

Gender Differences in a Disease Risk Reduction Intervention for People in Prison-based Substance Abuse Treatment¹

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IN 2013, THE CENTER for Disease Control estimated that over 1 million people were living with HIV in the United States and well over 100,000 were unaware of being HIV+. HIV/AIDS was the eighth leading cause of death in the 25-34 age range, and ninth among those 35-44 (Centers for Disease Control, 2016). Although great strides have been made in the prevention and treatment of HIV, it remains a significant problem in certain subpopulations, including rates 3-5 times higher among people in the criminal justice system compared to others in the U.S. (Centers for Disease Control, 2015a; Westergaard, Spaulding, & Flanigan, 2013). Drug use is associated with risky behaviors for HIV through risky sex activities (e.g., sex without a condom and with multiple partners) and needle sharing (Centers for Disease

Control, 2015b), and drug use among people in the criminal justice system is as high as 80 percent (James & Glaze, 2006). Furthermore, people in prison who participated in risky activities prior to incarceration often return to those activities after release from prison (Bureau of Justice Statistics, 2001; Braithwaite & Arriola, 2003; Seal et al., 2003).

Women in CJ Treatment as a Population

Release from incarceration back to the community carries a number of high-risk stresses that include reconnecting with family, finding housing and employment, healthcare, substance use treatment, and often mental health issues. While return to criminal activity, drug use, and risky sex activities is high in this population, these stresses are especially acute for women. Frequently they have children to reconnect with and care for; they may be in unhealthy and abusive relationships or may have experienced trauma (Staton-Tindall et al., 2007), and they have reportedly significantly higher rates of psychiatric illnesses (Grella, Lovinger, & Warda, 2013).

In a qualitative study involving incarcerated

women and correctional center staff, Martin et al. (2009) reported that five major themes emerged from focus groups and interviews regarding health concerns: 1) addictions and mental health; 2) HIV, hepatitis, and infections; 3) health care while in prison; 4) life skills for reentry to the community; and 5) relationships with family, children, and others. Janssen et al. (2017) found that successful reintegration into the community after incarceration for women was supported by health-related strategies, including health assessments at admission, treatment for mental health issues, and treatment for chronic medical problems. In part because of critical factors and needs specific to incarcerated females in substance abuse treatment, gender-responsive treatments have been implemented (e.g., Covington & Bloom, 2006) that are designed to specifically address pathways and factors unique to incarcerated women, and data have shown such programs to be effective for women (e.g., Messina et al., 2010).

The Centers for Disease Control and Prevention estimated that 19 percent of the almost 40,000 new HIV diagnoses in the U.S. in 2017 were adult and adolescent women

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(Centers for Disease Control and Prevention, 2019). Men who have sex with men accounted for the most new and existing HIV infections among men, whereas among females, 86 percent of infections occurred through heterosexual contact and 14 percent through injection drug use. Although 65 percent of HIV-positive women received some care, only about half were retained in care and were virally suppressed. One in nine females with HIV was unaware of being infected, which means that 11 percent of HIV-positive females were not getting care and were not aware that they could pass the virus to their partners. In addition, women are often not aware of the risk factors of their male partners, so they may be less likely to have vaginal or anal sex with a condom. These HIV risks for females along with the additional stressors for women reentering the community after incarceration make them especially susceptible during this time period.

WaySafe Intervention

In order to address the high-risk period after return to the community from incarceration, a multi-session, highly interactive, group-based curriculum called *WaySafe* (Lehman et al., 2015) was developed to meet the challenges of providing education on sensitive materials in correctional settings and promoting integrated services to justice-involved individuals at risk for infectious diseases. The goals of *WaySafe* were to improve problem recognition, commitment to change, and strategies for avoiding behavioral risks of infections. Therefore, the *WaySafe* curriculum was designed to increase positive decision-making skills for healthy living, including skills for reducing disease risk behaviors among people who were incarcerated and in the last phase of their substance use treatment prior to release back to the community. Its curriculum employed the evidence-based TCU Mapping-Enhanced Counseling procedure to focus on the cognitive aspects of risky sexual and drug use behaviors during reentry. *WaySafe* consists of six highly interactive, hour-long sessions conducted weekly:

1. "Introduction to Mapping," which provides background about this thinking and problem-solving tool to help explore beliefs and decisions.
2. "Risks and Reasons," which provides opportunities to think about why people take risks and to examine personal beliefs about risk-taking.
3. "The Game," which uses a workbook to

review personal knowledge and ignorance about HIV and other illnesses.

