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Assessing Short-Term Outcomes of an Intervention for Women Convicted of Violent Crimes

Sheryl Kubiak
Woo Jong Kim
Gina Fedock
Deborah Bybee
Michigan State University

Women convicted of violent offenses represent a small but important subpopulation of women involved in the criminal justice system. Correctional administrators working with these women often rely on treatment and rehabilitation programs developed for violent male offenders. Although women's trajectories into violent behavior—as well as their trajectory out— differ from their male counterparts, the field is marked by the absence of interventions designed specifically for women with violent offenses. As attention grows in the research literature and in community settings about "women who use force" it is important to develop interventions that effectively modify aggressive behavior as well as the underlying precursors of such aggression. This paper describes a pilot study as one step in a developmental approach to intervention research. Beyond Violence, a gender specific and trauma-informed intervention, was piloted with 35 women incarcerated in a state prison with a conviction for a felony-level assault. Short-term outcomes assessed through changes in pre- and posttest measures show reductions in mental health symptoms associated with depression, anxiety, posttraumatic stress disorder, and serious mental illness. The encouraging results of this pilot study have led to the next step in the intervention research process of testing the program in a randomized controlled trial that is currently underway.

Key words: intervention; women; prison; violence; trauma

Violent offenses are defined as acts that involve force, or threat of force, and include offense types such as homicide, robbery, assault, and sexual offenses. Within the U.S. criminal justice system, women comprise a small and stable proportion of those arrested (24%; Snyder, 2011) and sentenced (5%) for a violent offense (Guerino, Harrison, & Sabol, 2011). Depending on the seriousness of the offense and severity of harm caused, sentences for violent offenses can include community supervision (i.e., probation), short-term incarceration in local jails or longer term incarceration in state prisons. Among the total incarcerated population in the United States, women comprise 5% of all state prisoners with a violent offense. However, within women's correctional facilities, those with a violent offense comprise the largest group (34%) as compared with 30% of women offenders with property offenses and 27% with drug offenses (Guerino et al., 2011). In addition, women with violent offenses have a 49% rate of recidivism, mainly with drug-related crimes (Deschenes, Owen, & Crow, 2007). Although a small population of women have repeat violent offenses (Deschenes et al., 2007; Verona & Carbonell, 2000), violent and aggressive behaviors have higher risk factors, such as more serious injuries, for women than for men (Tjaden & Thonnes, 2000).

Violent crime among women has remained relatively stable since 1960, with an overall decreased rate of homicide and robbery but an increased rate of assaults throughout the 1990s (Koons-Witt & Schram, 2003; Kruttschnitt, 2002; Pollock & Davis, 2005; Schwartz, Steffensmeier & Feldmeyer, 2009). Historically, nearly three quarters of women convicted of violent offenses were charged with simple assault (Greenfeld & Snell, 1999), and some scholars have speculated that mandatory arrest policies in situations of domestic violence are likely responsible for the increases in arrest and conviction of women for assault (Pollock & Davis, 2005; Schwartz et al., 2009). In contrast to men, women who use violence were more likely to have had a relationship with the victim (Greenfeld & Snell, 1999; Pizarro, DeJong & McGarell, 2010). Owing to the likelihood that the victims of women's violence are partners or family members, much of the research on correlates of violence has been conducted on women involved in perpetrating intimate partner violence (for a review, see Carney, Buttell, & Dutton, 2007). Research on characteristics of women engaged in a continuum of violence involving nonpartner targets or other types of violent behaviors is far more limited, thus restricting the scope of available interventions and treatment models.

Intervention Needs for Incarcerated Women With Violent Offenses

Women convicted of violent offenses represent a distinct population in need of multifaceted interventions that consider gender differences in mental health, substance use, anger, experiences victimization of interpersonal violence, and perpetration of violence. In a recent study, over a third of jailed women met criteria for serious mental illness compared with 15% of men (Kubiak, Beeble & Bybee, 2010). Mental health disorders are associated with women's use of violence (Logan & Blackburn, 2009; Silver, Felson, & Vaneseltine, 2008) as well as experiences of trauma and exposure to violence (Greenfield & Marks, 2010; Mechanic, Weaver, & Resick, 2008). Studies have also reported that between 75% and 90% of incarcerated women had a serious substance use disorder; these rates were higher rates than those found for either incarcerated males or the general population (Fazel, Bains, Doll, 2006; Kubiak, Boyd, Slayden, & Young, 2005; Staton, Leukefeld, & Webster, 2003). Substance use disorders are linked to women's experiences of traumatic victimization (Dowd, Leisring, & Rosenbaum., 2005; Widom & White, 1997) and women's perpetration of violence (Dowd et al., 2005; Weizmann-Henelius, Putkonen, Naukkarinen, & Eronen, 2009).

Similarly, victimization experiences of interpersonal violence (e.g., childhood abuse, or physical violence associated with domestic violence and sexual assault) are common among incarcerated women (Battle, Zlotnick, Najavits, Gutierrez, & Winsor, 2003; Browne, Miller, & Maguin, 1999; Green, Miranda, Daroowalla, & Siddique , 2005; Jordan, Schlenger, Fairbank, & Caddell, 1996; Siegel & Williams, 2003; Sullivan, Meese, Swan, Mazure, & Snow, 2005; Teplin, Abram, & McClelland, 1996) and more prevalent than among incarcerated men (Greenfeld & Snell, 1999; Authors, 2011). Moreover, histories of childhood and adulthood abuse have been linked to women's use of violence in adulthood (Byrd & Davis, 2009; Dowd et al., 2005; Feerick, Haugaard, & Hein, 20002; Kernsmith, 2006; Pollock, Mullings, & Crouch, 2006; Sullivan et al., 2005). Differences in neurobiological and psychosocial mechanisms have been found in comparisons of women with and without violent offenses, with histories of more substantial abuse associated with violent offenses and histories of trauma linked with violent behavior (Brewer-Smyth, 2004.)

Exposure to traumatic events has been linked to posttraumatic stress disorder (PTSD) in both men and women (Breslau, Peterson, Kessler, & Schultz, 1999). Moreover, experiences of sexual violence have a higher correlation to PTSD than other types of trauma, and women comprise 90% of those reporting sexual victimization (Cortina & Kubiak, 2006; Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995). PTSD has been associated with both state (situational) and trait (fixed) anger (Chemtob, Novaco, Hamada, Gross & Smith, 1997). As compared with male offenders, female offenders scored higher on scales of state and trait anger, anger reactions, and anger expression, in addition to scoring lower on anger control (Suter, Bryne, Bryne, Howells, & Day, 2002). Specifically, undercontrolled anger expression, both inwardly and outwardly, has been linked with women's aggressive behavior (Swan, Gambone, Fields, Sullivan, & Snow, 2005), as have high levels of inhibition and overcontrolling behaviors (Verona & Carbonell, 2000).

Multimodal interventions that address the myriad of issues illuminated above are suggested for violence prevention (McGuire, 2008). Although some interventions have been successful in outcomes related to reducing violence and recidivism among male inmates (i.e., Ware, Cieplucha, & Matsuo, 2011), few studies have investigated the efficacy of such programming for females incarcerated for violent offenses. Moreover, few, if any, empirically tested interventions have been specifically designed for the population of women convicted of violent offenses (Moe & Ferraro, 2003). In a recent systematic review, none of the interventions designed for use with women in correctional settings were intended specifically for violence prevention (Tripodi, Bledsoe, Kim, & Bender, 2011). However, that review excluded the Eamon, Munchua, and Reddon (2002) study that focused on an anger management intervention for incarcerated Canadian women. The sample in the Eamon et al. study included women convicted of violent or nonviolent offenses. The treatment group had significant decreases on scores for the measures of anger and aggression and a lower number of institutional charges than the control group (Eamon et al., 2002). In the literature to date, only one other anger management intervention for female inmates has been examined, and that examination did not use pre- or posttest measures to test for program efficacy (Wilfley, Rodon, & Anderson, 1986).

