

A Mixed-Method
Process Evaluation of
an Intervention to
Improve Social
Reactions to Disclosures
of Sexual Assault and
Partner Abuse

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Abstract

Because of the high rates and deleterious consequences of sexual assault (SA) and partner abuse (PA) on college campuses, there is a proliferation of programming to both prevent and respond to these issues. Most research to date, however, presents outcome evaluation data on these programs and neglects to present process evaluation data which are critical for program refinement and dissemination. The purpose of this study was to present process evaluation data (i.e., acceptability and feasibility) specific to a program

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that endeavored to increase positive and decrease negative social reactions from disclosure recipients to individuals disclosing SA and PA. Participants were 303 students who completed the program and participated in postintervention surveys and a subset of students (n=18) who completed exit interviews. Results documented that the program was both feasible and acceptable, as evidenced by high satisfaction ratings. Important suggestions were also provided for how to improve the program, such as reducing repetition and making scenarios more realistic. Finally, participants who reported higher program engagement and more program usage generally reported more intentions to provide positive social reactions, less intentions to provide negative social reactions, and less actual negative social reactions. This information is useful not only for adapting the current program discussed herein but also for program developers and preventionists wishing to create similar programming to effectively prevent and improve response to SA and PA.

Keywords

domestic violence, sexual assault, PTSD, youth violence, mental health and violence

Sexual assault (SA) and partner abuse (PA) are prevalent (Krebs et al., 2009; Shorey et al., 2008) and lead to numerous negative outcomes (Banyard et al., 2017; Dworkin et al., 2017; Exner-Cortens et al., 2013) among college students. One way to buffer the negative effect of SA and PA on victims may be to decrease the negative reactions (e.g., blaming the victim and taking control of decisions) victims often receive when they disclose SA or PA to friends (Orchowski et al., 2013; Peter-Hagene & Ullman, 2014). These reactions from friends and family are called social reactions from informal supports (Ullman, 2010). Thus, programs that teach college students how to respond to victims' disclosures are promising in improving victim outcomes (Edwards et al., 2020). However, as with any area of prevention/intervention science, developing programs that are effective, acceptable, and engaging to participants is both challenging and important. In this article, we present findings from a process evaluation study examining aspects of program implementation such as acceptability to and engagement of participants. The program was intended to improve social reactions among college students receiving SA or PA disclosures.

Social Reactions to Disclosure

Approximately one half of college students have been the recipient of a disclosure of SA or PA (Edwards & Dardis, 2016). Upon receiving a disclosure of SA or PA, disclosure recipients can provide positive social reactions such

as believing the victim or validating the victims' emotions. They can also provide negative social reactions such as blaming the victim, not believing, or taking control of the victim's decisions (Ullman, 2010). In addition, social reactions can be related to alcohol. Alcohol-related social reactions can also be positive (e.g., telling the victim that drinking does not make it their fault) or negative (e.g., telling the victim they should not have drunk so much; Relyea & Ullman, 2015). Negative social reactions are associated with negative victim outcomes such as self-blame, posttraumatic stress disorder (PTSD), depression, and problem drinking (Jacques-Tiura et al., 2010; Peter-Hagene & Ullman, 2014). Indeed, a recent meta-analysis found that negative social reactions are associated with victim psychopathology (Dworkin et al., 2019). Unfortunately, such negative social reactions are common, with more than 80% of victims reporting at least one negative reaction (Ahrens & Aldana, 2012). Furthermore, many college students who have received a disclosure feel that they did not do a good job helping their friend (Banyard et al., 2010).

Thus, improving disclosure recipients' social reactions may improve victim outcomes, given past research showing that negative social reactions that are associated with PTSD and depression (Dworkin et al., 2019). The current program, Survivors and Self: An Intervention for Social Supports of Survivors of Partner Abuse and Sexual Aggression (SSS; Edwards et al., 2020), was intended to increase positive social reactions and decrease negative social reactions among college students who were recipients of an SA/PA disclosure. Full details on the theory and rationale behind the program are provided in Edwards and colleagues (2020). In brief, the SSS program covered skills to provide positive social reactions, opportunities for role-play, and emphasized the importance of balancing self-care with responding to the needs of SA and PA victims. SSS was co-facilitated by two trained facilitators who led groups of approximately 20 students. The program included instructional and multimedia components, large group discussions, and scenarios where participants practiced responses in pairs. The initial, 2-hour session was followed 1 month later by a 90-minute booster session that included review of core skills and opportunities for additional skills practice. SSS was guided by an acronym (HEARSS-Hearing, Empathy, Align, Resources, Stick with feelings, Support oneself).

Results from the outcome evaluation of the SSS intervention (N=1,268; Edwards et al., 2020) suggested that intentions to provide positive social reactions significantly increased among participants in the treatment group compared to the control group. Moreover, there were marginally significant effects in the anticipated directions for alcohol-specific intended social reactions. However, no overall difference was observed across conditions in actual social reactions provided. Moderation analyses

suggested that, in general, the SSS intervention worked better for students who were younger, male, non-White, sexual minorities, and/or nonvictims. Moderation analyses also suggested that the intervention varied in efficacy depending on the circumstances of the disclosure. A process evaluation of the SSS intervention is especially warranted to help further understand these mixed findings.