4. The "Should/Want Problem" considers the conflict between want and what should be done and how that influences our decisions.
5. "Risk Scenes: Everyone intends to avoid risks" addresses thinking ahead about risky situations to avoid HIV.
6. "Planning for Risks" deals with risks in life by thinking ahead and enjoying the resulting benefits.

Sessions were led by a trained counselor and generally included 10-15 participants (see Lehman et al., 2015 for more detail on *WaySafe* and study description).

Studies on *WaySafe* to date have documented its effectiveness in increasing knowledge, confidence, and motivation in terms of HIV knowledge confidence, avoiding risky sex, avoiding risky drug use, HIV testing awareness, and risk reduction skills. *WaySafe* participants had significantly greater knowledge, confidence, and motivation after *WaySafe* than did participants assigned to a treatment as usual condition. These benefits occurred within each of the eight participating prison facilities across two different states that differed by gender, treatment vendor, program length, and other factors (Joe et al., 2019; Lehman et al., 2015). In addition, *WaySafe* was shown to be effective for participants who varied on level of treatment engagement (Lehman et al., 2011). Some preliminary analyses also showed that pre-custody HIV risk behavior was a factor in the effectiveness of *WaySafe* and that the results differed by gender (Bartholomew et al., 2011). For males, higher levels of pre-custody injection risk and positive attitudes toward condom use were associated with greater pre-post changes for *WaySafe* participants, whereas for females, greater involvement in sex risk behaviors pre-custody was associated with less pre-post change for *WaySafe* participants.

Current Study

The purpose of the current study is to extend prior research on gender differences among incarcerated males and females who participated in the *WaySafe* curriculum. Our research questions include:

- A. How do males and females differ on baseline socio-demographic and background risk factors (employment, health, criminal behavior)?
- B. Do males and females differ on the *WaySafe* knowledge, confidence, and motivation

(KCM) measures prior to *WaySafe* and do they differ on post-*WaySafe* measures?

- C. Is program length, which varied among the three female facilities participating in *WaySafe* (4 months, 6 months, or 9 months), associated with *WaySafe* program success for females on the KCM measures?

Methods

Procedures

WaySafe was implemented in eight different prisons in two different states. Target participants were in the last phase of their prison-based substance abuse treatment and had about three months before their scheduled release to the community. Three of the facilities were female only and five were male only. Eligible participants were informed of the study by TCU research staff, and those interested in participating were asked to sign TCU IRB-approved Informed Consent forms. All participants who signed the forms were asked to complete a baseline survey in the week prior to the first *WaySafe* session. Following the baseline survey, groups of participants (e.g., those from the same wing or pod) were randomly assigned to either attend the 6 weekly *WaySafe* sessions or participate in treatment-as-usual (TAU) that consisted of normal substance abuse treatment programming. Following completion of the *WaySafe* intervention, both groups completed the post-intervention assessment. As part of normal clinical practice at the participating prisons, all residents completed a battery of TCU forms at intake, including the TCU A-RSKForm (described below), used in this study for demographic and background data.

Measures

Adult-background risk (TCU A-RSKForm). The adult background risk form (Institute of Behavioral Research, 2008) collects demographic and background information from adults at intake to treatment or prison. This form collects socio-demographic items as well as legal, medical, and health status during the six months prior to the current incarceration (Joe et al., 2004; Knight, Flynn, & Simpson, 2008).

Knowledge, Confidence, and Motivation (KCM) Scales. Baseline and post intervention surveys were developed to assess knowledge, confidence, and motivation around domains addressed by the *WaySafe* curriculum. Items assessed self-reported feelings of being knowledgeable about the domain, being confident in using that knowledge, and being motivated to act on that knowledge. Responses for all

