (2004), psychoeducation may also be promising as a stand-alone intervention of PTSD in clinical settings. Phoenix (2007) identified several existing, stand-alone psychoeducational programs for trauma survivors, including the Become Empowered: Symptom Management for Abuse and Recovery from Trauma (BE SMART; Moller & Murphy, 2001), Trauma Recovery and Empowerment Model (TREM; Harris, 1998), University of California School of Nursing Trauma Curriculum, and Seeking Safety (Najavits, 2002). Although these programs have shown promise as stand-alone psychoeducational interventions, they focus on specific mental health populations, are implemented in institutional settings, and/or have lengthy duration of services (Phoenix, 2007). The existing psychoeducational programs are therefore not suitable for outpatient community-based services.

Given the cost-effectiveness of psychoeducation, it would be beneficial to identify specific psychoeducational programs for sexual and domestic violence survivors that are practical for community-based organizations to utilize. Further research is needed to validate psychoeducation as a stand-alone intervention with this population (Wessely et al., 2008).

Hypotheses

Hypothesis One

Psychoeducation will reduce trauma related symptoms for survivors of sexual violence from pretest to posttest, compared with a patched-up control group.

Hypothesis Two

Psychoeducation will increase knowledge of interpersonal violence for survivors of sexual violence from pretest to posttest, compared with a patched-up control group.

Hypothesis Three

Psychoeducation will reduce trauma related symptoms for survivors of domestic violence from pretest to posttest, compared with a patched-up control group.

Hypothesis Four

Psychoeducation will increase knowledge of interpersonal violence for survivors of domestic violence from pretest to posttest, compared with a patched-up control group.

Method

Overview

The current research study was conducted at a community-based, nonprofit organization in the Northeastern United States; the state has been designated to provide services to survivors of interpersonal violence for over eighteen years. As a dual sexual and domestic violence program, the organization offered a comprehensive continuum of services to survivors and supporting family members, including 24/7 toll-free hotline, crisis intervention, counseling, advocacy, support groups, educational outreach, and primary prevention programs. The sexual violence program provided services to adolescent and adult survivors of any type of sexual violence, including date rape, sexual assault, adult survivors of childhood sexual abuse, and sexual harassment. The domestic violence program provided services primarily to adult survivors or dating violence or domestic violence. However, adult female survivors of domestic violence and their children were also offered emergency safe housing when needed. The organization provided support services to hundreds of survivors of interpersonal violence each year.

In addition to the traditional services provided by dual sexual and domestic violence programs, the organization being investigated developed two psychoeducational programs for adult, female survivors (sexual violence and domestic violence). The psychoeducational programs were developed in an effort to provide structure to the loosely defined crisis-counseling service; this service has historically been required by grant funding. Depending on the type of trauma and presenting concerns, survivors were encouraged to participate either in the sexual violence or in domestic violence psychoeducational program prior to being referred for therapy. The programs consisted

of eight one-hour sessions that were provided once per week. Sessions were conducted in three outreach offices, which represented different geographic regions in the state; these included primarily urban, suburban, and some relatively rural areas.

The eight sessions included the intake, six psychoeducational sessions, and the discharge planning session. Survivors were encouraged to attend all psychoeducational topics, but could opt to attend only those topics that they felt were relevant for them. Survivors were referred out if they reported suicidal or homicidal thoughts or required more intensive mental health treatment, such as the case of an active manic or psychotic episode. In such cases, the psychoeducational sessions were discontinued and the survivor was referred immediately to a crisis response center for a psychiatric evaluation.

Data were collected in an effort to evaluate the psychoeducational programs for approximately two and a half years (March 2012 through September 2014). However, due to limited resources, the data had not been analyzed to determine the effectiveness of either program. The current research is an outcomes evaluation study examining the effects of the psychoeducational programs.

Development of the Psychoeducational Programs

The psychoeducational programs were developed by an expert panel with an average of 15 years of experience working at the organization. The panel consisted of clinicians and program supervisors who had extensive experience working with this population. Six psychoeducational topics were selected for each program with the intention of supporting, empowering, and educating survivors. There were two main objectives of the psychoeducational programs, which were to 1) decrease trauma-related symptoms and 2) increase knowledge of interpersonal violence.

Although similar in nature, there were key differences in the content and delivery of the two psychoeducational programs. These differences were mainly a result of funding requirements and limitations. The sexual violence program was provided primarily in individual sessions and included information on healthy relationships, healthy coping, common reactions to sexual violence, safety planning, medical and legal options, available community resources, and consent. These individual sessions were structured sessions in which the advocate reviewed information related to the psychoeducational topic with the survivor. The domestic violence program was provided in a workshop setting and included information on healthy relationships, healthy coping, red flags/warning signs, power and control, effects of domestic violence on adults and children, safety planning, available community resources, and financial literacy. The workshops consisted of structured sessions in which the advocate or counselor presented information to a small group of survivors.

The psychoeducational programs were provided primarily by bachelor's level advocates who, in addition to completing their certification training, also received six hours of training by a program supervisor in order to provide the psychoeducation to survivors. This training consisted of a review of each session as well as sample scripts and role plays for each of the components, including the intake, psychoeducational sessions, and discharge planning session. The supervisor also reviewed each measure and provided detailed instruction regarding the administration of pre- and post-assessments. These procedures were outlined in the written policy and procedure manual for the advocates to reference and were reviewed by a program supervisor during periodic staff meetings. The initial training, written procedures, and ongoing meetings

were an effort to standardize the psychoeducational services as much as possible, given the fact that a fully standardized manual had not yet been developed.

Participants

The participants in the current study included adult, female survivors of interpersonal violence.