Given that women's motivations for violence and the victims of their violent behaviors frequently differ from those of male-perpetrated violence (Kruttschnitt, 2002; Mann, 1990, 1996; Pollock & Davis, 2005) and that multiple studies have found gender differences when comparing incarcerated men and women (e.g., Fazel et al., 2006; James & Glaze, 2006; Kubiak et al., 2010; Messina, Burdon, Hagopian, & Prendergrast, 2006; Raj et al., 2008), gender-specific and trauma informed services are needed for incarcerated women (Bloom, Owen, & Covington, 2003; Fournier,

Hughes, Hurford, & Sainio, 2011; Laux et al., 2008). In particular, incarcerated females with violent offenses represent a distinct population in need of interventions that consider differences in mental health, substance use, anger regulation, and exposure to interpersonal violence and their the women's connections to engagement in violence.

Beyond Violence: A New Intervention for Women with Violent Offenses

Intervention research is comprised of several steps that assess the efficacy of a modified or new intervention (Fraser, Richman, Galinsky, & Day, 2009; Rothman & Thomas, 1994). Initial steps include a systematic process for problem identification, information gathering, and program design before moving toward pilot testing. We have reported extensively on these important developmental steps, including the underlying theoretical framework, curriculum development, and implementation feasibility, in an earlier paper (Kubiak, Fedock, Tillander, Kim, & Bybee, 2012). In brief, Beyond Violence (Covington, 2011), uses trauma theory (Herman, 1992,1997) as a foundation for the intervention with the basic tenant that early trauma influences both perceptions of and reactions to life events (Kendall-Tackett, 2000) and that exposure, particularly early or ongoing exposure, to traumatic events can result in not only repressed anger (Neumann, Houskamp, Pollock, & Briere, 1996; Newman & Peterson, 1996; Springer, Sheridan, Kuo, & Carnes, 2007) but also the use of alcohol and other drugs (Hedtke et al., 2008; Najavitis, Weiss, & Shaw, 1997). The Beyond Violence curriculum was developed after an extensive review of other interventions, focus groups conducted with likely participants, and discussions with professionals (treatment and criminal justice); the curriculum uses the ecological framework espoused by the World Health Organization for violence prevention (Dahlberg & Krug, 2002). Beyond Violence uses a multimodal approach and a variety of evidence-based therapeutic strategies (i.e., psychoeducational, role-playing, mindfulness activities, cognitive behavioral restructuring, and grounding skills for trauma triggers) to address issues of mental health, substance abuse, trauma histories, and anger regulation. This 20-session intervention, delivered by a trained professional, is trauma-informed and gender-specific because it incorporates attention to women's extant victimization history, gender socialization, and the likelihood of either separate or co-occurring substance use and mental health disorders. The curriculum content is organized into four modules: self, relationships, community, and society. (See Appendix A for a list of session titles within each module).

Fidelity to the intervention curriculum and feasibility of implementation within a prison setting are discussed extensively elsewhere (Kubiak et al., 2012). In summary, the women who participated in Beyond Violence provided a positive reception for the intervention as voiced in a series of focus groups and written confidentially in their session comment forms. Participants received a high dosage (i.e., 90% of the women received 95% of the intervention) and staff were able to demonstrate fidelity to the intervention's curriculum via weekly monitoring. Issues arising during the implementation within the prison setting, primarily session length interfering with the daily routines of the prison, were addressed as they arose. Feedback on areas of the curriculum that women found problematic was used to modify subsequent drafts of the curriculum.

Current Study

This study builds on the developmental approach to intervention research by reporting on the short-term outcomes associated with the inaugural pilot of Beyond Violence. Using a pre- posttest design, outcomes are assessed as changes in measures of anger and hostility and changes in mental health symptoms. The questions guiding our research were as follows: (a) Do mental health symptoms related to anxiety, depression, serious mental illness, and PTSD decrease as a result of the intervention? (b) Do indications exist that anger, aggression, or hostility decrease as a result of the intervention? (c) Do subsample differences exist in short-term outcomes among the women involved in the pilot test?

Method

Participant Selection

Women were selected for the pilot from a group of 87 women admitted into the Residential Substance Abuse Treatment (RSAT) program. RSAT is a specific living unit within the prison that is considered a therapeutic community (TC). The TC unit has cross-trained corrections and treatment staff employed on a specific housing unit with confined women who are engaged in a variety of treatment or pretreatment activities. The TC unit has more rules and higher expectations for behavior than in general population units. Piloting the intervention in this setting provided some control for confounding variables associated with differing units, officers, and other interventions. Eligibility criteria for RSAT included the following: (a) a substance abuse dependency diagnosis as determined by Substance Abuse Subtle Screening Inventory (SASSI; Miller, 1999); and (b) an absence of any serious (i.e., assaultive) misconduct ticket within the 6 months prior to RSAT admission. A third criterion was established for eligibility to the Beyond Violence

program: current or previous conviction for a violent offense (i.e., assault, robbery, homicide, or sexual offense). Of the 87 women admitted to RSAT, 45 women met the third criterion and were eligible for Beyond Violence. Of these 45 inmates, 27 women were randomly selected whereas an additional eight women were purposefully selected because they had received life sentences. Usually, prison policy excludes women with life sentences, and all women who are not within 24 months of prison release, from treatment services. An exception was made for the Beyond Violence intervention pilot so that women with life sentences could be involved. The aim for this inclusion of these "lifers" was to prepare them for eventually becoming mentors and cofacilitators to assist the professional therapists in future Beyond Violence groups. Selection criteria for the unusual inclusion of women with life sentences focused on stability and leadership qualities.

In addition to the eight participants (22.9%) serving life sentences, 11 participating women (31.4%) were labeled by the institution as having a dual diagnosis. Dual diagnosis refers to women with both a mental health and substance use disorder; these participants were under the care of health professionals in the Psychological Service Unit, currently prescribed psychotropic medication, and scored in the dependency range on the SASSI.

Procedures

Before beginning the Beyond Violence program, the informed consent form was provided to all participants and verbally reviewed with the group by a research team member; all consent procedures and forms were approved by the Michigan State University Institutional Review Board. All women who were approached agreed to participate in the study. Membership into three groups was based on two criteria: the date the woman was admitted to RSAT and the presence or absence of a dual disorder. Group 1 consisted of 13 women, including five with life sentences, who met criteria in the first RSAT cohort. Groups 2 and 3 were women that entered RSAT 3 months later in the second cohort: Group 2 consisted of 10 women, including one with a life sentence; and Group 3 consisted of 11 women, all labeled as having a dual diagnosis, including two with life sentences.

Group Sessions. The intervention is delivered in weekly 2-hour sessions held in a group room within the RSAT unit of the prison. Each group was led by a different facilitator, but all facilitators had many years of experience as substance abuse or mental health treatment counselors. Facilitators received 6 hours of formal training on the Beyond Violence curriculum, a facilitator manual, and attended booster sessions and discussions during the implementation process. Study participants received Beyond Violence workbooks that provided course information and content-specific exercises.

Measures

Multiple measures assessing various constructs of mental health (i.e., depression, anxiety, PTSD. and serious mental illness), personality (i.e., anger, hostility) and aggression (i.e., indirect, physical, verbal) were used to examine pre- and postintervention differences.

Two subscales of the self-report Patient Health Questionnaire (PHQ) were used to assess study participants' levels of depression and anxiety.