Process Evaluation

Process evaluation, or the evaluation of implementation, should be included alongside outcome evaluation as a key part understanding effective prevention (Densley et al., 2017). Process evaluation opens the "black box" of prevention by yielding insights about how and why the program is or is not successful (Harachi et al., 1999). For interventions to achieve widespread impact, they must be disseminated widely beyond efficacy trials; using process evaluation, preventionists can understand barriers and enablers to further dissemination (Spoth et al., 2013). Process evaluation also results in valuable information about how to revise and adapt a program based on these barriers and to refine the intervention for new settings. Given the value of process evaluation, it is not surprising that projects that gather information related to process tend to produce larger outcome effects than projects not gathering such information (Durlak & DuPre, 2008). A process evaluation of one particular program may also provide critical insights regarding the development or refinement of other similar programs. Thus, findings from a process evaluation study can extend to other programs beyond the one under study. For example, findings from this process evaluation will provide information about general aspects of the program not specific to content such as facilitation, program length, and preference for interactive activities.

Process evaluation may include examination of acceptability to participants, program engagement, and usage among participants. Acceptability describes how participants react to the program, the extent to which they find it acceptable, and how they think the program could be improved (Bowen et al., 2009). Including acceptability in process evaluation is consistent with calls to include participant voices, particularly the voices of young participants, in program development (Edwards et al., 2016). In addition, a program must be acceptable to participants for dissemination of that program to be feasible (Bowen et al., 2009; Spoth et al., 2013). Engagement with programming describes the degree to which participants think about and are motivated by the program. This conceptualization of engagement is consistent with elaboration likelihood model (Petty & Cacioppo, 1986), which states that an individual who actively processes material is most likely

to be influenced by it, leading to attitude or behavior change. Usage of the program is the degree to which participants remember and practice the program material.

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Process evaluation is key to gaining information that will improve both the implementation and effectiveness of future prevention initiatives, and to understanding how program implementation affects outcomes. In keeping with three elements of process evaluation (acceptability, engagement, and usage), our first three aims address acceptability and our last aim addresses engagement and usage. In this article, Aim 1 was to examine acceptability of the SSS program to participants. Aim 2 was to identify positive aspects of SSS to be replicated in future implementation, and Aim 3 was to identify negative aspects of SSS to be refined in future implementation. Aim 4 was to examine the association of program engagement and usage with study outcomes. We utilize a mixed-methods approach with four different forms of data to achieve these aims: (a) closed-ended data collected in surveys that immediately followed the program (i.e., postprogram surveys), (b) short-answer question data collected in the same postprogram surveys, (c) exit interviews conducted with a subset of program participants 6 months after the initial programming session, and (d) survey data collected 6 months after the initial programming session. See Table 1 for a summary of aims and forms of data.

Methods

Procedures at Study Initiation

The study took place at a residential, medium-size public university in the northeastern United States and received approval from the university's Institutional Review Board. The university's Dean of students sent emails to randomly selected, full-time, undergraduate students on the behalf of the researchers. These emails were sent via mass email to 7,000 students (approximately 50% of the student body) in four batches across 4 weeks in the fall of 2018. Emails included information about the study and a direct link to an online (Qualtrics) survey. The email informed students that the survey was 20 minutes long and would ask about how they may have helped friends with difficult sexual and/or relationship experiences. Students who did not respond to this initial email were sent one to two reminder emails across 2 weeks if they had not yet completed their survey. The purpose of the initial survey was to assess baseline positive and negative social reactions, along with other outcomes relevant to the outcome evaluation (e.g., victim blaming).

n	Forms of Data	N	Time	Graphic
Examine acceptability of the SSS program to participants	Postprogram surveys (closed-answer questions)	303	Immediately after intervention	Figure I
Identify positive aspects of SSS to be replicated in future	Postprogram surveys (short-answer questions)	303	Immediately after intervention	Table 2
implementation	Exit interviews	18	Two weeks after 6-month follow-up survey	
Identify negative aspects of SSS to be refined in future	Postprogram surveys (short-answer questions)	303	Immediately after intervention	Table 3
implementation	Exit interviews	18	Two weeks after 6-month follow-up survey	
Examine the association of program engagement and usage with study outcomes	Six-month follow-up survey	259	Six months after intervention	Table 4
	of the SSS program to participants Identify positive aspects of SSS to be replicated in future implementation Identify negative aspects of SSS to be refined in future implementation Examine the association of program engagement and usage with study	Examine acceptability of the SSS program to participants Identify positive aspects of SSS to be replicated in future implementation Identify negative aspects of SSS to be refined in future implementation Identify negative aspects of SSS to be refined in future implementation Examine the association of program engagement and usage with study Postprogram surveys (short-answer questions) Exit interviews Six-month follow-up survey	Examine acceptability of the SSS program to participants (closed-answer questions) Identify positive aspects of SSS to be replicated in future implementation Identify negative aspects of SSS to be refined in future implementation Identify negative aspects of SSS to be refined in future implementation Postprogram surveys (short-answer questions) Exit interviews I8 Examine the association of program engagement and usage with study	Examine acceptability of the SSS program to participants (closed-answer questions) Identify positive aspects of SSS to be replicated in future implementation Identify negative aspects of SSS to be refined in future implementation Identify negative aspects of SSS to be refined in future implementation Exit interviews Is Two weeks after 6-month follow-up survey (short-answer questions) Exit interviews Is Two weeks after intervention Immediately after intervention

Table I. Aims and Corresponding Forms of Data.

Note. SSS = Survivors and Self: An Intervention for Social Supports of Survivors of Partner Abuse and Sexual Aggression.