Inclusion Criteria:

1. At least 18 years of age;
2. Female;
3. A history of sexual violence or domestic violence, as determined by self-report;
4. Had voluntarily completed the measures and submitted the responses to be used for program evaluation.

Exclusion Criteria:

1. Under age 18;
2. Male;
3. Absence of a prior history of sexual violence or domestic violence;
4. Had not completed and submitted self-report measures for the program evaluation.

Measures

All questionnaires consisted of self-administered paper-and-pencil instruments. Pre-assessment packets included four measures (Staff Input Form, Trauma Symptom Checklist-40, Client Questionnaire, and Demographics Form). The pre-assessment packet was administered to participants during the intake session at week one. Post-assessment packet included four measures (Staff Input Form, Trauma Symptom

Checklist-40, Client Questionnaire, and Client Satisfaction Survey). The post-assessment packet was administered to participants during week eight, regardless of the number of sessions the survivor had completed. If survivors did not attend the session during week eight, they were contacted by staff and asked to complete the post-assessment measures via the telephone.

Demographics Form. Participants were asked to complete a Demographics Form at intake. The demographic characteristics collected included the participant's gender, age, ethnicity, marital status, sexual orientation, highest level of education, household income, type of interpersonal violence, and motivation for seeking services.

Trauma Measure. The frequency and severity of trauma-related symptoms were assessed using the Trauma Symptom Checklist-40 (TSC-40; Briere & Runtz, 1989). The TSC-40 is a 40 item survey that asks participants to rate how often they had experienced various trauma symptoms in the previous two months. Participants used a three point scale, where zero indicated never and three indicated often. Results yield scores for six subscales (Dissociation, Anxiety, Depression, Sexual Abuse Trauma Index, Sleep Disturbance, and Sexual Problems), as well as a total score. The total score and subtests have been shown to have good discriminative validity for sexual abuse (Elliott & Briere, 1992) and physical abuse (Briere & Runtz, 1989). Overall, the measure is considered a relatively reliable instrument that captures symptoms of PTSD and complex trauma (Fernandez, 2010). This version of the tool has not been published and is available for research purposes only. In both the sexual violence and domestic violence samples, the TSC-40 consisted of 40 items and were shown to have excellent internal consistency reliability ($\alpha = .92$ and $\alpha = .96$ respectively).

Knowledge Measure. The Client Questionnaire was developed to measure the participants' perceived changes in their knowledge of interpersonal violence. There were two versions created, one for the sexual violence program and the other for the domestic violence program. Participants were asked to rate how true each of the statements was for them at that time, using a 5-point Likert type scale, ranging from Strongly Disagree to Strongly Agree. The tools were developed by the same panel of experts that developed the programs. Items were intended to reflect the survivors' perceptions of understanding of each objective in the psychoeducational program. Both measures were demonstrated to have good internal consistency reliability. The sexual violence knowledge-based Client Questionnaire consisted of 14 items ($\alpha = .89$). The domestic violence knowledge-based Client Questionnaire consisted of 15 items ($\alpha = .88$). The validity of these measures remains unknown. Items on Sexual Violence Client Questionnaire and Domestic Violence Client Questionnaire are shown in Appendix A and B, respectively.

Client Satisfaction Survey. A Client Satisfaction Survey was included in the post-assessment packet to measure whether or not survivors were satisfied with the services they received. This tool consisted of 11 items in total, five of which were examined in the current study because they assessed the degree to which the survivor found the services helpful, found the information to be useful, believed the staff spent enough time talking about safety, believed the staff treated the survivor with respect, and realized the extent to which the survivor perceived changes in their symptoms from the beginning of the psychoeducational program. Participants were asked to rate how true each of the statements was for them at that time using a 5-point Likert type scale, ranging

from Strongly Disagree to Strongly Agree. Items on the Client Satisfaction Survey are shown in Appendix C.

Staff Feedback Forms. The staff members completed two feedback forms to provide supplemental information. The pre-assessment staff input form tracked the type of client (survivor or significant other), the psychoeducational program to which the survivor was referred (sexual violence or domestic violence), the format of the psychoeducational sessions (individual or workshop), the office location to which the survivor was referred, and whether or not the survivor reported a disability of any kind. The post-assessment staff input form included the total number of sessions completed in the eight week period as well as the method of collecting post-assessment data (in person or over the phone).

All pre- and post-assessment packets were coded in advance in order to ensure anonymity and confidentiality. All completed assessment packets were stored in a locked filing cabinet.

Procedure

The doctoral student responsible for this study obtained permission from the Vice President of the organization to use the archival data. The doctoral student was provided access to the completed pre- and post-assessment measures. Data were de-identified and entered into Statistical Package for the Social Sciences (SPSS) version 19, an IBM-compatible computerized data analysis software program. The doctoral student, the second dissertation committee person and the Principal Investigator reviewed the data collected on the 466 participants who completed the measures.

The data set was divided between the two programs, totaling 165 individuals in the sexual violence program and 301 individuals in the domestic violence program. Only those self-identified as female, as victims of sexual or domestic violence or over the age of 18 were included in the current study based on inclusion criteria, which was intended to minimize the confounding variables. In the sexual violence program, 47 participants were removed due to not meeting inclusion criteria. In the domestic violence program, 25 participants were removed due to not meeting inclusion criteria. In addition, 83 participants in the sexual violence program and 215 participants in the domestic violence program were removed because they did not complete the posttest measures. As a result, there were 35 participants in the sexual violence program and 61 participants in the domestic violence program remaining for analyses.