Depression. The Depression Subscale of the PHQ (Kroenke, Spitzer & Williams, 2001) is a nine-item subscale that elicits depression symptoms that the respondent experienced in the last 2 weeks. Examples of items include, "Experienced little interest or pleasure in doing things" and "Felt bad about yourself, or felt that you are a failure or have let yourself or your family down." Respondents rated items on 4-point Likert scale ranging from *not at all* (0) to *nearly every day* (3). The nine responses were summed to form a measure of the severity of depression symptoms. Internal consistency reliability coefficients for this scale were .78 at pretest and .82 at posttest.

Anxiety. The PHQ Anxiety Subscale (Spitzer, Kroenke, & Williams, 1999) comprises seven items that examine anxiety symptoms the respondent has experienced in the past 4 weeks. The first item was used as a screener to determine if participants had experienced anxiety symptoms within the past month: "Over the last four weeks, how often have you been feeling nervous, anxious, on edge, or worrying a lot about different things?" Participants then completed the remaining six questions, which included items such as "Getting tired very easily," and "Feeling so restless that it's hard to sit still." Respondents rated items on a 4-point Likert scale ranging from *not at all* (0) to *nearly every day* (3). The scores of the seven items were summed to form a subscale score. The alpha reliability coefficient for this scale was .78 at pretest and .72 at posttest.

PTSD. The Short Screening Scale for *DSM-IV* Posttraumatic Stress Disorder-modified version (Breslau et al., 1999) is an eight item measure that collects a respondent's *yes/no* response to questions about current PTSD symptoms. The first item was used as screener with a *yes* or *no* answer choice to determine if participants have been exposed to a traumatic event: "In your life, have you ever had any experience that was considered frightening, horrible, or upsetting?" An affirmative response directed

participants to complete the remaining seven items. Participants were asked "Based on this experience, over the last 4 weeks how often have you…" and then guided to respond about resulting symptoms, such as, Avoided being reminded of this experience by staying away from certain places, people, or activities" and "Became jumpy or got easily startled by ordinary noises or movements." Respondents provided responses using a 4-point Likert scale ranging from *not at all* (0) to *nearly every day* (3). The scores of these seven items were summed to form a subscale score. Cronbach's alphas for this scale were .71 at pretest and .71 at posttest.

Serious mental illness. The K6 (Kessler et al., 2002; Kessler et al., 2003) is a nationally and internationally validated brief six-item measure designed to detect any past year diagnosis of disorder meeting the criteria of a *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.; *DSM-IV*; American Psychiatric Association, 1994) Axis I disorder and a Global Assessment of Functioning (GAF) score of 60 or below. Examples of items include, "Over the last 4 weeks, how often have you felt nervous" and "Over the last 4 weeks, how often have you felt hopeless?" Respondents rated items on a 5-point Likert scale of frequency ranging from *none of the time* (0) to *all of the time* (4). Cronbach's alphas for this scale were .77 at pretest and .81 at posttest. A total score was used for analysis.

Aggression and Hostility. The Buss-Warren Aggression Questionnaire (AQ; Buss & Warren, 2000) is 34-item instrument with a total hostility and aggression score that uses all items and five subscales to assess anger, hostility, and three forms of aggression (verbal, indirect, physical). Respondents rated items on 5-point Likert scale of frequency ranging *from not at all like me* (1) to *completely like me* (5). Internal consistency reliability for this scale was alpha .94 at pretest and .91 at posttest.

Anger. The Revised Expressions of Aggression Scale (Revised Expagg; Campbell, Muncer, McManus, & Woodhouse, 1999) is comprised of 16-items with two subscales (instrument and expressive) that assess a respondent's anger expression. The first subscale measures instrumental anger and includes items such as, "I believe that physical force is needed to get through to some people." The second subscale measures expressive anger and includes items such as, "My friends say that I argue a lot." Participants rated items on a 5-point Likert scale ranging from *strongly disagree* (1) to *strongly agree* (5). Responses were summed within the two subscales. Internal consistency reliability coefficients for instrumental anger scale were alpha .87 at pretest and .82 at posttest. Cronbach's alphas for expressive anger at pretest and posttest were .81 and .78 respectively.

Conduct problems. A subscale from the Self-Appraisal Questionnaire (SAQ; Loza, Neo, Shahinfar, & Loza-Fanous, 2005) was used to assess history of behavior indicative of a conduct disorder**.** The SAQ uses eight subscales to gather responses that are predictive of violent and nonviolent recidivism. The six-item subscale used in the current study included items such as, "Before the age of 15, I threatened others, started a fight, or used a weapon." All items used *true/false* response options that were scored dichotomously (*false* = 0, *true* = 1). Internal consistency for the scale was alpha .70 at pretest and .71 at posttest.

Analysis

Paired-samples *t*-tests were conducted to examine differences for all participants across time for depression, anxiety, PTSD, serious mental illness, anger, and aggression. Repeated measures ANOVA were conducted to explore subgroup differences over time between women prisoners with and without life sentences and women prisoners with and without a dual diagnosis.

Results

Of the 35 women who completed the pretest, 29 women (83%) completed the Beyond Violence intervention. Table 1 shows the demographic characteristics of the women who participated in Beyond Violence. On average, the women entered the prison at 33 years old (*SD* = 10.3) and were 39 years old (*SD* = 8.4) at the time of their enrollment in the Beyond Violence intervention. The average length of incarceration was 6.5 years (*SD* = 7.7). Of the six women who did not complete the intervention, one left the therapeutic unit because of a medical reason and five women were terminated from the therapeutic unit for program rule infractions such as limited participation. The six women who did not complete the program showed no significant differences from those who completed the program in terms of age at incarceration, current age, or scores on the pretest measures. However, the women that completed were more likely to have spent a longer time in prison than those who did not complete the intervention (7.4 years for program completers versus 1.9 years for noncompleters, $p = .003$). This difference may be attributable to the longer prison stays of the eight lifers, all of whom completed the intervention.

Table 1
Demographics of Participants

	Total (*N*=35)	Participants with completion (*n*=29)	Participants with incompletion (*n*=6)	
	M	*M*	*M*	*t* (33)
Age when incarcerated (years)	32.83	31.83	37.67	1.28
Current age	39.14	39.10	39.33	0.06
Length of stay at prison	6.46	7.41	1.90	-3.25***
	%	%	%	χ^2_{diff}
Proportion with life sentences	22.9	27.6	0	2.14
Proportion with a dual diagnosis	31.4	31.0	33.3	0.012
Race				8.20*
White	57.1	65.5	16.7	
Black	40.0	34.5	66.6	
Native American	2.9	0	16.7	
Education (less than high school grad)	60.0	55.2	83.3	1.64
Previous incarceration in				
Juvenile	14.3	13.8	16.7	0.03
Jail	57.1	55.2	66.7	0.27
Prison	28.6	20.7	66.7	5.15*

*p<.1, **p<.05, ***p<.001

Short-Term Outcomes

Table 2 describes the average changes in the pre- and post-test measures of mental health, anger, and conduct problems among the women who completed the intervention. Significant changes were found on all of the mental health measures. Mean scores measuring symptoms of depression (6.8 versus 4.3) and anxiety (5.6 versus 3.4) decreased significantly post-intervention. The change in anxiety had a large effect size (d=0.88) whereas the change in depression showed a moderate-to-large effect size (d=0.70). Symptoms of serious mental illness also declined significantly, from 7.3 to 4.7 (d=0.67), whereas the mean scores measuring PTSD showed a less robust decline, 5.3 to 4.8, with a moderate effect size (d=.50).