Students receive many university-sponsored emails, some of which they may ignore or delete. Thus, to increase enrollment, we also recruited in a second manner that was more personal. In addition to the random selection of emails, we also sent an email from the research team to all professors at the University with classes more than 60 students (n = 205), as identified by the course catalog. We provided all university professors study information with recruitment messaging. At least 11 professors confirmed with us that they forwarded information to their students, mostly by email, although it is likely that more did so without responding back to the research team. Upon professors' request, we visited approximately five classrooms to pass on the information. Finally, we posted fliers about the study in residence halls and other shared spaces. Overall, 1,831 students started the survey, of which 1,268 qualified for, consented to, and completed the survey. Of these 1,268 participants, 994 heard about the survey from the email, resulting in a 14.2% response rate from the emails. The remaining 274 participants heard about the survey in other ways (e.g., fliers and class).

Qualtrics randomized participants into intervention and control groups. Participants were initially randomized at a 50/50 rate to the intervention and control conditions. However, we found that rates of intervention attendance were

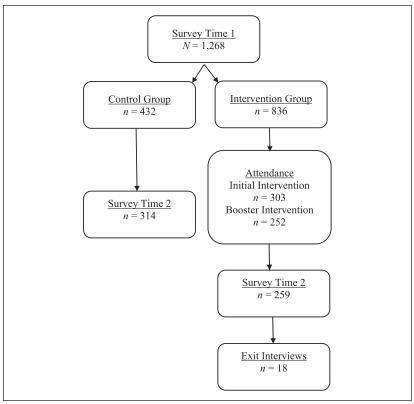


Figure 1. Participant retention and recruitment across data collection time points and data collection methods.

lower than expected. Thus, to achieve desired numbers of intervention participants, when we reached more than 400 in the control group, we began assigning 100% of participants who were randomly selected to be emailed by the university's Dean of students to the intervention group. As participants recruited via professors and fliers were not randomly selected, these participants were always randomized 50/50. Thus, 65.9% of participants were assigned to the intervention condition (n = 836) and 34.1% were assigned to control (n = 432).

Postprogram Survey: Used for Aims 1, 2, and 3

Postprogram survey procedures. See Figure 1 for a flow diagram of participation. Of our final 1,268 participants, 65.9% of participants were assigned to the intervention condition (n = 836) and 34.1% were assigned to control

(n=432). Of participants invited to the intervention (n=836), 303 attended the initial session and filled out postprogram surveys (36.2%), and of those who attended the initial session, 252 attended the booster session (83.1%). This article only uses data from the 303 participants who attended the initial session (see Waterman and colleagues [2020] for what predictors of uptake). Participants who did not attend the initial (first) intervention session were not eligible to attend the booster session. Immediately following initial and booster sessions, participants completed a brief paper postprogram survey. As this survey asked questions about the program facilitators, the facilitators left the room, and the survey was conducted by a research assistant who was not involved in the facilitation of any programming. Participants received \$25 in cash for attending each program session and completing the postprogram survey.

Postprogram survey participants. Of participants who completed the postprogram surveys after the initial session (n = 303), the mean age of participants was 19.5 (range = 18-23, SD = 1.2). In regard to class year, 27.1% were in their first year (n = 82), 29.4% were in their second year (n = 89), 24.4% were in their third year (n = 74), 18.8% were in their fourth year (n = 57), and 0.3% were in their fifth year or beyond (n = 1). Over two thirds of students identified as a woman (78.5%; n = 238), 20.5% identified as a man (n = 62), 0.7% identified as gender variant and/or gender queer (n = 2), and 0.3% identified as another gender (e.g., transgender male; n=1). Participants were 93.0% White (n=280), 7.6% Asian/Asian American (n = 23), 1.3% Black/African American (n = 4), 1.0% American Indian or Alaska Native (n = 3). Regarding ethnicity, and 3.3% were Hispanic/Latino (n = 10). Participants were 82.1% heterosexual (n = 248), 8.9% bisexual (n = 27), 2.3% gay (n = 7), 2.0% not sure (n = 6), 1.7% asexual (n = 5), 1.0% pansexual (n = 3), 1.0% lesbian (n = 3), and 1.0% identified with something else (e.g., demisexual; n = 3).

Postprogram survey measures. Participants responded to the Client Satisfaction Questionnaire-8 (CSQ-8) (Attkisson & Zwick, 1982), an eight-item standardized measure of program acceptability with items such as, "How would you rate the quality of the service you received?" on a scale from Poor (1) to Excellent (4). Participants also responded to 11 researcher-created items assessing various aspects of acceptability, such as "The scenarios presented were realistic" on a scale from Strongly disagree (1) to Strongly agree (5). Some of these items were adapted from Gidycz and colleagues (2006, 2015) based on the elaboration likelihood model (Petty & Cacioppo, 1986). All response items were tailored to the question. Finally, we asked

participants to respond to two short-answer questions: "What did you like about this program," and "What recommendations would you suggest to improve the program?"

Exit Interviews: Used for Aims 2 and 3

Exit interviews procedure. We used purposive sampling to invite participants who had attended at least one intervention session to exit interviews which occurred approximately 2 weeks after the final, 6-month follow-up survey. Purposive sampling was based on participants' responses to the follow-up survey; the follow-up survey measures are described below. We only invited participants who had reported, on their follow-up survey, having received at least one SA or PA disclosure. Participants then reported the social reactions to SA/PA disclosure they provided on a scale described below. We invited all participants who reported providing at least one negative social reaction to the disclosure on their follow-up survey, all participants who reported providing a positive social reaction on their follow-up survey (if they had on the baseline survey reported providing a negative social reaction), and a random selection of participants who reported only positive social reactions on both surveys. This sampling frame was used to gather perspectives from participants reporting an array of responses, including participants that seemed to benefit from the programming as well as participants who did not. As we collected postprogram surveys, we invited more participants and conducted interviews until the data were saturated (i.e., responses were replicated with few new or additional themes identified; Morse et al., 2002). The audiotaped interviews were transcribed by the third author. Of the 78 who were invited in total, 18 (23.1%) were interviewed. All interviews were conducted by the first author. Participants were compensated with a \$35 gift card for participating in the approximately 30-minute interviews. According to a series of t-tests and chi-square tests, exit interview participants were not significantly different on demographics from other intervention participants.