items were on a 5-point Likert scale (1 = Strongly Disagree and 5 = Strongly Agree). Factor analyses found that the knowledge, confidence, and motivation items within each domain generally loaded together, so five scales were computed around each of the domains. These included HIV Knowledge Confidence, Avoiding Risky Sex, Avoiding Risky Drug Use, HIV Testing Awareness, and Risk Reduction Skills. The **HIV Knowledge Confidence and Motivation scale** (alpha = .89) included 13 items addressing knowledge about avoiding HIV and confidence and motivation to talk with others about avoiding HIV, including “You know enough to teach others what they should do if they think they have been exposed to HIV,” “You feel very confident that you could be a role model for others in helping reduce HIV risks,” and “You are totally committed to helping your friends and/or family avoid HIV/AIDS.” **Avoiding Risky Sex** (alpha = .91) included 13 items that addressed knowledge about risky sex and confidence and motivation to avoid risky sex activities such as “You have promised yourself to avoid risky sex activities” and “You have learned to think ahead in order to make less risky decisions about sex.” There were 12 items in the **Avoiding Risky Drug Use** scale (alpha = .85), which addressed knowledge about risky drug use and confidence and motivation to avoid risky drug use activities such as “If you do decide to inject drugs, you will always use a ‘clean’ needle” and “You are confident that even if you really need a fix, you will never share works.” The HIV Testing Awareness scale (alpha = .76) consisted of 7 items addressing knowledge about getting tested for HIV and obtaining HIV services and motivation to get tested regularly, including “You plan on being tested regularly for HIV” and “You will get tested for HIV if you think that you might have been exposed.” The **Risk Reduction Skills** scale (alpha = .85) included 14 items addressing having skills for preventing HIV and having the confidence and motivation to use those skills such as “You know how to stand up for yourself when someone tries to pressure you to take a risk” and “You have a clear mental plan for how to avoid people and situations that lead to problems.” The post-test measures were identical to the pre-test.

Sample

Across the eight participating facilities, a total of 1,393 participants who had consented completed baseline surveys, and 1,257 of those completed post-intervention surveys.

Because background information was only available on the TCU A-RSKForm, the sample included 1,091 participants who completed a baseline, post intervention survey, and a TCU A-RSKForm. Previous analyses (Lehman et al., 2015; Joe et al., 2019) showed that *WaySafe* participants demonstrated greater change on the knowledge, confidence, and motivation measures than did TAU participants, and these changes were observed in each of the eight participating facilities. Therefore, for the current study, we are restricting analyses to those participants who were randomly assigned to the *WaySafe* intervention (N = 736). We are primarily interested in examining gender differences in response to *WaySafe*. Of the 736 *WaySafe* participants, 653 completed a post-intervention survey and 570 participants also completed the TCU A-RSKForm.

Overall, of the 736 participants receiving *WaySafe*, 313 were female and 423 were male (291 females and 362 males completed post-intervention surveys). The female sample was recruited from three female-only facilities which differed in program length—4 months (N = 91), 6 months (N = 91), and 9 months (N = 109).

Analytic Approach

Analyses were designed to compare female and male participants in the *WaySafe* intervention in eight different prison facilities in two different states. We first compared females and males on demographic and background factors using t-tests for comparisons of means and chi-square tests for contingency tables and dichotomous background factors. To examine gender differences on knowledge, confidence, and motivation (KCM) factors, we compared females and males on the five KCM factors at baseline to examine pre-existing differences. SAS Proc Mixed was used for the analyses to account for nesting of participants within the eight facilities. Gender differences on the KCM factors after *WaySafe* were then examined using Proc Mixed and using the baseline measure as a covariate. The final analyses then compared the three women’s facilities that differed in program length to determine whether program length was related to *WaySafe* success. We used SAS Proc GLM to compare the three programs at baseline and again at post-intervention using the baseline measure as a covariate. We also computed effect sizes (Cohen’s d; Cohen, 1988) for the change in each of the KCM measures within each of the three facilities and compared the effect size across the three facilities.

Results

Gender Differences on Demographic and Background Factors

Table 1 shows demographic and background factors for the *WaySafe* sample. Overall, participants averaged about 34 years old, were 52 percent White and 19 percent Hispanic; 61 percent had a high school diploma or GED, 48 percent were singles, and 26 percent did not have any children. Compared to males in the sample, females were more likely to be White (60 percent to 45 percent), more likely to be divorced or separated (34 percent to 25 percent), and more likely to have 3 or more children (42 percent to 26 percent), while males were more likely to not have children (32 percent to 18 percent).

Data in Table 1 (next page) show high levels of criminal issues for this sample. Over 60 percent reported having been arrested in the prior six months, having been on probation or parole, or being in jail or prison. Additionally, in the six months prior to entering their present facility, other problems included unemployment and health. Only 49 percent worked full time, 29 percent were unemployed, 27 percent received public assistance. More than 20 percent reported being treated in an emergency room, treated for a mental health problem, or treated for illegal drug use.

These issues were especially prominent for females. In addition to higher rates of being divorced or separated and having 3 or more children, females reported significantly lower employment rates and higher unemployment rates, and much higher rates of having received public assistance (almost half of females). In addition, females were more likely to have been arrested in the prior six months and to have been on probation or parole. In terms of health issues, females were more than twice as likely as males to have been treated in an emergency room and treated for illegal drug use, and almost five times as likely to have been treated for a mental health problem.