Less consistent changes were seen in the measures of anger, conduct problems, and aggression/ hostility. Although not expected for a measure of historical behavior, the conduct problems scale, which assesses negative adolescent behaviors, increased significantly post-intervention (1.7 to 2.2) with a moderate to high effect size (d = -0.71). Scores on measures of both instrumental (13.8 vs. 13.0) and expressive (23.3. vs. 22.7) anger were relatively unchanged from pre- to post intervention with nonsignificant, small effect sizes. Similarly, no significant changes were found in the total aggression/hostility scale score or any of the subscale scores.

Subsample analyses. ANOVA analyses tested for subgroup differences on the short-term effects of the Beyond Violence intervention. Table 3 shows the results for the differences between women with and without life sentences, and Table 4 displays the differences between women with and without a dual diagnosis.

Women serving life sentences. As compared with women who were not serving life sentences, women with life sentences had higher scores on the pretest assessment measures of depression, anxiety, PTSD, and serious mental illness. At post-intervention assessment, women with life sentences demonstrated a decrease in all of these mental health measures, with scores similar to those of women without life sentences. Although no statistically significant differences were found between groups in the changes over time on the mental health measures for depression, anxiety, and serious mental illness, we found significant differences on the measures of PTSD symptoms. Whereas women without life sentences demonstrated decreased PTSD symptoms over time (4.5 to 4.0), women with life sentences began the intervention with higher PTSD scores (7.4) and had lower scores at program completion (3.3). The mean change in the score of 4.13 for women with life sentences was differed significantly from the mean change of 0.48 for women without a life sentence ($F(1, 27) = 4.93$, p =.035).

Table 2
Pre- to Post Intervention Change on Outcome Measures Test

	Pretest	Posttest		
	M	*M*	*t* (28)	*d*
Depression	6.79	4.34	2.68**	0.70
Anxiety	5.62	3.38	3.33***	0.88
Conduct Problems	1.69	2.17	-2.64**	-0.71[a]
Anger				
Instrumental	13.83	13.00	0.89	0.24
Expressive	23.31	22.72	0.50	0.13
Serious mental illness	7.28	4.72	2.52**	0.67
PTSD	5.28	3.79	1.89*	0.50
Aggression/Hostility total	67.10	64.52	0.80	0.21
Physical	13.76	12.48	1.28	0.35
Verbal	10.10	10.72	-1.01	-0.27
Anger	13.03	13.24	-0.23	-0.06
Hostility	17.62	16.03	1.60	0.42
Indirect Aggression	12.59	12.03	0.80	0.21

[a] Negative *d*s reflect average increases in scores.
*p<.1, **p<.05, ***p<.001

Table 3
Group Differences between Women With and Without Life Sentences

	Women w/ Life Sentence (*n* = 8; 27.6%)		Women w/o Life Sentence (*n* = 21; 72.4%)		
	Pretest	Posttest	Pretest	Posttest	
	M	*M*	*M*	*M*	*F*(1, 27)
Depression	9.25	4.13	5.86	4.43	3.56
Anxiety	7.00	3.63	5.10	3.29	1.09
Conduct Problems	1.75	2.13	1.67	2.19	0.13
Anger					
Instrumental	13.75	13.13	13.86	12.95	0.02
Expressive	25.00	23.00	22.67	22.62	0.54
Serious mental illness	8.88	4.25	6.67	4.90	1.63
PTSD	7.38	3.25	4.48	4.00	4.93*
Aggression/Hostility (Total)	76.88	65.25	63.38	64.24	3.21
Physical	14.75	12.25	13.38	12.57	0.57
Verbal	11.38	11.63	9.62	10.38	0.13
Anger	15.00	12.63	12.29	13.48	3.38
Hostility	20.63	16.63	16.48	15.81	2.37
Indirect Aggression	15.13	12.13	11.62	12.00	5.61*

* p<.05, ** p<.01, *** p<.001

Women with life sentences also had higher pretest scores on the measures of aggression and hostility than women without life sentences. For example, the total score on the hostility measure was 76.9 for lifers compared to 63.4 for nonlifers. All of these scores declined over the course of the intervention and were similar between groups at posttest. The only significant change was on the indirect aggression subscale score. The scores of women lifers decreased significantly on this measure (*M* change = -3.05) as compared with the scores of women nonlifers, which demonstrated a slight increase (*M* change = 0.38, F(1, 27) = 5.61, *p* =.025).

Women classified as dual diagnosis. For the pretest measures, women classified as having a dual diagnosis (DD) differed from women without a DD in terms of higher level of depressive symptoms (8.2 vs. 6.2); anxiety (7.4 vs. 4.8); serious mental illness (9.8 vs. 6.2); and PTSD (6.3 vs. 4.8). Repeated measure analysis using group (DD, non-DD) x time (pre, post) analysis found that, as compared with women without DD, those with DD had significant declines on measures of anxiety (*M* change = -4.88 and -1.05 respectively, F(1, 27) = 8.95, *p* = .006)

Table 4
Group Difference Between Women With and Without a Dual Diagnosis

	Women w/ Dual Diagnosis (*n* = 9, 31%)		Women w/o Dual Diagnosis (*n* = 20, 69%)		
	Pretest	Posttest	Pretest	Posttest	
	M	*M*	*M*	*M*	*F* (1, 27)
Depression	8.22	5.11	6.15	4.00	0.23
Anxiety	7.44	2.56	4.80	3.75	8.95**
Conduct Problems	1.78	2.56	1.65	2.00	1.18
Anger					
Instrumental	13.33	13.11	14.05	12.95	0.18
Expressive	25.11	20.33	22.50	23.80	6.87*
Serious mental illness	9.78	5.67	6.15	4.30	1.07
PTSD	6.33	4.00	4.80	3.70	0.52
Aggression/Hostility (Total)	65.89	69.11	67.65	62.45	1.48
Physical	12.44	14.11	14.35	11.75	4.04*
Verbal	10.11	11.11	10.10	10.55	0.17
Anger	13.22	14.11	12.95	12.85	0.25
Hostility	17.78	17.33	17.55	15.45	0.59
Indirect Aggression	12.33	12.44	12.70	11.85	0.41

* *p*<.05, ** *p*<.01

Although few differences were found between women with DD and non-DD women on the pretest measures of anger and hostility, expressive anger declined significantly for the DD group, whereas the scores on the expressive anger measure increased slightly among non-DD women (*M* change = -4.78 and 1.3 respectively; F(1, 27) = 6.87, *p* =.014). Interestingly, measures of physical aggression increased for women with DD as compared with non-DD women (*M* change= 1.67 and -2.6, respectively, F(1, 27)=4.40, p= .045).

Discussion

This article assessed the short-term outcomes of an intervention, Beyond Violence, which was aimed at preventing and reducing violent behavior among women by addressing issues of mental health, trauma, anger, and substance abuse. Using the steps in intervention research (Fraser et al., 2009), the curriculum was developed based on knowledge garnered from reviewing the existing literature and informed by engaging incarcerated women convicted of violent offenses in several focus groups. Beyond Violence is unique not only because of the lack of similar interventions that target this high-risk group of women but also because the intervention is based on trauma theory and uses a gender-specific curriculum. The short-term outcomes illustrated in this article, coupled with a more in-depth assessment of the feasibility and

fidelity of the intervention (Kubiak et al., 2012), represent further steps in the intervention research process.