The current study was initially proposed to have a patched-up, nonequivalent control group design with two groups based on the number of sessions. This quasi-experimental design would have allowed the participants who completed minimal treatment to be compared with the participants who completed most or all of the treatment sessions. However, the number of sessions was not recorded for the majority of the participants in the data set. Due to the small sample size remaining and the missing data, each program was not able to have the treatment group and patched-up control group for comparison. The data were, therefore, kept as one group regardless of the number of sessions completed. Doing so ensured that there would be sufficient power to conduct the analyses. The study was therefore changed to a one group, pretest-posttest design and the hypotheses were also revised, maintaining the initial intent but eliminating reference to the patched-up control group.

Results

The independent variable was Time (with Time 1 being the pretest and Time 2 being the posttest). The dependent variables were Trauma (as measured by the TSC-40) and Knowledge (as measured by the Client Questionnaire). The current study used the intent-to-treat analysis using paired samples t-tests to compare the participants in each psychoeducational program from pretest to posttest. After considering the exclusion criteria, there were 35 participants in the sexual violence sample and 61 participants in the domestic violence sample remaining. Participants in the sexual violence sample completed an average of 6.45 of sessions; participants in the domestic violence sample completed an average of 5.84 of sessions. An alpha level of .05 was used for all statistical analyses. Bonferroni correction was used due to conducting multiple significance tests on the same data set. This was calculated by dividing .05 alpha level by the number of significance tests conducted, resulting in a more stringent alpha criterion.

Descriptive Statistics

Sexual Violence Sample.

Demographics. Regarding demographic characteristics, the largest percentage of participants was White (57%), single (57%), heterosexual (86%), had a household income of less than $25,000 (57%), reported having no disability (51%), and had experienced more than one type of interpersonal violence (51%). The participants ranged in age, spanning the following: 18-24 (26%), 25-34 (23%), and 35-49 (40%); their levels of education included high school (29%), some college (34%), and college graduate (17%). The complete demographic characteristics of the participants are shown in Table 1.

Table 1

Demographic Characteristics (Percentage of the Sample in Parentheses)

Characteristic	Sexual Violence Program (n=35)		Domestic Violence Program (n=61)	
Age				
18-24	9	(25.7)	9	(14.8)
25-34	8	(22.9)	29	(47.5)
35-49	14	(40.0)	15	(24.6)
50-64	4	(11.4)	7	(11.5)
65+			1	(1.6)
Race				
African American/Black	6	(17.1)	10	(16.4)
White	20	(57.1)	32	(52.5)
Hispanic/Latino	7	(20.0)	9	(14.8)
More than one	1	(2.9)	7	(11.5)
Unknown	1	(2.9)	23	(4.8)
Marital status				
Single	20	(57.1)	23 17	(37.7)
Married	5	(14.3)	18	(27.9)
Separated/divorced	7	(20.0)	3	(29.5)
Cohabitating	3	(8.6)		(4.9)
Sexual orientation				
Heterosexual	30	(85.7)	57	(93.4)
Bisexual	4	(11.4)	4	(6.6)
Unknown	1	(2.9)		
Education level completed				
9-11 grade	2	(5.7)	7	(11.5)
HS diploma/equivalent	10	(28.6)	20	(32.8)
Some college	12	(34.3)	23	(37.7)
College graduate	6	(17.1)	7	(11.5)
Advanced degree	5	(14.3)	4	(6.6)
Household income				
Under 25K	20	(57.1)	34	(55.7)
25-50K	5	(14.3)	9	(14.8)
50-100K	1	(2.9)	8	(13.1)
Over 100K	2	(5.8)	2	(3.3)
Unknown	7	(20.0)	8	(13.1)
Disability				
None	18	(51.4)	40	(65.6)
Physical	1	(2.9)	3	(4.9)
Learning	2	(5.7)	1	(1.6)
Mental	8	(22.9)	8	(13.1)
Two or more disabilities	1	(2.9)	2	(3.3)
Unknown	5	(14.3)	7	(11.5)
History of interpersonal violence (IPV)				
Sexual assault	12	(34.3)		
Sexual harassment	1	(2.9)		
Child sexual abuse	2	(5.7)		
Domestic violence			41	(67.2)
More than one form of IPV	18	(51.4)	18	(29.5)
Unknown	2	(5.7)	2	(3.3)

Other pertinent information regarding the delivery of services was also collected. This data revealed that the majority of participants in the sexual violence program were referred for individual psychoeducational sessions (100%), completed the post-assessment measures during session (91%), received additional support services during the same time frame as the psychoeducation (54%), and had not received services from the organization prior to the psychoeducational program (66%). The participants were motivated for services for a variety of reasons: referred by professional (14%), wanted help on her own (31%), and more than one reason (37%). The complete information regarding the delivery of services is shown in Table 2.

Table 2

Delivery of Services (Percentage of the Sample in Parentheses)

Category	Sexual Violence Program (n=35)		Domestic Violence Program (n=61)	
Reason for referral				
Encouraged by family/friends	3	(8.6)	1	(1.6)
Referred by professional	5	(14.3)	2	(3.3)
Wanted help on own	11	(31.4)	19	(31.1)
Mandated to treatment			14	(23.0)
More than one	13	(37.1)	17	(27.9)
Unknown	3	(8.6)	8	(13.1)
Format of the psychoeducational sessions				
Individual	35	(100.0)	6	(9.8)
Workshop			55	(90.2)
Administration of post-test				
In session	32	(91.4)	38	(62.3)
Via telephone	3	(8.6)	23	(37.7)
Additional services prior to psychoeducation				
Yes	8	(22.9)	11	(18.0)
No	23	(65.7)	46	(75.4)
Unknown	4	(11.4)	4	(6.6)
Additional services during psychoeducation				
Yes	19	(54.3)	32	(52.5)
No	10	(28.6)	15	(24.6)
Unknown	6	(17.1)	14	(23.0)

Client Satisfaction. Measures of central tendency were calculated to evaluate the responses on the client satisfaction survey. Participants in the sexual violence sample strongly agreed that the services were helpful; the information was useful; the staff spent enough time talking about safety, and the staff treated them with respect (Means range from 4.63 to 4.88; Median = 5). In addition, the participants agreed that they perceived a decrease in their trauma symptoms since starting the psychoeducational program (Mean = 4.21; Median = 4.5). The mean scores for each item on the client satisfaction survey are shown in Table 3.