Exit interview measures. Exit interviews were conducted using a structured interview guide. Participants responded to questions about their motivation for attending, aspects of the program they liked and disliked, their overall reaction, if they have used what they learned and how, and their thoughts on the booster session. At the end of the interview, we asked specifically about the disclosure situation that participants reported on in their survey and why participants responded in the ways that they reported.

Six-Month Follow-Up Survey: Used for Aim 4

Follow-up survey procedures. Following the baseline survey (N=1,268), we implemented a 6-month follow-up survey. All participants received the follow-up survey via email approximately 6 months after their initial intervention session and \$25 gift cards for completing it. According to a series of t-tests and chi-square tests, participants who completed the follow-up survey were not significantly different on demographics from intervention participants who did not complete the follow-up survey.

Follow-up survey measures. To determine whether program engagement and usage were associated with study outcomes, participants answered questions program engagement, program usage, actual and intended positive and negative social reactions, and three intermediary outcomes (i.e., confidence, empathy, and blame).

Program engagement. Participants responded to four researcher-created items on a scale from Strongly disagree (1) to Strongly agree (5). The prompt was, "Please think back to the SSS workshop you completed about 6 months ago. In the time since the workshop . . . ," and items were "I thought about the workshop content," "I tried to process the workshop content," "I felt the workshop content was important to me," and "I felt motivated to use the skills I learned in the workshop." Some of these items were adapted from Gidycz and colleagues (2006, 2015). Engagement scores were created by taking a mean of the items; reliability was $\alpha = .89$.

Program usage. Participants responded to seven researcher-created items. The prompt was, "How have you used the information you received in the workshop in the past six months? (Please check all that apply)." Participants selected up to seven responses that reflected program content, for example "I used positive listening skills (i.e., eye contact, open body language) when talking with others about their problems," "I knew what responses were empathetic and not empathetic to a survivor's disclosure," and "I understood the importance of setting boundaries and talking time for myself." We calculated a sum of the items as the program usage score.

Actual and intended social reactions. To assess participants' responses to disclosure, they responded to an initial version of the Social Reactions Questionnaire—Shortened (Ullman et al., 2017; Ullman & Relyea, 2014). Participants who were not disclosure recipients were asked questions about how they would respond to a friend or family member who told them about an SA and/or PA experience; disclosure recipients were asked questions about their actual

behavior. Although this scale has been used widely in previous research on victim-reported social reactions, we adapted the scale for this study to assess recipient-reported social reactions. Thus, we performed exploratory factor analyses with half the sample, which suggested a two-factor solution. We then performed confirmatory factor analyses to confirm the two-factor solution. The two factors were negative reactions (10 items; e.g., "Told them that they were irresponsible or not cautious enough"; "Tried to take control of what they did/decisions they made"), and positive reactions (4 items; e.g., "Listened to their feelings"). Response items ranged from 1 = never/extremely unlikely to 5 = always/extremely likely. Final score on the subscales was a mean of items. Reliability for actual/intended was (for broader sample) $\alpha = .85/.84$ for negative reactions, and $\alpha = .70/.74$ for positive reactions.

Participants also responded to the Social Reactions Questionnaire-Alcohol (Relyea & Ullman, 2015). Disclosure recipients answered questions about their actual behavior (if they reported that the victim had been drinking at the time of the experience), and disclosure nonrecipients answered questions about their intended behavior. This questionnaire includes two subscales: negative alcohol reactions (six items; e.g., "Told them the experience was their fault because they were drinking when it happened"), and positive alcohol reactions (two items; e.g., "Said that they should have been able to go out and have a drink without worrying about something like that happening"). Response items ranged from 1 = never/extremely unlikely to 5 = always/extremely likely. Final score on the subscales was a mean of items. Similarly, we adapted the scale for recipientreported reactions (as opposed to victim-reported reactions), and our factor analyses indicated a two-factor solution as indicated in previous research (Relyea & Ullman, 2015). Reliability for actual/intended was $\alpha = .89/.88$ for negative, and $\alpha = .61/.49$ for positive reactions.

Intermediary outcomes (confidence, empathy, and blame). Participants responded to three items created for this study on a scale from *Strongly disagree* (1) to *Strongly agree* (5): "I feel confident that I could help a friend who has been a victim of intimate partner abuse and/or sexual assault," "I feel empathy for victims of intimate partner abuse and sexual assault. (Empathy is the ability to understand and share the feelings of another)," and "Victims of intimate partner abuse and sexual assault are at least partly responsible for what happened to them."

Analysis Plan

Aim 1: Acceptability of the SSS program. Data for Aim 1 came from closedended questions on the postprogram survey. We recoded all reverse items so that a higher response indicated a more positive response or a response that indicated higher acceptability. We calculated a mean for each question for both the initial and booster session.