Across participants, symptoms attributed to mental health disorders decreased significantly by the end of the intervention, with the largest effect attributable to anxiety symptoms. These significant changes demonstrate that Beyond Violence can be used to address a variety of the mental health needs experienced by incarcerated women, and—given that mental health disorders have been linked with use of violence (Chemtob et al., 1997; Logan & Blackburn, 2009; Silver et al., 2008; Skeem et al., 2005)—the Beyond Violence program might have potential utility as a violence prevention intervention

Given the associations demonstrated in the program model among trauma, mental health disorders, and anger, the lack of significant changes in the measures of anger and hostility is perplexing, especially considering the significant changes found in mental health symptoms. However, qualitative information gleaned in participant focus groups might provide some explanation (for detailed discussion of the focus groups, see Kubiak et al., 2012). Briefly, women prisoners indicated that before participating in the intervention, they thought they had resolved their anger; however, over the course of the intervention, most of the women recognized their repressed anger and the ways in which they were expressing anger in their daily lives. Many women discussed feelings of anger with family members or partners and recognized, often for the first time in their lives, the high level of dysfunction within their families. As seen in previous qualitative research on service development for incarcerated women (Hedderman, Gunby, & Shelton, 2011), women qualitatively express changes that quantitative measures might not have fully captured. In addition, we believe the one measure of anger (i.e., Buss Warren Hostility) was inadequate to measure the potential changes in the type of anger that might be targeted by this intervention. We had included this measure of anger to replicate the measures used in the Canadian Correctional Service's Women's Violence Prevention Program (Derkzen, 2009), which was the only research we could find that examined a violence prevention program within a women's prison. However, the Buss Warren Hostility scale does not measure multiple facets of anger. Indeed, the Buss Warren Hostility scale measured only "state" anger (i.e., angry feelings at a particular time) whereas "trait" anger—anger experienced or expressed over time—is a better indicator of the intervention's target of repressed anger that is related to abuse and exposure to other traumatic events. Therefore, with this knowledge and the qualitative data in from the focus group in which women reported their recognition of repressed anger and the coping and anger management tools they learned as part of the intervention (reported extensively in the feasibility paper), we believe that the null finding on the current anger scale is attributable to measurement error rather than ineffective intervention or a faulty program model. In the next phase of our intervention research (i.e., a randomized controlled trial), we will use a more comprehensive measure of anger, such as the State-Trait Anger Expression Inventory (Spielberger, 1991).

Another unexpected result was the significant change found in the historical measure of conduct disorders. In the focus groups conducted with the women prisoners (see Kubiak et al., 2012, for more detail), the women's preintervention comments indicated their denial about their responsibility for their offenses. However, through their participation in the Beyond Violence intervention, the women participants not only began to understand and recognize this responsibility but also began taking responsibility for other areas of their life. This recognition likely accounts for the significant change found in the conduct disorder scale results. Clearly, history cannot be rewritten and the intervention cannot change behaviors that occurred at an earlier time; however, what might have changed was the women's ability to admit to these negative behaviors, as well as their feelings and expressions of anger.

These short-term outcomes provide encouragement for further testing of the intervention model. Preliminary evidence of reductions in mental health symptoms associated with depression, anxiety, PTSD, and serious mental illness for women with violent offenses across pre- and post-test measures provides support for the program model. This evidence also held true for subsamples of women serving life sentences and women meeting DD criteria. Women serving life sentences comprise a distinct population for whom reducing recidivism is not necessarily a relevant goal. However, the significant changes observed in the alleviation of mental health symptoms and indirect aggression for this subsample of women are crucial, given these women's intensified risk factors, such as higher rates of suicide attempts and more extensive trauma histories than women without life sentences (Leigey & Reed, 2010). Previous research has also shown that women with long-term sentences often experience multiple forms of trauma before and during incarceration (e.g., Kupers, 1999; Kubiak, Hanna, & Balton, 2005), resulting in high rates of PTSD and making a significant decrease in PTSD symptoms for women with life sentences all the more notable. On the other hand, because women with life sentences were usually restricted from participat-

ing in other therapeutic interventions, the lifers in the current study might have been highly motivated to take advantage of treatment opportunities, and therefore, experienced larger gains.

Likewise, women with co-occurring disorders and involved in the criminal justice system have been found to be a difficult population to engage and treat (Brady, Krebs, & Laird, 2004; Lang & Belenko, 2000). Significant changes in symptomatology demonstrate the potential of the Beyond Violence intervention to positively impact this group of women. Similarly, these results support the utilization of a multimodel intervention that is relevant to incarcerated women with diverse and complex needs.

These short-term outcomes suggest that the Beyond Violence program model that posits that experiences of trauma underlie mental health symptoms of depression, PTSD, and anxiety as well as repressed anger which in-turn leads to violent behavior is promising but requires assessment of long-term outcomes as well as replication in a controlled study. Beyond Violence addresses a gap in the area of gender-specific and trauma-informed programming for women that exhibit assaultive behaviors. Based on a national survey of women's prisons, women's main programming needs are in the areas of (a) substance abuse, (b) anger management, (c) trauma issues, and (d) relationship skills (van Wormer & Kaplan, 2006). In addition, these programming needs emphasize pathways to crime that are unique to women based on their high rates of victimization, mental health distress and substance use disorders. These factors are central to gender-responsive interventions. Such interventions are increasingly relevant given their focus on empowerment and improving problem solving, self-image, and self-efficacy (Bloom et al., 2003; Chesney-Lind & Pasko, 2004; Green et al., 2005).

In addition, Beyond Violence has utility for correctional administration. When assessing a violent female offender's readiness for parole or discharge, members of the parole board and correctional administrators examine the woman's progress toward and capacity for positively managing dynamic risk factors such as attitudes, emotionality, and coping skills (Hannah-Moffat & Yule, 2011). Research with parole board members have shown they were most impressed with an incarcerated woman's ability to recognize the association between life events and criminal behavior, as well as her willingness to take advantage of relevant programming (Hannah-Moffat & Yule, 2011). Interventions, such as Beyond Violence, are needed to assist women in examining, processing, and synthesizing life events to reach this level of awareness of their crime and behavior—both to meet parole eligibility and to prevent future criminal behavior.

This study has several limitations. Although the research team had an excellent, cooperative relationship with the Department of Corrections and the prison treatment staff, situations arose (e.g., staffing and group composition changes) that were beyond the control of the research team. For example, regarding the participants who did not complete the program, it should be noted that these participants were terminated from the program because of therapeutic unit rules and not institutional misconduct violations. Such actions would not be penalized in a general population prison setting. Similarly, the research team used existing prison treatment staff to implement the intervention, and therefore, could not control for facilitator skill and other factors. Finally, the small sample size limits our statistical power and ability to generalize our findings. Nevertheless, the main goal of this pilot study was to determine feasibility for future studies, including a rigorous randomized controlled trial, which is required to test the efficacy of the intervention and complete the steps of intervention research.

Conclusion

Future research should assess the long-term outcomes of this sample and implement additional groups with random assignment to test the efficacy of the Beyond Violence intervention. In addition, research is needed that addresses a broader spectrum of women's use of violence. Most research about women with violent offenses has focused on women and intimate partner violence perpetration. Women are increasingly being sentenced to attend batterer intervention programs (Carney & Buttell, 2006; Martin, 1997), but a review of literature on batterer intervention programs is substantially lacking outcome-studies focused on female batterers (Dowd, 2001; see Carney & Buttell, 2006 for an exception). This work makes an important contribution to the field by addressing the existing knowledge gap; nonetheless, more research is needed to help develop a more comprehensive understanding of women's violent behavior and how that behavior is contextually motivated, or how interventions can encompass a wider perspective of violence.

Author Note

Sheryl Kubiak is an associate professor and Ph.D. Program coordinator in the School of Social Work, Michigan State University.

Woo Jong Kim is a doctoral student in the School of Social Work, Michigan State University: kimwoo11@msu.edu

Gena Fedock is a doctoral student in the School of Social Work, Michigan State University: fedockgi@msu.edu

Deborah Bybee is a research professor of ecological-community psychology at Michigan State University: bybee@msu.edu

Correspondence regarding this article should be directed to Dr. Sheryl Kubiak, 110 Baker Hall, Michigan State University, East Lansing , MI 48824, or via e-mail at spk@msu.edu

References

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.