Table 3

Mean Scores of Client Satisfaction Survey (N in Parentheses)

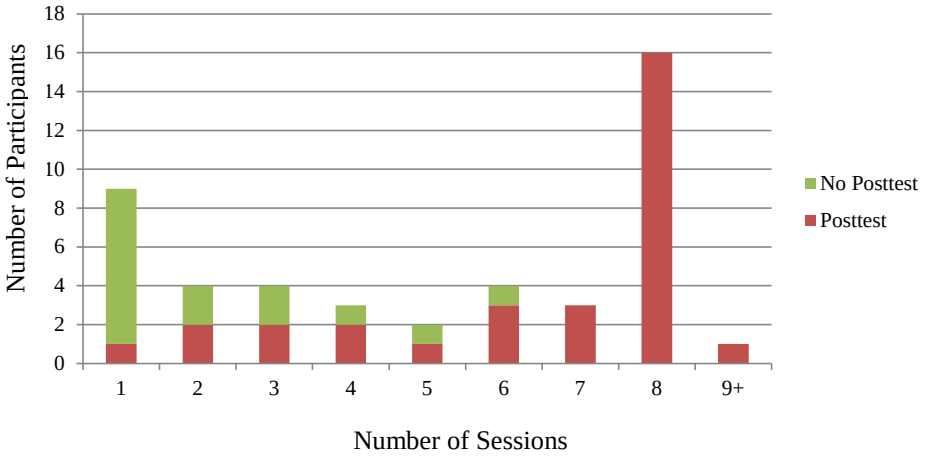
Item	Sexual Violence Sample		Domestic Violence Sample	
Overall, I found the services to be helpful.	4.7	(n = 24)	4.8	(n = 42)
Overall, the information provided has been useful.	4.6	(n = 24)	4.7	(n = 42)
I feel *better* since starting services.	4.2	(n = 24)	4.6	(n = 42)
I was treated with respect.	4.9	(n = 32)	4.9	(n = 55)
Staff spent enough time talking about my safety.	4.8	(n = 32)	4.8	(n = 54)

Note: The Client Satisfaction Survey instructed participants to rate how true each of the statements were using a 5-point Likert type scale, with 1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree.

Treatment Attendance. An accurate attrition rate for the sexual violence program was not able to be determined because the number of sessions was not recorded for the majority of participants by the staff, as originally planned. However, this information was available for 46 participants in total (31 of whom completed the posttest and were

included in the analyses and an additional 15 participants who did not complete the posttest measures). Complete information regarding treatment attendance of the sexual violence psychoeducational program is shown in Figure 1.

Figure 1. Treatment Attendance for the Sexual Violence Psychoeducational Program (n = 46)



Domestic Violence Sample.

Demographics. The largest percentage of participants in the domestic violence program was White (53%), heterosexual (93%) , had a household income of less than $25,000 (56%), reported having no disability (66%), and had experienced domestic violence only (67%). There was variability noted in the ages;25-34 (48%) and 35-49 (25%); marital status, single (38%), married (28%), and separated/divorced (30%), and level of education, high school (31%) and some college (38%). The complete demographic characteristics of the participants are shown in Table 1.

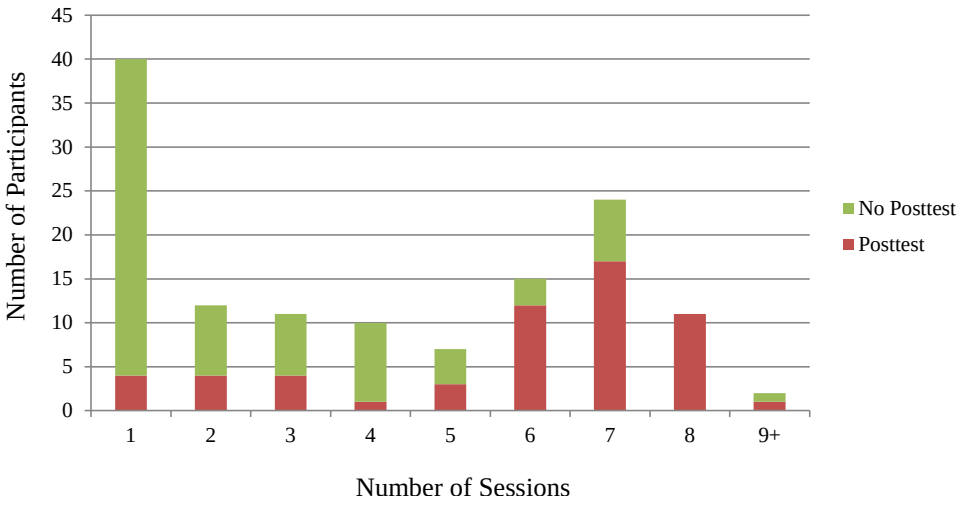
Most of the participants in the domestic violence program were referred for the psychoeducational sessions in a workshop setting (90%), received additional support

services during the same time frame as the psychoeducation (53%), and had not received services from the organization prior to the psychoeducational program (75%). The participants were motivated for services for a variety of reasons including wanting help on their own (31%), mandated to treatment (23%), more than one reason (28%). The post-assessment measures were administered during session (62%) as well as over the telephone (38%). The complete information regarding the delivery of the services is shown in Table 2.