Aim 2: Positive aspects of the SSS program. Data for Aim 2 came from shortanswer questions on the postprogram survey and from exit interviews. The relevant short-answer question on the postprogram survey ("What did you like about this program") was coded using conventional content analysis (Hsieh & Shannon, 2005) by the first and third authors. Conventional content analysis was fitting for the short-answer questions because responses were succinct, and content analysis allowed us to quantify the frequency of responses. The first and third authors first read all responses and discussed the diversity of responses that were present in the short-answer questions. This discussion resulted in a provisional codebook, which was used by the coders to code a subsection of the data (appx. 10% of the responses) individually. Coders created a final codebook based on a discussion of the subsection coding (Hsieh & Shannon, 2005). Then, the first and third authors individually coded all of the short-answer data using this final codebook, where each short-answer question was assigned, for each response, 0 = code not present or 1 = code present. Codes were not mutually exclusive. We calculated Cohen's kappa as a measure of interrater reliability. Cohen's kappa ranged from .85 to 1.00 for this question (including both initial and booster postprogram questions), indicating good reliability between coders. Finally, the coders met and resolved all discrepancies, resulting a final list of codes. Thus, Cohen's kappas are based on initial ratings, whereas the final codes are based on a group discussion following coding.

Although the responses from short-answer questions on the postprogram survey were succinct, the exit interviews were much longer and were conversational between the interviewer and interviewee. Thus, instead of quantifying these data using content analysis, we used a thematic analysis approach (Vaismoradi et al., 2013) to obtain the gestalt of the data. First, the third author pulled out responses from each interview and organized these responses by their corresponding question on the structured interview guide. Then, the first and third authors read each group of responses and created a list of major themes that arose during the interviews. The coders then met to discuss the major themes that arose in each group of responses. Major themes were agreed on during discussion and listed along with examples of each theme. For the purposes of the current aim, we attend to those themes regarding positive aspects of the program.

Aim 3: Negative aspects of the SSS program. Data for Aim 3 came from short-answer questions on the post-program survey and from exit interviews. Data analysis for Aim 3 was similar to Aim 2 such that we used content analysis,

except that the relevant short-answer question on the post-program was, "What recommendations would you suggest to improve the program?" Cohen's kappa ranged from .80 to 1.00 for this question, indicating good reliability between coders. However, two codes were exceptions—the alphas for "large group discussion" were .58/.65 for the initial/booster, and the alphas for "fewer partner activities" were .68/.63 for the initial/booster. Differences in interpreting these codes led to this low reliability; coders discussed and resolved these differences when they met to create a final list of codes. Data analysis for the exit interviews was similar to Aim 2, except that we attend to those themes regarding negative aspects instead of positive aspects of the program.

Aim 4: Program engagement and usage. Data for Aim 4 came from the quantitative follow-up survey. We conducted bivariate correlations to examine the associations of program engagement and program usage obtained from the follow-up survey with primary (positive and negative social reactions; positive and negative alcohol-related social reactions) and intermediary outcomes (confidence, efficacy, and blame).

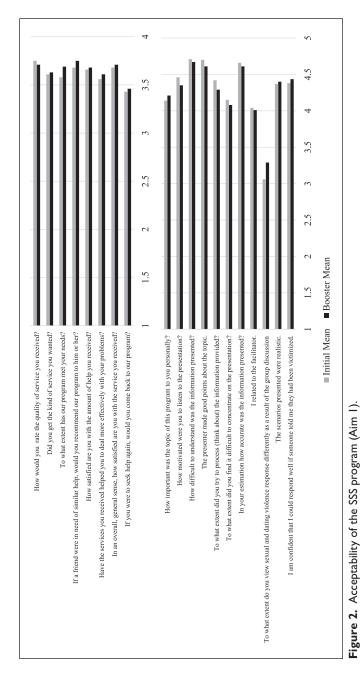
Results

Aim 1: Acceptability of the SSS Program

Figure 2 depicts the means for each close-ended question related to acceptability of the SSS program. Acceptability was high. The means were above 3 on a scale of 1 to 4 for the CSQ-8 items, and, with one exception, above a 4 on a scale of 1 to 5 for the researcher-created items.

Aim 2: Positive Aspects of the SSS Program

Table 2 describes coding results from the 6-month follow-up survey for the question, "What did you like about this program?" Participants most often mentioned that they liked the facilitators and atmosphere of the program. Other frequently mentioned themes were that participants liked the information provided/topic, the interactive nature of the program, the scenarios, and that the program was easy to understand. The positive aspects of the initial session and booster session were similar. However, notably, 11.1% of participants mentioned videos in the initial session, whereas no participants mentioned videos in the booster session, and 7.7% of participants mentioned preparation for real life in the initial session, whereas 16.3% of participants mentioned preparation for real life in the booster session.



The first eight items were from the CSQ-8 (Attkisson & Zwick, 1982) and the remaining questions were researcher-created. SSS = Survivors and Note. We recoded all reverse items so that a higher response indicated a more positive response or response that indicated more acceptability. Self: An Intervention for Social Supports of Survivors of Partner Abuse and Sexual Aggression.

Table 2. Short-Answer Response Results Regarding Positive Aspects of the SSS Program (Aim 2).