Battle, C. L., Zlotnick, C., Najavits, L. M., Gutierrez, M., & Winsor, C. (2003). *Trauma and substance abuse: Causes, consequences, and treatment of comorbid disorders*. Washington, DC: American Psychological Association.

Bloom, B., Owen, B., & Covington, S. (2003). *Gender-responsive strategies: Research, practice, and guiding principles for women offenders.* (NIC Publication No. 018017). Washington DC: National Institute of Corrections.

Brady, T. M., Krebs, C. P., & Laird, G. (2004). Psychiatric comorbidity and not completing jail-based substance abuse treatment. *American Journal on Addictions*, *13*, 83-101. doi:10.1080/10550490490265398

Breslau, N., Peterson, E. L., Kessler, R .C., & Schultz, L. R. (1999). Short screening scale for DSM-IV posttraumatic stress disorder. *American Journal of Psychiatry, 156*, 908-911. Retrieved from http://ajp.psychiatryonline.org/article.aspx?volume=156&page=908

Brewer-Smyth, K.(2004). Women behind bars: Could neurobiological correlates of past physical and sexual abuse contribute to criminal behavior? *Health Care for Women International 25*, 835-852. doi:10.1080/07399330490517118

Browne, A., Miller, B., & Maguin, E. (1999). Prevalence and severity of lifetime physical and sexual victimization among incarcerated women. *International Journal of Law and Psychiatry, 22*, 301-322. doi:10.1016/S0160-2527(99)00011-4

Buss, A. H., & Warren, W. L. (2000). *Aggression questionnaire* [Manual]. Los Angeles, CA: Western Psychological Services.

Byrd, P. M., & Davis, J. L. (2009). Violent behavior in female inmates: Possible predictors. *Journal of Interpersonal Violence, 24*, 379-392. doi:10.1177/0886260508316475

Campbell, A., Muncer, S., McManus, I., & Woodhouse, D. (1999). Instrumental and expressive representations of aggression: One scale or two? *Aggressive Behavior, 25*, 435-444. doi:10.1002/(SICI)1098-2337(1999)25:6<435::AID-AB4>3.0.CO;2-Q

Carney, M. M., & Buttell, F. P. (2006). An evaluation of a court-mandated batterer intervention program: Investigating differential effect for African American and White women. *Research on Social Work Practice, 16*, 571-581. doi:10.1177/1049731506289115

Carney, M., Buttell, F., & Dutton, D. (2007). Women who perpetrate intimate partner violence: A review of the literature with recommendations for treatment. *Aggression and Violent Behavior, 12*, 108-115. doi:10.1016/j.avb.2006.05.002

Chemtob, C. M., Novaco, R. W., Hamada, R. S., Gross, D. M., & Smith, G. (1997). Anger regulation deficits in combat-related posttraumatic stress disorder. *Journal of Traumatic Stress, 10*, 17-36. doi:10.1023/A:1024852228908

Chesney-Lind, M., & Pasko, L. (2004). *The female offender: Girls, women, and crime.* Thousand Oaks, CA: Sage.

Cortina, L. M., & Kubiak, S. P. (2006). Gender and posttraumatic stress: Sexual violence as an explanation for women's increased risk. *Journal of Abnormal Psychology, 115*, 753-759. doi:10.1037/0021-843X.115.4.753

Covington, S. (2011). *Beyond Violence: A prevention program for women*. La Jolla, CA: Center for Gender and Justice.

Dahlberg L. L., & Krug E. G. (2002). Violence-a global public health problem. In E. Krug, L.L. Dahlberg, J. A. Mercy, A. B. Zwi, & R. Lozano (Eds.), *World report on violence and health* (pp. 1-56). Geneva, Switzerland: World Health Organization.

Derkzen, D. (2009). *Preliminary implementation results for Women's Violence Prevention Program (WVPP).* Presentation at the 70th Annual Canadian Psychological Association Convention; Montreal, Quebec.

Deschenes, E. P., Owen, B., & Crow, J. (2007). *Recidivism among female prisoners: Secondary analysis of the 1994 BJS recidivism data set* (NIJ Document No. 216950). Washington, DC: National Institute of Justice.

Dowd, L. (2001). Female perpetrators of partner aggression: Relevant issues and treatment.

Journal of Aggression, Maltreatment, and Trauma, 5, 73-104. doi:10.1300/J146v05n02_06

Dowd, L. S., Leisring, P. A., & Rosenbaum, A. (2005). Partner aggressive women: Characteristics and treatment attrition. *Violence and Victims, 20*, 219-233. doi:10.1891/0886-6708.2005.20.2.219

Eamon, K. C., Munchua, M. M., & Reddon, J. R. (2002). Effectiveness of an anger management program for women inmates. *Journal of Offender Rehabilitation, 34*, 45-60. doi:10.1300/J076v34n01_04

Fazel, S., Bains, P., & Doll, H. (2006). Substance abuse and dependence in prisoners: A systematic review. *Addiction, 101*, 181-191. doi:10.1111/j.1360-0443.2006.01316.x

Feerick, M. M., Haugaard, J. J., & Hien, D. A. (2002). Child maltreatment and adulthood violence: The contribution of attachment and drug abuse. *Child Maltreatment, 7*, 226-240. doi:10.1177/1077559502007003005

Fournier, A. K., Hughes, M. E., Hurford, D. P., & Sainio, C. (2011). Investigating trauma history and related psychosocial deficits of women in prison: Implications for treatment and rehabilitation. *Women & Criminal Justice, 21*, 83-99. doi:10.1080/08974454.2011.558794

Fraser, M. W., Richman, J. M., Galinsky, M. J., & Day, S. H. (2009). *Intervention research: Developing social programs*. New York, NY: Oxford University Press.

Green, B., Miranda, J., Daroowalla, A., & Siddique, J. (2005). Trauma, exposure, mental health functioning, and program needs of women in jail. *Crime & Delinquency 51*, 133-151. doi:10.1177/0011128704267477

Greenfield, E. A., & Marks, N. F. (2010). Identifying experiences of physical and psychological violence in childhood that jeopardize mental health in adulthood. *Child Abuse & Neglect, 34*(3), 161-171. doi:10.1016/j.chiabu.2009.08.012

Greenfeld, L. A., & Snell, T. L. (1999). *Women offenders* (NCJ Pub. No. 175688). Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics. http://bjs.ojp.usdoj.gov/content/pub/pdf/wo.pdf

Guerino, P., Harrison, P. M., & Sabol, W. J. (2011). *Prisoners in 2010* (NCJ Pub. No. 236096). Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics. http://bjs.ojp.usdoj.gov/content/pub/pdf/p10.pdf

Hannah-Moffat, K., & Yule, C. (2011). Gaining insight, changing attitudes and managing 'risk': Parole release decisions for women convicted of violent crimes. *Punishment & Society, 13*, 149-175. doi:10.1177/1462474510394961

Hedderman, C., Gunby, C., & Shelton, N. (2011). What women want: The importance of qualitative approaches in evaluating work with women offenders. *Criminology and Criminal Justice, 11*, 3-19. doi:10.1177/1748895810392188

Hedtke, K. A., Ruggiero, K. J., Fitzgerald, M. M., Zinzow, H. M., Saunders, B. E., Resnick, H. S., & Kilpatrick, D. G. (2008). A longitudinal investigation of interpersonal violence in relation to mental health and substance use. *Journal of Consulting and Clinical Psychology, 76*(4), 633-647. doi:10.1037/0022-006X.76.4.633

Herman, J. L. (1992). Complex PTSD: A syndrome in survivors of prolonger and repeated trauma. *Journal of Traumatic Stress, 5*, 377-391. doi:10.1007/BF00977235

Herman, J. L. (1997). *Trauma and recovery*. New York, NY: Basic Books.