Client Satisfaction. Measures of central tendency were calculated to evaluate the responses on the client satisfaction survey. Participants in the domestic violence sample strongly agreed the services were helpful; the information was useful; staff spent enough time talking about safety, and staff treated them with respect (Means range from 4.64 to 4.87; Median = 5). In addition, the participants strongly agreed that they perceived a decrease in their trauma symptoms since starting the psychoeducational program (Mean = 4.21; Median = 4.5). The mean scores for each item on the client satisfaction survey are shown in Table 3.

Treatment Attendance. An accurate attrition rate for the domestic violence program was not able to be determined because the number of sessions was not recorded by the staff, as originally intended for the majority of participants. However, this information was available for 132 participants in total (57 of whom completed the posttest and were included in the analyses, and an additional 75 who did not complete the posttest measures). Complete information regarding treatment attendance of the domestic violence psychoeducational program is shown in Figure 2.

Figure 2. Treatment Attendance for the Domestic Violence Psychoeducational Program (n = 132)



Inferential Statistics

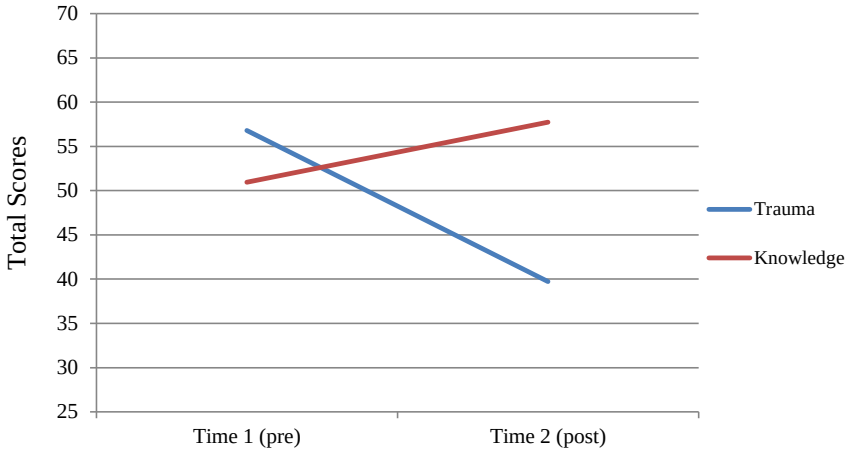
Hypothesis One. Psychoeducation will reduce trauma related symptoms for survivors of sexual violence from pretest to posttest. A paired-samples t-test with Bonferroni correction was conducted to compare the total score on the TSC-40 for participants in the sexual violence program from pretest to posttest. This test was found to be statistically significant, $t(25)=5.3$, $p < .01$. The effect size for this analysis (d=-1.05) was found to have a large effect, according to Cohen (1988). Results indicated that trauma symptoms of the participants in the sexual violence psychoeducational program significantly decreased from Time 1 (M=56.81, SD=18.32) to Time 2 (M=39.73, SD=18.49). Total scores on the trauma and knowledge measures in the sexual violence sample are shown in Table 4.

Table 4. Total Scores on the Trauma and Knowledge Measures

	Sexual Violence Sample			Domestic Violence Sample		
Measure	N	Mean	Std. Deviation	N	Mean	Std. Deviation
TSC-40 (Trauma)						
Pretest Total Score	30	58.80	18.01	44	37.48	22.56
Posttest Total Score	29	39.83	18.48	52	26.29	20.17
Client Questionnaire (Knowledge)						
Pretest Total Score	28	49.68	10.99	45	55.53	10.51
Posttest Total Score	27	57.70	10.64	57	66.88	7.89

Hypothesis Two. Psychoeducation will increase knowledge of interpersonal violence for survivors of sexual violence from pretest to posttest. A paired-samples t-test with Bonferroni correction was conducted to compare the total score on the Sexual Violence Client Questionnaire from pretest to posttest. This test was found to be statistically significant, $t(23)=-2.87$, $p < .01$. The effect size for this analysis ($d=.73$) was found to have a moderate effect, according to Cohen (1988). Results indicated that knowledge of the participants in the sexual violence psychoeducational program significantly increased from Time 1 (M=50.96, SD=10.08) to Time 2 (M=57.75, SD=10.92). Changes in knowledge and trauma scores in the sexual violence sample are shown in Figure 3.