Theme	Example	% in Initial	% in Booster
Facilitators and atmosphere	"I loved the way topics were presented and I loved the facilitators, they were engaging and relatable"	29.5	28.7
Information and topic	"I liked all the information and resources given and how informed the presenters were on the topic"	20.8	21.1
Interactive nature of the program	"I liked that it was extremely interactive, I was never bored or not engaged"	18.1	13.4
Easy to understand	"It was very open and professional yet easy to follow and comfortable"	15.4	17.8
Preparation for real life/helpful	"It teaches a valuable skill that can be used to help others and make me a better friend"	7.7	16.3
Examples, specifically scenarios	"I liked that the scenarios were very realistic and common"	16.1	14.6
Examples, generally	"There was so much information and examples that were easy to understand and relatable"	11.4	5.7
Examples, specifically videos	"I loved the video comparisons because they were relatable"	11.1	0
Participation, generally	"Made me feel very comfortable sharing my thoughts"	6.7	5.3
Participation was voluntary	"I liked how participation was optional, thus not intimidating to attend the workshop"	5.4	6.5
Universal beyond SA and PA	"The information provided is applicable to more than just the specific topic, like I feel like I can be a much better listener and friend in all situations"	2.0	4.9
Participation was encouraged	"I really like how the presenters encouraged discussion"	1.3	1.6
Negative	"The first session had a more professional facilitator"	0.7	0.8

Note. Although the n for postprogram surveys was 303, not all participants answered this question; some left it blank. Thus, percentages are the valid percentages among participants who responded to this particular question (n=298 initial; n=247 booster). Participants who gave no response (n=5 initial; n=56 booster) are not included in the denominator. Examples are depicted exactly as written by the participant. SSS = Survivors and Self: An Intervention for Social Supports of Survivors of Partner Abuse and Sexual Aggression; SA = sexual assault; PA = partner abuse.

In exit interviews, participants identified a number of positive aspects. Consistent with the short-answer questions, participants liked the interactive nature of the program, including small group/partnered activities, and group

discussion. For example, "I think class discussion really engaged people and gave people an opportunity to speak and learn more from each other and like, from the facilitators a bit." Participants liked that the scenarios were applicable to real life and depicted a diversity of situations (e.g., "I did like the making sure that, you know, men and women and all genders and sexual preferences are noted, that it can happen to anybody"). Participants enjoyed the videos and thought the content was helpful (e.g., "I would say a lot of the resources and stuff was helpful . . . identifying resources is one of the first steps in getting help, and like, just knowing of them. So, that information's really good"). Also consistent with the short-answer questions, participants often stated that they enjoyed the comfortable atmosphere created by the facilitators—in fact, when asked about an aspect of the program they most remember, participants often cited the facilitators (e.g., "They were just really, like, kind. And you could tell that they were very caring people and trustworthy. They never made me feel uncomfortable. Very easy to talk to").

The SSS program was delivered using a guiding acronym. Participants said that they liked this acronym, for example, "I liked that we were given the acronym with the specific things. Cause I think it makes it way easier to remember . . . [the acronym] stuck with me a little bit more, I think." In addition, during the SSS program, we gave out a variety of snacks as well as merchandise with the SSS logo and/or acronym. Participants often mentioned the snacks as something they liked. In regard to merchandise, some products were liked better and more often used than other products. One thing participants could take was a magnet with the acronym; many participants put this magnet up at home, and some reviewed periodically (e.g., "I still have the magnet on my fridge in my room. And I've actually had a couple of people who've come over like, ask about it, which was kinda cool. I just, um . . . like, explained what it was and that it's for, like, possible victims of sexual assault or any kind of violence"). We also gave out a notepad, which participants said was useful. Finally, we distributed handouts of information regarding resources to which they could refer victims. Participants said this information was helpful (e.g., "I also appreciated all of the informational stuff that you guys gave out, like the paper. It was nice to like, have a physical copy of things").

Finally, a positive aspect of the program was how the content helped participants with subsequent disclosures. Participants stated that the program increased their confidence in handling these situations ("I find myself more confident in telling that person to seek actual professional help. Yeah, it definitely gave me a confidence boost"). They reported learning skills like body language, eye contact, referring to resources, showing empathy, and checking in later with the victim ("I really tried to just like, sit down, listen to what she said; I made sure I wasn't on my phone or anything. Like, I was paying

attention and just trying to like, mirror how [my friend] was feeling. And, um . . . made sure that she knew it wasn't her fault at all"). In addition, participants said the program helped them identify red flags or warning signs that someone might need help, and the importance of not blaming victims (". . . realizing that you don't want to victim blame. You don't want to like, make the victim feel more [suffering]—just do more harm than they're already going through"). Participants also said that they learned it was important not to tell the victim what to do, although they said it was difficult not to give advice ("It was tough. Because I like, wanted to do the best things for [my friend], but at the end of the day, it's not my decision").

Aim 3: Negative Aspects of the SSS Program

Table 3 describes the results of short-answer response coding for the question, "What recommendations would you suggest to improve the program?" Participants most often mentioned that they had no suggestion for improvement (just over 30%), that they wanted more interactive participation, that the program should have more or different scenarios (such as more scenarios with male victims), and that the program should be shorter or have a faster pace. Negative aspects of the initial session and booster session were similar.