Gender Differences at Baseline and Post-intervention on Knowledge, Confidence, and Motivation Measures

A primary goal of this paper is to examine gender differences in response to *WaySafe*. As noted above, females in participating facilities report significantly higher rates of social problems in terms of employment, criminal involvement, and health issues prior to *WaySafe*. We considered whether there are differences in how females and males

TABLE 1
Gender Differences on Demographic and Background Factors

| | Females (N = 258) | Males (N = 312) | Total (N = 570) | |
|---|----------------------|--------------------|--------------------|------------|
| Mean Age (s.d.) | 33.8 (9.6) | 34.7 (9.4) | 34.3 (9.5) | n.s. |
| Race | | | | $p = .001$ |
| % African American | 21.4 | 32.0 | 27.2 | |
| % White | 60.7 | 45.4 | 52.3 | |
| % Other | 17.9 | 22.7 | 20.5 | |
| % Hispanic | 17.4 | 21.1 | 19.4 | n.s. |
| % H.S. diploma, GED or higher | 57.0 | 64.4 | 61.1 | n.s. |
| Marital Status | | | | $p = .007$ |
| % Single | 41.4 | 54.2 | 48.4 | |
| % Married | 24.2 | 21.2 | 22.5 | |
| % Divorced/separated | 34.4 | 24.7 | 29.1 | |
| Number of Children | | | | $p < .001$ |
| % None | 18.0 | 31.7 | 25.5 | |
| % 1 to 2 | 39.8 | 42.3 | 41.2 | |
| % 3 or more | 42.2 | 26.0 | 33.3 | |
| In the 6 months before entering this program or being "locked up," were you ever (% yes) – | | | | |
| % employed full time? | 34.4 | 61.2 | 49.0 | $p < .001$ |
| % unemployed and NOT looking for work? | 34.9 | 24.0 | 29.0 | $p = .005$ |
| % receiving any public assistance? | 45.4 | 11.5 | 26.8 | $p < .001$ |
| % arrested? | 66.7 | 56.4 | 61.1 | $p = .012$ |
| % on parole or probation? | 79.8 | 59.7 | 68.8 | $p < .001$ |
| % in jail or prison? | 71.7 | 66.4 | 68.8 | n.s. |
| % treated in an emergency room? | 35.5 | 17.6 | 25.7 | $p < .001$ |
| % treated for a mental health problem? | 38.2 | 7.7 | 21.6 | $p < .001$ |
| % treated for an alcohol use problem? | 9.7 | 11.5 | 10.7 | n.s. |
| % treated for illegal drug use? | 32.3 | 14.8 | 22.8 | $p < .001$ |

TABLE 2
Gender Differences on Knowledge, Confidence, and Motivation Scales at Baseline and Post-intervention

| | Baseline* | | | Post Intervention** | | |
|--------------------------|----------------------|--------------------|-------|----------------------|--------------------|-------|
| | Females (N = 313) | Males (N = 423) | prob. | Females (N = 291) | Males (N = 362) | prob. |
| HIV Knowledge confidence | 40.49 | 38.64 | 0.047 | 44.94 | 44.51 | n.s. |
| Avoiding Sex risk | 40.29 | 37.29 | 0.028 | 44.40 | 44.50 | n.s. |
| Avoiding Drug Risk | 42.70 | 43.05 | n.s. | 46.01 | 45.69 | n.s. |
| HIV Testing awareness | 44.11 | 41.33 | 0.007 | 46.68 | 46.40 | n.s. |
| Risk Reduction Skills | 42.53 | 41.50 | n.s. | 45.70 | 45.34 | n.s. |

* Least squares means are presented accounting for nesting within facilities.

** Least squares means are presented accounting for nesting within facilities and controlling for baseline values.

responded to the *WaySafe* curriculum, taking into consideration their baselines on these measures. Table 2 shows baseline and post-intervention means on the five KCM scales used in the study separately for females and males. Prior to participation in the *WaySafe* curriculum, females reported significantly higher levels of knowledge, confidence, and motivation than did males in terms of HIV knowledge confidence, avoiding sex risks, and HIV testing awareness; females and males did not differ significantly on avoiding drug risks and risk reduction skills at baseline. However, there were not significant differences between females and males on the five post-intervention measures after controlling for the appropriate baseline score. These results show that in spite of pre-existing differences on the KCM measures, and in spite of females reporting much higher levels of background problems, both genders demonstrated about the same levels of improvement on their knowledge, confidence, and motivation for risk reduction after completing the *WaySafe* curriculum.