Figure 3. Changes in Trauma and Knowledge Scores in the Sexual Violence Sample

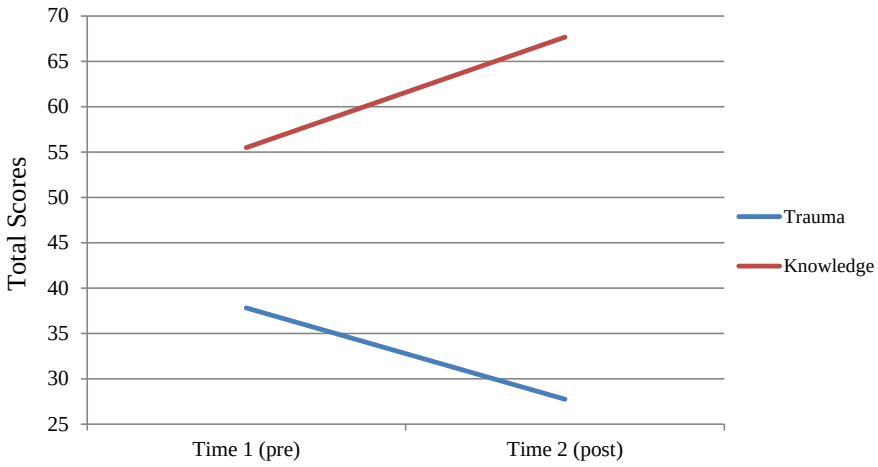


Hypothesis Three. Psychoeducation will reduce trauma related symptoms for survivors of domestic violence from pretest to posttest. A paired-samples t-test with Bonferroni correction was conducted to compare the total score on the TSC-40 for participants in the domestic violence program from pretest to posttest. This test was found to be statistically significant, $t(40)=3.99$, $p < .01$. The effect size for this analysis ($d=-.50$) was found to have a moderate effect, according to Cohen (1988). Results indicated that trauma symptoms of the participants in the domestic violence psychoeducational program significantly decreased from Time 1 (M=37.83, SD=22.79) to Time 2 (M=27.76, SD=20.48). Total scores on the trauma and knowledge measures in the domestic violence sample are shown in Table 4.

Hypothesis Four. Psychoeducation will increase knowledge of interpersonal violence for survivors of domestic violence from pretest to posttest. A paired-samples t-test with Bonferroni correction was conducted to compare the total scale score on the

Domestic Violence Client Questionnaire from pretest to posttest. This test was found to be statistically significant, $t(43)=-6.45$, $p < .01$. The effect size for this analysis ($d=1.08$) was found to have a large effect, according to Cohen (1988). Results indicated that knowledge of the participants in the domestic violence psychoeducational program significantly increased from Time 1 (M=-55.50, SD=10.63) to Time 2 (M=67.66, SD=8.00). Changes in knowledge and trauma scores in the domestic violence sample are shown in Figure 4.

Figure 4. Changes in Trauma and Knowledge Scores in the Domestic Violence Sample



Correlations

A Pearson product-moment correlation coefficient was conducted to examine the relationship between trauma scores and knowledge scores both in the sexual violence and in the domestic violence psychoeducational programs. In the sexual violence sample, there was a moderate negative correlation between the two variables $r(23) = -.625$, $p < .01$. The coefficient of determination ($r^2 = .39$) indicated that 39% of the variability in the

trauma scores can be accounted for by (or attributed to) differences in the knowledge scores. In the domestic violence sample, there was no correlation between the two variables $r(49) = -.060$, $p = .342$.

Discussion

Summary and Explanation of Findings

The purpose of the current study was to investigate the effects of psychoeducation on survivors' self-reported trauma symptoms, as measured by the TSC-40 (Briere & Runtz, 1989) and self-reported knowledge of interpersonal violence, as measured by a Client Questionnaire. A patched-up nonequivalent control group design was initially proposed, forming two groups based on the number of sessions completed. However, missing data regarding the number of sessions resulted in the lack of a comparison group.

The intent-to-treat analysis was therefore used with all participants who completed pre- and posttest measures, regardless of the number of sessions. This approach is considered a conservative method of analysis with missing data. Although the intent-to-treat analysis was originally developed for randomized control studies (Gupta, 2011), it has also been applied to nonrandom controlled studies in community settings (Salloum et al., 2014; Stewart et al., 2014). Even with this conservative approach, significant results were found. The results of the paired-samples t-tests indicated that trauma symptoms significantly decreased and knowledge of interpersonal violence significantly increased from pretest to posttest. This pattern was observed both in the sexual violence and in the domestic violence samples.

As with many community-based samples, the participants in the current study represented a heterogeneous group in many ways. For example, more than half of the sexual violence sample and approximately one third of the domestic violence sample reported experiencing at least two different types of interpersonal violence, which may have included sexual assault, sexual harassment, childhood sexual or physical abuse, or

domestic violence. In addition, the majority of participants in both samples reported having at least some college education, but had a household income of less than $25,000. Despite this, many populations remained underrepresented or excluded in the current study; these include adolescents, older adults, males, and members of the LGBT community.

The internal consistency reliability of each measure administered to participants was also examined. The Client Questionnaires were demonstrated to have good internal consistency reliability both with the sexual violence and with domestic violence samples. These results suggested that for both versions of the Client Questionnaire, scores on similar items were consistent and each item contributed something unique to the measure. This is especially important considering that the psychometric properties of these measures were not available prior to the current study. The TSC-40 was demonstrated to have excellent internal consistency reliability with both samples. These results are consistent with previous studies examining the reliability of the TSC-40 (Briere & Runtz, 1989) and suggested that scores on similar items were consistent. Although most items on the TSC-40 contributed something unique to the measure, some items may have overlapped with each other.

The utility of psychoeducation is based on several assumptions, including the fact that it could normalize symptoms, modify perceptions, reduce distress, increase knowledge, and/or increase help seeking behaviors (Wessely et al., 2008). Although psychoeducation has been demonstrated to be a promising intervention for several populations, its exact mechanisms remain unclear. The current study conducted correlations in an effort to better understand the relationship between trauma symptoms

and knowledge. In the sexual violence sample, knowledge scores and trauma scores had a moderate negative correlation. The results indicated that as the participants' knowledge increased, trauma symptoms systematically decreased. However, there was no correlation found between knowledge scores and trauma scores in the domestic violence sample.