In exit interviews, although participants generally had a positive impression, they suggested a number of areas for improvement. Among participants who had an overall negative view of the program, it was primarily due to the heaviness of the topic matter (e.g., "I actually don't like talking about that kinda stuff, and I think that it's definitely like, difficult to put your input on it without kinda remembering and feeling like, 'Oh, yeah. That happened"). Participants often thought the program was too repetitive and too slow (e.g., "I think there was a lot of repetitiveness and a lot ofsome points were like, lecturing, and I think that was a little bit, like, a lot to listen and retain the entire time"; "The slideshow was a little bit repetitive. It seemed like every time they went over something, even though it really was instilled in us, it was just stuff that they already said"). In particular, according to participants, the booster session did not add any new material and could focus more on different scenarios (e.g., "It was like, a lot of review. Um, but I don't know if it was necessarily needed, because I don't really remember much from it"; "Less PowerPoint and more like, active learning. Maybe you can do like, an activity, a game, or like, a large scenario to get the class going"). Although participants cited scenarios as something they liked, some participants offered suggestions for changing scenarios, such as having more complex scenarios such as how to deal with

Table 3. Short-Answer Response Results Regarding Negative Aspects of the SSS Program (Aim 3).

Theme	Example	% in Initial	% in Booster
No suggestion/nothing	"Nothing, I am extremely grateful and happy I was able to attend"	31.2	32.3
More interactive participation	"More interactive activities that require more brainstorming"	13.4	16.2
More or different scenarios	"I would suggest going through even more scenarios. They taught me more on how to react in different situations"	10.3	11.9
Shorter program or faster pace	"Shorten it a bit. It is hard to sit for two hours"	9.2	6.8
More group discussions	"Maybe it could be more discussion based, because it's easier for engagement to occur this way"	5.5	8.9
More information	"Extremely vague program, clarification would have been useful"	7.9	6.4
Fewer partner activities	"The partner activity was kinda awkward and not well explained"	6.8	3.8
More male or other representation	"Have a scenario displaying a male friend coming to you about sexual/relationship abuse and assault"	4.8	3.8
Better facilitation	"Speak louder and be clear while talking. This would be very beneficial in keeping everyone engaged"	4.8	3.4
Less awkward	"I would recommend a way to make things more comfortable like an icebreaker"	4.1	2.1
Hear from survivors	"Hearing from actual survivors would have been very cool"	3.1	0.9
Earlier in the day	"Perhaps not have it in the evening if possible. May be better and more engaging if it was light out"	1.4	2.1
Less group discussions	"More activities that don't involve discussion. Maybe worksheets"	1.4	0.9
Less repetition	"I think the second session was very repetitive. I feel like I did not learn anything new"	1.0	6.0

Note. Although the n for postprogram surveys was 303, not all participants answered this question; some left it blank. Thus, percentages are the valid percentages among participants who responded to this particular question (n=292 initial; n=235 booster). Participants who gave no response (n=11 initial; n=68 booster) are not included in the denominator. Examples are depicted exactly as written by the participant. SSS = Survivors and Self: An Intervention for Social Supports of Survivors of Partner Abuse and Sexual Aggression.

disclosure over the phone, or having fewer scenarios focusing on alcoholrelated situations (e.g., "I didn't like the examples that we walked through. I think 'cause all of them involved alcohol in some way. And while that's very prevalent, I feel like it's one of those things where it's very obvious what to do and what not to do when someone's drunk").

Although participants liked the interactive nature of the SSS program, they said that paired practice and group discussion were often awkward or forced. For example, "... Sometimes, it felt like discussions were forced a bit too much... Sometimes it just felt like they wouldn't continue until someone said something." Some participants said that discussion might be better if the program was not implemented with a room of strangers, and rather was implemented via student organizations. A few participants had complaints about the facilitators, for example, "Enthusiasm from the people that are running it would help... it sometimes felt a little bit repetitive and like they had a script. It felt kinda boring sometimes." Finally, although most participants kept some merchandise, other participants did not take any products or threw them away. In particular, we gave away a keychain light with the program acronym on it, and this light was rarely mentioned by participants as something they took and used.

Aim 4: Program Engagement and Usage

Table 4 presents bivariate correlations of program engagement and usage with primary and intermediary study outcomes. Participants who reported more program engagement reported more intended positive, less intended negative, and less actual negative alcohol-related social reactions than participants who reported less program engagement. They also reported more confidence and empathy toward victims than participants who reported less program engagement. Participants who reported more program usage reported more intended and actual positive, less intended and actual negative, and less intended and actual negative alcohol-related social reactions than participants who reported lower program usage. They also reported more confidence and less blame toward victims than participants who reported less program usage.

Discussion

The purpose of this article was to conduct a process evaluation (i.e., evaluating aspects of program implementation such as acceptability to and engagement among participants) of a program that aimed to increase positive and

Outcome	Program Engagement	Program Usage
Intended social reactions		
Positive	.27**	.26**
Negative	18*	23*
Positive alcohol-related	.04	.09
Negative alcohol-related	11	21*
Actual social reactions		
Positive reactions	.16	.32***
Negative reactions	21*	28**
Positive alcohol-related	.03	.30
Negative alcohol-related	09	46**
Intermediary outcomes		
Confidence	.22***	.24***
Empathy	.19**	.12
Blame	11	14*

Table 4. Bivariate Correlations of Program Engagement and Program Usage With Outcomes at 6-Month Follow-Up (Aim 4).

decrease negative social reactions among college students receiving SA or PA disclosures. Process evaluation is a key component to understanding prevention and intervention strategies (e.g., Densley et al., 2017). Given that we found mixed results for the outcome evaluation (Edwards et al., 2020), findings from the process evaluation will help us understand how to revise SSS to increase efficacy. In addition, the findings from this article can be used by preventionists who are developing programming related to social reactions and SA and PA.