WaySafe Outcomes for Women's Facilities with Differing Program Lengths

Analyses have demonstrated high levels of baseline dysfunction among the present sample, with females reporting much greater levels than males; in addition, females reported greater knowledge, confidence, and motivation around risk behaviors at baseline than males, but females and males responded similarly to the *WaySafe* curriculum in terms of level of change. Some pre-existing dysfunction measures were associated with amount of change from before to after *WaySafe*, and some of these factors differed between females and males. Our final analysis focused on the three female facilities that differed in program length (4 months, 6 months, or 9 months). We wanted to examine whether program length was associated with amount of change from before to after participation in *WaySafe*. Table 4 shows baseline and post-intervention means on the five KCM scales separately for each of the three female-only facilities. The effect size for baseline/post change for each of the five scales was computed for each of the three facilities.

At baseline, the 4-month program had significantly lower scores on each of the five KCM measures than did the 6-month or the 9-month programs (except for avoiding risky drug use, where the 4-month and 9-month programs did not significantly

differ). However, the 6-month and 9-month programs did not differ at baseline on any of the five measures. At post-intervention, the three programs did not differ significantly on avoiding drug risk. However, on the other four KCM scales, the 4-month program did not differ from the other two programs, but the 6- and 9-month programs did differ significantly. Thus, even though participants in the 4-month program started with lower scores, they essentially “caught up” with the longer programs at the end of *WaySafe*. This is more clearly shown by the effect sizes for change within each program. Effect sizes for change in the 4-month program ranged from 0.84 to 1.12 across the five KCM scales; effect sizes for the 6-month program ranged from 0.35 to 0.63 for the 6-month program and from 0.41 to 0.72 for the 9-month program. Thus, participants in the 4-month program started lower on the scales but showed greater change than the longer-term programs. Effect sizes for all three programs showed moderate to large increases in KCM scores.

Discussion

The present study examined gender differences in a large incarcerated sample who attended *WaySafe* groups toward the end of their prison-based substance abuse treatment prior to release back to the community. Analyses examined gender differences in background and risk factors, in baseline and post-intervention knowledge, confidence, and motivation measures around health risk avoidance, and responses to *WaySafe* across female programs of varying lengths. As expected, there were substantial differences between

males and females at baseline. Females often are not sentenced to prison until they have very serious substance abuse problems or serious criminal behaviors. Conversely, males often are imprisoned for less serious violations. In the present study, the female sample was much more likely to be white, more likely to be divorced or separated, more likely to have 3 or more children, and substantially more likely to have lower employment, to be on public assistance, to have previously been in the criminal justice system, and to have greater mental health and substance use issues. These background differences point to the need for specialized services for many women and support gender-responsive treatment (e.g., Covington & Bloom, 2006) and special interventions such as Seeking Safety, designed to address trauma and PTSD commonly occurring among women with substance abuse issues (Najavitz, 2002).

We examined the implication of these differences between men and women in terms of the effectiveness of *WaySafe*. In spite of substantially greater magnitude of problem areas in employment, health, and substance abuse treatment among incarcerated women, they had significantly higher knowledge, confidence, and motivation at baseline regarding HIV knowledge confidence, avoiding sex risk, and HIV testing awareness. Perhaps women have had more prior exposure to these issues due to significantly higher rates of previous treatment for mental health problems or illegal drug use. Nevertheless, there were no significant differences between men and women after completing the *WaySafe* curriculum, suggesting that *WaySafe* effectiveness is

rather robust to pre-intervention differences, findings that have been reported in other analyses. Although the *WaySafe* curriculum for men and women is identical, the highly interactive nature of *WaySafe* sessions using mapping-enhanced counseling approaches allows same-sex groups to explore issues relevant for each group.

Finally, we also found that although *WaySafe* was effective across the female facilities that differed in program length, women in the short-term (3 month) program had lower scores on all five measures at baseline than women in longer programs, possibly due to women in the longer programs having more exposure to HIV education prior to the beginning of *WaySafe*. However, women in the short-term program “caught up” to women in the mid-term program (6 months) at post-intervention and had much larger effect sizes for change than did women in the longer programs.