James, D. J., & Glaze, L. E. (2006). *Mental health problems of prison and jail inmates*. (NCJ Pub. No. 213600).Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics. http://bjs.ojp.usdoj.gov/content/pub/pdf/mhppji.pdf

Jordan, K., Schlenger, W. E., Fairbank, J. A., & Caddell, J. M. (1996). Prevalence of psychiatric disorders among incarcerated women. *Archives of General Psychiatry, 53*, 513-519. doi:10.1001/archpsyc.1996.01830060057008

Kendall-Tackett, K. A. (2000). Physiological correlates of childhood abuse: Chronic hyperarousal in PTSD, depression, and irritable bowel syndrome. *Child Abuse & Neglect, 24*, 799-810. doi:10.1016/S0145-2134(00)00136-8

Kernsmith, P. (2006). Gender differences in the impact of family of origin violence on perpetrators of domestic violence. *Journal of Family Violence, 21*, 163-171. doi:10.1007/s10896-005-9014-y

Kessler, R. C., Andrews, G., Colpe, L. J., Hiripi, E., Mroczek, D. K., Normand, S.-L. T., …Zaslavsky, A. M. (2002). Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological Medicine, 32*(6), 959-976. doi:10.1017}S0033291702006074

Kessler, R. C., Barker, P. R., Colpe, L. J., Epstein, J. F., Gfroerer, J. C., Hiripi, E.,… Zaslavsky , A. M. (2003). Screening for serious mental illness in the general population. *Archives of General*

Psychiatry, 60, 184-189. doi:10.1001/archpsyc.60.2.184

Kessler, R. C., Sonnega, A., Bromet, E., Hughes, M., & Nelson, C. B. (1995). Posttraumatic stress disorder in the National Comorbidity Survey. *Archives of General Psychiatry, 52*), 1048-1060. doi:10.1001/archpsyc.1995.03950240066012

Koons-Witt, B. A., & Schram, P. J. (2003). The prevalence and nature of violent offending by females. *Journal of Criminal Justice, 31*, 361-371. doi:10.1016/S0047-2352(03)00028-X

Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine, 16*, 606-613. doi:10.1046/j.1525-1497.2001.016009606.x

Kruttschnitt, C. (2002). Women's involvement in serious interpersonal violence. *Aggression and Violent Behavior, 7*, 529-565. doi:10.1016/S1359-1789(01)00045-3

Kubiak, S. P., Beeble, M. L., & Bybee, D. (2010). Testing the validity of the K6 in detecting major depression and PTSD among jailed women. *Criminal Justice and Behavior, 37*, 64-80.doi:10.1177/0093854809348139

Kubiak, S. P., Boyd, C. J., Slayden, J., & Young, A. (2005). The substance abuse treatment needs of prisoners. *Journal of Offender Rehabilitation, 41*, 1-19. doi:10.1300/J076v41n02_01

Kubiak, S.P., Fedock, G., Tillander, E., Kim, W. J., & Bybee, D. (2012). *Assessing the feasibility of an intervention for women convicted of violent crimes*. Manuscript submitted for publication

Kubiak, S., Hanna, J., & Balton, M. (2005). "I came to prison to do my time - Not to get raped": Coping within the institutional setting. *Stress, Trauma, and Crisis, 8*, 157-177. doi:10.1080/15434610590956921

Kupers, T. (1999). *Prison madness*. San Francisco, CA: Jossey-Bass.

Lang, M., & Belenko, S. (2000). Predicting retention in a residential drug treatment alternative to prison program. *Journal of Substance Abuse Treatment, 19*, 145-160. doi:10.1016/S0740-5472(00)00097-0

Laux, J. M., Dupuy, P. J., Moe, J. L., Cox, J. A., Lambert, E., Ventura, L.A., Williamson, C., …Benjamin, B. J. (2008). The substance abuse counseling needs of women in the criminal justice system: A needs assessment approach. *Journal of Addictions and Offender Counseling, 29*, 36-48. doi: 10.1002/j.2161-1874.2008.tb00042.x

Leigey, M. E., & Reed, K. L. (2010). A woman's life before serving life: Examining the negative pre-incarceration life events of female life-sentenced inmates. *Women & Criminal Justice, 20*, 302-322. doi:10.1080/08974454.2010.512229

Logan, C., & Blackburn, R. (2009). Mental disorder in violent women in secure settings: Potential relevance to risk for future violence. *International Journal of Law and Psychiatry, 32*, 31-38. doi:10.1016/j.ijlp.2008.11.010

Loza, W., Neo, L. H., Shahinfar, A., & Loza-Fanous, A. (2005). Cross-validation of the Self-Appraisal Questionnaire: A tool for assessing violent and non-violent recidivism with female offenders. *International Journal of Offender Therapy and Comparative Criminology, 49*, 547-560. doi:10.1177/0306624X04273433

Mann, C. (1990). Female homicide and substance abuse: Is there a connection? *Women & Criminal Justice, 1*, 87-109. doi:10.1300/J012v01n02_06

Mann, C. (1996). *When women kill*. Albany, NY: SUNY Albany Press.

Martin, M. (1997). Double your trouble: Dual arrest in family violence. *Journal of Family Violence, 12*, 139-157. doi:10.1023/A:1022832610728

McGuire, J. (2008). A review of effective interventions for reducing aggression and violence. *Philosophical Transactions of the Royal Society B: Biological Sciences, 363*(1503), 2577-2597. doi:10.1098/rstb.2008.0035

Mechanic, M. B., Weaver, T. L., & Resick, P. A. (2008). Mental health consequences of intimate partner abuse: A multidimensional assessment of four different forms of abuse. *Violence Against Women, 14*, 634-654. doi:10.1177/1077801208319283

Messina, N., Burdon, W., Hagopian, G., & Prendergrast, M. (2006). Predictors of prison-based treatment outcomes: A comparison of men and women participants. *American Journal of Drug and Alcohol Abuse, 32*, 7-28. doi:10.1080/00952990500328463

Miller, G. A. (1999). *The SASSI manual: Substance abuse measures* (2nd ed.). Springville, IN: SASSI Institute.

Moe, A. M., & Ferraro, K. J. (2003). Malign neglect and benign respect: Women's health care in a incarceration setting. *Women & Criminal Justice, 14*, 53-80. doi:10.1300/J012v14n04_04

Najavitis, L. M., Weiss, R. D., & Shaw, S. R. (1997). The link between substance abuse and posttraumatic stress disorder in women: A

research review. *American Journal on Addictions, 6*, 273-283. doi:10.1111/j.1521-0391.1997.tb00408.x

Neumann, D. A., Houskamp, B. M., Pollock, V. E., & Briere, J. (1996). The long-term sequelae of childhood sexual abuse in women: A meta-analytic review. *Child Maltreatment, 1*, 6-16. doi:10.1177/1077559596001001002

Newman, A. L., & Peterson, C. (1996). Anger of women incest survivors. *Sex Roles, 34*, 463-474. doi:10.1007/BF01545026

Pizarro, J. M., DeJong, C., & McGarell, E. F. (2010). An examination of the covariates of female homicide victimization and offending. *Feminist Criminology*, 51-72. doi:10.1177/1557085109354044

Pollock, J. M., & Davis, S. M. (2005). The continuing myth of the violent female offender. *Criminal Justice Review, 30*(5), 5-28. doi:10.1177/0734016805275378

Pollock J., Mullings, J., & Crouch, B. (2006). Violent women: Findings from the Texas women inmates' study. *Journal of Interpersonal Violence, 21*, 485-502. doi:10.1177/0886260505285722