There are many possible explanations for these results. First, there were two different versions of the knowledge measure, one for the sexual violence and the other for the domestic violence psychoeducational program. Perhaps the differences regarding the results of the correlations were due to differences in the development of the measures. It may also be possible that the results were due to differences between the two samples. One notable difference is that the sexual violence sample reported more types of trauma and a higher incidence of trauma symptoms than the domestic violence sample at baseline. The sexual violence survivors also reported having less knowledge of interpersonal violence at pretest than did their domestic violence counterparts. Another difference is that nearly one quarter of the domestic violence sample was mandated to treatment. There may be something unique about this subgroup of the domestic violence sample. Perhaps their perceptions regarding knowledge of interpersonal violence and trauma symptoms differed from those individuals who were motivated to seek services on their own.

Yet another difference involved the delivery of the psychoeducational programs. That is, the sexual violence program was provided primarily in individual sessions, whereas the domestic violence program was provided mainly in a workshop setting. Perhaps the information provided in the sexual violence program was more easily tailored

to meet the individual needs of each survivor. These differences in the development of the measures, format of the programs, or participants in each sample could account for the different results seen in the correlations. However, if this pattern continues to be observed in future studies, then there may be something inherently different about the effects of psychoeducation on survivors of sexual violence, when compared with survivors of domestic violence.

Another important factor to consider is the treatment attendance rates. An accurate attrition rate could not be determined due to missing data regarding the number of sessions completed for the majority of participants in both samples. However, for whom this information was available, approximately 52% of participants in the sexual violence sample and 40% of participants in the domestic violence sample completed at least six sessions. Spinazzola et al. (2005) reviewed attrition rates for published research studies prior to and since the International Society for Traumatic Stress Studies (ISTSS) 2000 Practice Guidelines. The studies that were included examined the effect of CBT, EMDR, and other interventions for trauma survivors. Prior to 2000, the majority of studies did not report important demographic and attrition rates in the screening, assessment, and treatment phases. Of those studies with available information, less than 40% of the participants that were screened actually completed treatment. Since 2000, 45% of participants completed treatment (Spinazzola et al., 2005). Using this as a basis for comparison, the participants in the current study completed the psychoeducational program at rates comparable with other studies investigating the treatment of trauma survivors.

Despite this, it is important to note that a significant portion of both samples dropped out of the program early. For whom this information was available, approximately 20% of the sexual violence sample and 30% of the domestic violence sample dropped out after the intake. Therefore, the largest percentage of participants who dropped out of the program did so prior to receiving any psychoeducational sessions. This trend is consistent with studies examining treatment for trauma survivors (Resko & Mendoza, 2012). It remains unclear whether the participants in the current study elected to drop out, were referred out, or actually completed the majority of sessions but were not available for follow-up during week eight. One possible explanation of the high dropout rate is that participants in both samples were predominately low income, which may have led to barriers to treatment such as transportation or child care issues. Other explanations could include the fact that the participants' symptoms either increased or decreased in severity or that they were perhaps dissatisfied with the services being provided. Avoidance behaviors, as often seen in individuals with anxiety and PTSD, may also have contributed to the treatment dropout rate in the current study.

Resko and Mendoza (2012) investigated early attrition, as defined by dropping out after the first session, in survivors with co-occurring trauma and substance use disorders. They found that early attrition was associated with a history of youth dating violence, high perceived need for psychological treatment, and abuse of certain substances such as alcohol, opioids, and stimulants. Logistical barriers, such as transportation or childcare issues, were not associated with early attrition in that study (Resko & Mendoza, 2012). However, limited demographic information makes it difficult

to determine if the sample used in that study differed from the current study on important characteristics, such as household income.

Results of the client satisfaction survey indicated that the participants both in the sexual violence and in the domestic violence samples perceived the psychoeducation to be helpful and useful. Participants also perceived a decrease in trauma symptoms since starting the psychoeducational intervention. Their self-report on this measure were consistent with scores on the TSC-40 and Client Questionnaire. It is important to note, however, that the majority of participants who completed the client satisfaction survey also completed the program.

Limitations

As a grant funded, nonprofit organization providing community-based services to survivors of sexual and domestic violence, all survivors requesting services were referred either to the psychoeducational intervention or for other services immediately. Therefore, there was no control group or random assignment of participants into different groups for comparison. Furthermore, the small sample size, heterogeneity within the samples, and missing data pose significant limitations in the current study. Caution must therefore be used when drawing conclusions based on the current outcomes.

In addition, there were variations in the delivery of the psychoeducational programs. Although steps had been taken by the organization to increase consistency, the psychoeducational programs had not been fully standardized prior to the data collection. One notable example involved different methods of obtaining post-test data. If a participant did not appear for the session in week eight, the staff contacted the survivor and requested the survivor to complete the measures via the telephone. Although this

procedure had been successful in increasing the number of participants who completed posttest measures, it was unclear whether or not the differences in administration influenced participants' responses. In addition, some participants received more than the eight sessions that were intended in the psychoeducational program. Although this was recorded for only two participants, it points to further inconsistencies in the delivery of the psychoeducational programs.

Also, the data had been collected as part of a program evaluation and the responsible investigator in the current study was employed as a program supervisor by the organization during the same timeframe as the data collection. Although not directly involved in the data collection or ongoing staff meetings, the responsible investigator had been involved in the initial training of new staff regarding the procedures of the psychoeducational program. All of the participants had also been informed that the measures were being collected as part of a program evaluation. The changes in scores from pretest to posttest could therefore be the result of performance bias.