The SSS program was highly acceptable to participants, although they did not report that the program strongly changed the way they view sexual and dating violence response. It could be that participants are already aware of these issues given other on-campus programming, suggesting that rather than focusing on changing awareness, SSS should continue to focus on practical skills. This focus is consistent with some aspects that participants found helpful. Participants liked the information that was provided; aspects like body language skills, how to show empathy, and victim resources were helpful. Related to skills, participants thought the program was too repetitive and slow at times. It could be that the SSS program could be revised to increase complexity of skill learning (for example, having more complex scenarios) while retaining the core material. By increasing the complexity of the skills as suggested by participants, we may increase the efficacy of the program because

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

participants will be learning beyond their current skill in handling disclosures. Developers of other SA- and PA-related programs might consider assessing knowledge about SA and PA before program development, and if knowledge is high, increasing the complexity of skills. In general, assessing community readiness, and adjusting programming according to level of readiness, is a best practice for prevention science (Edwards et al., 2000).

The most-liked aspect of the program was the facilitators and the atmosphere. This finding is consistent with previous research demonstrating the importance of knowledgeable, engaging, and trustworthy facilitators (Durlak & DuPre, 2008; Meyers et al., 2012); developers of future programming should not underestimate this aspect, which is relevant to all types of programs. That being said, sometimes participants had complaints about the facilitators, particularly about their enthusiasm and use of a script. Indeed, SSS facilitators did work off a script. Although they were encouraged to use a tone and language that was natural, we also encouraged facilitators to focus on fidelity and not veer too far from the scripted material. In the future, programmers should consider how facilitators can be trained to stick with a script while also being more natural and engaging. In addition, overall participants liked the interactive components of SSS more than the lecture components. This finding is consistent with findings from other SA- and PA-related programming, such that participants tended to enjoy the interactive activities more than the lectures (Edwards et al., 2019). Future programming should be increasingly creative about providing information interactively and should use multimedia presentations to cater to varied learning styles.

Related to interactive programming components, our findings regarding scenarios and paired practice were mixed. Participants enjoyed the interactive nature of these scenarios, and paired practice to facilitate skill building was a key component of our theoretical model (Ajzen, 1991). However, at the same time, participants had ideas to improve scenarios, and often felt the paired practice was awkward or forced. In regard to improving scenarios, future programming should increase the variety of scenarios based on the results of this article, for example, add more scenarios with male victims. In addition, future programming might increase the complexity of scenarios. For example, participants thought that it was obvious what to do in an alcohol situation, but research shows disclosures in alcohol situations are actually quite complicated (Ullman et al., 2019). Increasing the complexity of scenarios and letting participants brainstorm solutions in a larger group would likely be well-received by participants. In addition, increasing the complexity would likely have a positive impact on efficacy because the scenarios will more closely match participants' real-life experiences, leading to more nuanced and more applicable practice. Participants seemed to like large group brainstorming instead

of paired practice. However, since paired practice is important to skill building, there may be ways to make paired practice less awkward, for instance, providing scripts to the person playing the part of the disclosing victim. Paired practice may also be less awkward if participants already knew each other (e.g., they were part of the same sports team). In addition, a third group member could provide in-time feedback to create a brainstorming-like environment. All of these strategies can be used for a variety of health-related preventive intervention programs.

Data suggested that participants who engaged with and used the program more actively reported more favorable outcomes in regard to intended and actual social reactions, confidence, empathy, and victim blame. This finding is promising, particularly because negative social reactions are associated with deleterious outcomes for victims (Dworkin et al., 2019). These data suggest that using the current process evaluation to increase participants engagement and usage in future program interactions may lead to more favorable social reactions among participants, ultimately leading to better outcomes for victims disclosing to these participants. That being said, we must also note that the directionality of this association cannot be determined—it could be that participants who knew they were more likely to use the skills were more engaged in the programming.

It is important to note that participant uptake, or whether a participant attended the initial intervention session was a factor in the current project (Waterman et al., 2020). We found that women, sexual minority students, and students who reported less negative social reactions were more likely to attend the intervention than other students. In general, this finding suggests that students who were less at risk for providing negative social reactions self-selected into the program. This selection effect suggests that the findings in this article may not be generalizable beyond the current participants. It is likely these students were also more likely to find the program acceptable than other students—if SSS was required, our results may have been different and potentially more negative.

In addition to selection effects, another limitation of the study was the lack of racial diversity. Our sample reflected the racial diversity at the university where the study took place. In addition, because of selection bias, women were over-represented in the intervention compared to men. Future studies could also consider adapting the SSS program for more racially diverse campuses. In addition, future studies should consider methods to engage men, for example, adapting the intervention for pre-existing organizations such as fraternities or sports teams. Preventionists and researchers may also adapt SSS for other organizations, for example, high schools or military environments. Another limitation was that we used a cash incentive to attract participants to the intervention.

Although this strategy helped us evaluate program efficacy, it is likely not a sustainable practice for other settings. Finally, a limitation of this article is that although we can comment on feasibility and acceptability, this article is not an outcome analysis. Another paper describes the outcome analysis (Edwards et al., 2020). Feasibility and acceptability do not necessarily result in efficacy.

In sum, we found that a program intended for potential disclosure recipients of SA and PA was both feasible and acceptable, as evidenced by high levels of satisfaction with the program. Important suggestions were also provided for how to improve the program, such as reducing repetition and making scenarios more realistic. Finally, participants who reported more program engagement and more program usage generally reported more intentions to provide positive social reactions, less intentions to provide negative social reactions, and less actual negative social reactions to SA or PA disclosures. This information is useful not only in adapting the current program discussed herein but also to program developers and preventionists wishing to create similar programming to effectively prevent and improve response to SA and PA.

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