WaySafe has been shown in this study and other analyses to effectively improve knowledge, confidence, and motivation around planning for and avoiding health risks. It helps prepare people who are incarcerated and in the last phase of their substance abuse treatment for the risky, post-release period. Although such training is also critical after participants are back in the community, it is often difficult to implement multi-session, interactive group trainings. Subsequently, we used many of the cognitive elements involved in training for risk reduction in *WaySafe* and developed a decision-making training around health risks for people in the community under community supervision. This training, called

TABLE 3
Baseline, Post Intervention Means, and Effect Sizes for Female Facilities with Differing Program Lengths

| | 4 Month (N = 91) | | | 6 Month (N = 91) | | | 9 Month (N = 109) | | |
|--------------------------|---------------------|---------------------|-------------|---------------------|--------------------|-------------|----------------------|--------------------|-------------|
| | Baseline | Post | Effect Size | Baseline | Post | Effect Size | Baseline | Post | Effect Size |
| HIV Knowledge confidence | 39.04 ^a | 44.02 ^{ab} | 1.12 | 40.69 ^b | 43.54 ^a | 0.63 | 41.39 ^b | 44.85 ^b | 0.72 |
| Avoiding Sex risk | 38.10 ^a | 43.75 ^{ab} | 1.01 | 40.83 ^b | 43.21 ^a | 0.63 | 41.91 ^b | 44.27 ^b | 0.61 |
| Avoiding Drug Risk | 41.10 ^a | 45.57 | 0.84 | 43.46 ^b | 45.11 | 0.38 | 43.44 ^{ab} | 45.31 | 0.41 |
| HIV Testing awareness | 42.48 ^a | 46.13 ^{ab} | 0.95 | 44.80 ^b | 45.72 ^a | 0.35 | 44.98 ^b | 46.73 ^b | 0.60 |
| Risk Reduction Skills | 40.89 ^a | 44.83 ^{ab} | 1.07 | 43.09 ^b | 44.65 ^a | 0.53 | 43.42 ^b | 45.58 ^b | 0.65 |

Note: Comparisons across the three facilities were made separately at baseline and at post-intervention (controlling for the baseline score). Facilities that were not significantly different (at baseline or post-intervention) share a superscript (a, b, or c). Facilities that were significantly different do not share a superscript. Thus, at baseline, the 4-month program, with superscript “a” was significantly different from the 6-month and 9-month programs, with superscript “b” on avoiding sex risk, and the 6- and 9-month programs did not significantly differ. For avoiding drug risk at baseline, the 4-month program did not share a superscript with the 6-month program indicating significant differences. However, the 9-month program was not significantly different from the 4-month program (they shared the superscript “a”) or the 6-month program (they shared the superscript “b”).

StaySafe, is designed to be self-administered on tablet computers using an evidence-based approach based on analytically created schemas (ACS). We have implemented *StaySafe* in community supervision samples in several large probation departments and have found effects similar to *WaySafe* in terms of improving HIV knowledge confidence, avoiding risky sex, HIV testing awareness, and risk reduction strategies (see Lehman et al., 2018 for more information regarding *StaySafe*). In addition, qualitative interviews and analysis (see Pankow et al. in this issue) show how the knowledge base and decision-making training provided in *StaySafe* has led to increased awareness of HIV issues and resulting behavior changes in terms of motivation for HIV testing and relating to others who are HIV+, and to using the decision-making training for self-regulation of their behavior.

Limitations

Several limitations about this study should be noted. Although the study took place at eight different prison facilities in two different states, these facilities may not be representative of other facilities in other regions of the country or even within the same states. All responses on the TCU A-RSKForm and the baseline and post-intervention surveys were self-report, and the outcome KCM measures are based on attitudes measured prior to release from incarceration and may not predict risk reduction or other behavior change in the community.

Conclusions

This study found significant gender differences in background and risk factors and in baseline knowledge, confidence, and motivation factors. However, these results also suggest that the effectiveness of *WaySafe* is rather robust given that, in spite of pre-existing differences in background and baseline attitudes, there were no significant gender differences on post-intervention measures, meaning that both males and females benefited from the *WaySafe* curriculum in equivalent ways. In addition, results showed that females benefited from *WaySafe* across programs with substantial program length differences. In conclusion, *WaySafe* is a useful tool for helping to shape participants' knowledge, confidence, and motivation to avoid risks around health issues to help prepare them to plan for and avoid risks in the community. These results directly led to the development and implementation of a community-based tool, *StaySafe*, which

built on the concepts included in *WaySafe* but extends them to those in the community under community supervision.

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