The measures utilized in the current study also produced limitations. The trauma measure did not have cut off scores that could be used as clinical indicators. In addition, the psychometric properties of the knowledge measure had not been evaluated. Although both versions of this measure were demonstrated to have good internal consistency reliability in the current study, the validity of the measures remains unknown. This is a noteworthy limitation because it is unclear whether or not this tool actually assessed the participants' knowledge of interpersonal violence as intended. Furthermore, the items on the Client Questionnaires assessed the participants' subjective perceptions regarding their

understanding of various aspects of interpersonal violence, rather than including specific items that could objectively determine if the information had been retained.

It is also possible that the observed changes may have been the result of external factors that were not controlled for in the current study. Although descriptive statistics were available regarding the percentage of participants who received other services from the organization either prior to or during the delivery of the psychoeducational program, it is unclear if the additional services influenced the outcomes. In addition, there are several other external factors that were not controlled for, including prior or concurrent treatment provided by other organizations; comorbid conditions such as substance use; factors related to resiliency such as existing coping strategies and availability of social support; and aspects of the traumatic experience itself, such as age of onset, number or severity of traumatic experiences, or relationship of the offender.

Implications and Future Research

The current study has important implications in clinical psychology. To date, there has been very little research conducted at community-based sexual and domestic violence programs. There has also been limited research investigating the effectiveness of psychoeducation, especially with survivors of interpersonal violence. The current study, despite its limitations, has therefore contributed to the existing literature in both areas. Continued research in both areas has the potential to lead, one day, to a better understanding of effective interventions for trauma survivors.

Although psychoeducation has been shown to be a promising intervention with some populations, what remains unclear is whether or not it was changes in knowledge, skills, or beliefs, or a combination thereof that actually produced the outcomes observed.

It may be beneficial to develop standardized psychoeducational programs that can be further investigated. Specific tools may also need to be developed and validated that can more effectively examine changes in knowledge, skills, and attitudes related to interpersonal violence. Additional measures could also be incorporated into future research in order to investigate the effect of psychoeducation on other constructs, such as depression, anxiety, quality of life, hope, and/or resiliency. Doing so could allow future research to better understand the different components of the psychoeducational program, determine which topics are associated with significant results, and possibly even predict which characteristics are more likely to predict successful outcomes.

When conducting research in real-world community based settings, it may be helpful to improve the initial and ongoing training for the staff responsible for implementing the program. For example, the staff could be required to audio tape sessions that could be reviewed by a supervisor in order to ensure that the information was delivered in a consistent manner. In addition, a supervisor could conduct monthly quality assurance checks of the completed measures throughout the data collection period. Doing so may identify systematic problems such as missing data, which could then be addressed before posing significant limitations in the analyses.

Future research could also examine the effect of psychoeducation on other populations, including adolescents, older adults, males, various ethnic groups, members of the LBGT community, and/or survivors of other types of traumatic experiences. It may be beneficial for future researchers to include a qualitative component in order to receive firsthand feedback about the intervention from the survivor's perspective. A

randomized control trial may one day be warranted to draw definitive conclusions about the effectiveness of psychoeducation as a stand-alone intervention with this population.

Conclusions

The current study examined the effect of a psychoeducational intervention on adult, female survivors in a community-based dual sexual and domestic violence program. The study used the intent-to-treat analysis, using paired-samples t-tests to examine changes from pretest to posttest. Trauma symptoms were measured by the TSC-40 (Briere & Runtz, 1989) and knowledge of interpersonal violence was measured by a Client Questionnaire developed by the organization. The results indicated that for participants both in the sexual violence and in the domestic violence samples, trauma symptoms significantly decreased and knowledge significantly increased from pretest to posttest. There are several inherent and noteworthy limitations of conducting a program evaluation using archival data collected in a real-world community based settings. These limitations make it difficult to draw conclusions based on the outcomes of the current study. The results, although promising, therefore highlight the importance of continued research regarding the effectiveness of psychoeducation in community-based settings. Such research has the potential to impact the way in which future treatment is provided to survivors of interpersonal violence.

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Appendix A

Items on Sexual Violence Client Questionnaire

1. I recognize how I am currently coping with the sexual violence.
2. I use healthy coping skills.
3. I can identify the type of sexual violence that I experienced.
4. I realize that the sexual violence is not my fault.
5. I understand how I reacted to the sexual violence at first.
6. I understand how the sexual violence is impacting me now.
7. I can identify the difference between healthy and unhealthy relationships.
8. I believe that consent is an important part of a healthy relationship.
9. I recognize the importance of setting boundaries in relationships.
10. I can identify high risk situations.
11. I understand my legal options as a survivor of sexual violence.
12. I am aware of community resources that can help me if needed.
13. I feel hopeful that I can heal from the sexual violence.
14. I believe that I am in charge of my own healing.

Appendix B

Items on Domestic Violence Client Questionnaire

1. I would be able to identify red flags if I were in an abusive relationship.
2. I can recognize the obstacles that make it difficult to leave an abusive relationship.
3. I recognize how I am currently coping with the domestic violence.
4. I use healthy coping skills.
5. I am able to identify characteristics of a healthy relationship.
6. I am aware of the different types of abuse on the Power and Control Wheel.
7. I understand the Cycle of Violence.
8. I can identify how domestic violence has impacted me.
9. I understand the effects domestic violence can have on children.
10. I know ways to plan for my safety.
11. I am aware of community resources that can help me if needed.
12. I can define financial abuse.
13. I know how to obtain a free credit report.
14. I feel hopeful that I can heal from the domestic violence.
15. I believe that I am in charge of my own healing.

Appendix C

Items on Client Satisfaction Survey

1. Overall, I found the services to be helpful.
2. Overall, the information provided has been useful.
3. I feel better since starting services (my symptoms have decreased).
4. I was treated with respect.
5. Staff spent enough time talking about my safety.