Raj, A., Rose, J., Decker, M. R., Rosengard, C., Hebert, M. R., Stein, M., & Clarke, J. G. (2008). Prevalence and patterns of sexual assault across the life span among incarcerated women. *Violence Against Women, 14*, 528-541. doi:10.1177/1077801208315528

Rothman, J., & Thomas, E. J. (Eds.). (1994). *Intervention research: Design and development for human service*. New York, NY: Haworth

Schwartz, J., Steffensmeier, D. J., & Feldmeyer, B. (2009). Assessing trends in women's violence via data triangulation: Arrests, convictions, incarcerations, and victim reports. *Social Problems, 56*, 494-525. doi:10.1525/sp.2009.56.3.494

Siegel, J. A., & Williams, L. M. (2003). The relationship between child sexual abuse and female delinquency and crime: A prospective study. *Journal of Research in Crime and Delinquency, 40*, 71-94. doi:10.1177/0022427802239254

Silver, F. E., Felson, R. B., & Vaneseltine, M. (2008). The relationship between mental health problems and violence among criminal offenders. *Criminal Justice and Behavior. 35*(4), 405-426. doi:10.1177/0093854807312851

Skeem, J., Schubert, C., Stowman, S., Beeson, S., Mulvey, E., & Lidz, C. (2005). Gender and risk assessment: Understanding women's violence potential. *Law & Human Behavior, 19*, 173-186. doi:10.1007/s10979-005-3401-z

Snyder, H. N. (2011). *Arrest in the United States, 1980-2009*. (NCJ Pub. No. 234319). Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics. http://bjs.ojp.usdoj.gov/content/pub/pdf/aus8009.pdf

Spielberger, C. D. (1991). *State-Trait Anger Expression Inventory: STAXI professional manual*. Lutz, FL: Psychological Assessment Resources. http://www4.parinc.com/Products/Product.aspx?ProductID=STAXI-2

Spitzer, R.L., Kroenke, K., & Williams, J.B.W. (1999). Patient health questionnaire study group. Validity and utility of a self-report version of PRIME-MD: The phq primary care study. *Journal of the American Medical Association*, 282, 1737-1744. doi:10.1001/jama.282.18.1737

Springer, K. W., Sheridan, J., Kuo, D., & Carnes, M. (2007). Long-term physical and mental health consequences of childhood physical abuse: Results from a large population-based sample of men and women. *Child Abuse & Neglect, 31*(5), 517-530.doi: 10.1016/j.chiabu.2007.01.003

Staton, M., Leukefeld, C., & Webster, J. M. (2003). Substance use, health, and mental health: Problems and service utilization among incarcerated women. *International Journal of Offender Therapy and Comparative Criminology, 47*(2), 224-239. doi:10.1177/0306624X03251120

Sullivan, T. P., Meese, K. J., Swan, S. C., Mazure, C. M., & Snow, D. L. (2005). Precursors and correlates of women's violence: Child abuse traumatization, victimization of women, avoidance coping, and psychological symptoms. *Psychology of Women Quarterly, 29*, 290-301. doi:10.1111/j.1471-6402.2005.00223.x

Suter, J. M., Bryne, M. K., Bryne, S., Howells, K., & Day, A. (2002). Anger in prisoners: Women *are* different than men. *Personality and Individual Differences, 32*, 1087-1100. doi:10.1016/S0191-8869(01)00105-2

Swan, S. C., Gambone, L. J., Fields, A. M., Sullivan, T. P., & Snow, D. L. (2005). Women who use violence in intimate relationships: The role of anger, victimization, and symptoms of posttraumatic stress and depression. *Violence and Victims, 20*, 267-285. doi:10.1891/088667005780997929

Tjaden, P., & Thoennes, N. (2000). *Extent, nature and consequences of intimate partner violence.* (NCJ Pub. No. 181867). Washington, DC: U.S. Department of Justice. https://www.ncjrs.gov/pdffiles1/nij/181867.pdf

Teplin, L. A., Abram, K. M., & McClelland, G. M. (1996). Prevalence of psychiatric disorders among incarcerated women. *Archives of General Psychiatry, 53*(6), 505-512. doi:10.1001/archpsyc.1996.01830060047007

Tripodi, S. J., Bledsoe, S. E., Kim, J. S., & Bender, K. (2011). Effects of correctional-based programs for female inmates: A systematic review. *Research on Social Work Practice, 21*, 15-31. doi:10.1177/1049731509352337

van Wormer, K., & Kaplan, L. E. (2006). Results of a national survey of wardens in women's prisons: The case for gender specific treatment. *Women & Therapy, 29*, 133-151. doi:10.1300/J015v29n01_07

Verona, E., & Carbonell, J. L. (2000). Female violence and personality: Evidence for a pattern of overcontrolled hostility among one-time violent female offenders. *Criminal Justice and Behavior, 27*, 176-195. doi:10.1177/0093854800027002003

Ware, J., Cieplucha, C., & Matsuo, D. (2011). The violent offenders therapeutic programme (VOTP) - Rationale and effectiveness. *Australasian Journal of Correctional Staff Development, 6.* Retrieved from http://www.bfcsa.nsw.gov.au/__data/assets/pdf_file/0004/278041/The-Violent-Offenders-Therapeutic-Programme.pdf

Weizmann-Henelius, G., Putkonen, H., Naukkarinen, H., & Eronen, M. (2009). Intoxication and violent women. *Archives of Women's Mental Health, 12*, 15-25. doi:10.1007/s00737-008-0038-1

Widom, C. S., & White, H. R. (1997). Problem behaviours in abused and neglected children grown up: Prevalence and co-occurrence of substance abuse, crime and violence. *Criminal Behaviour and Mental Health, 7*, 287-310. doi:10.1002/cbm.191

Wilfley, D., Rodon, O., & Anderson, W. (1986). Effectiveness of an anger management program for women inmates. *International Journal of Offender Therapy and Comparative Criminology, 30*, 45-60. doi:10.1300/J076v34n01_04

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Appendix

Box 1: Beyond Violence Manual Components

Opening Session	Welcome, introductions, group agreements, overview, lecture, exercises and activities.
Module A: Self The first level identifies factors in a person's biological and personal histories that increase the likelihood of the individual becoming a victim or perpetrator of violence. First-level factors include age, education, income, substance use, and history of abuse.	Session 1: Thinking Our Thoughts Session 2: Feeling Our Feelings Session 3: Violence and Trauma in Our Lives Session 4: The Effects of Trauma Session 5: Women and Anger Session 6: Understanding Ourselves
Module B: Relationships Second-level factors increase risk because of relationships with peers, intimate partners, and family members. People in a woman's closest social circle (peers, partners, and family members) influence her behavior and contribute to her range of experiences.	Session 7: Our Families Session 8: Communication Session 9: Power and Control Session 10: Conflict Resolution Session 11: Creating Our Relationships
Module C: Community The third level includes settings, such as schools, workplaces, and neighborhoods, in which social relationships occur; this level also seeks to identify characteristics of these settings that are associated with a woman becoming a victim or perpetrator of violence.	Session 12: Our Communities Session 13: The Importance of Safety Session 14: Creating Community Session 15: The Power of Community
Module D: Society The fourth level identifies the broad societal factors that help to create a climate in which violence is either encouraged or inhibited. Fourth-level factors include social and cultural norms. Larger societal factors include health, economic, educational, and social policies that help to maintain economic and social inequalities across groups in society.	Session 16: Society and Violence Session 17: Creating Change Session 18: Transforming Our Lives Session 19: Honoring Ourselves and Our Community

Covington, S. (2011). Beyond Violence: A prevention guide for women. Center for Gender & Justice, La Jolla, CA.