



The author(s) shown below used Federal funding provided by the U.S. Department of Justice to prepare the following resource:

Document Title: Expanding Use of the Social Reactions Questionnaire among Diverse Women

Author(s): Anne P. DePrince, Ph.D., Julia Dmitrieva, Ph.D., Kerry L. Gagnon, M.A., Jennifer Labus, Ph.D., Tejaswinhi Srinivas, M.A., Naomi Wright

Document Number: 251459

Date Received: December 2017

Award Number: 2012-W9-BX-0049

This resource has not been published by the U.S. Department of Justice. This resource is being made publically available through the Office of Justice Programs' National Criminal Justice Reference Service.

Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

Summary Overview
June 30, 2017

Summary overview report submitted to the National Institute of Justice
Grant #2012-W9-BX-0049

Principal Investigator: Anne P. DePrince, PhD, University of Denver

Contributors: Julia Dmitrieva, PhD¹, Kerry L. Gagnon, MA¹, Jennifer Labus, PhD², Tejaswinhi Srinivas, MA¹, Naomi Wright¹

This study (official title: “Expanding Use of the Social Reactions Questionnaire among Diverse Women”) was funded by the National Institute of Justice (Grant #2012-W9-BX-0049). The views expressed are those of the authors and do not necessarily represent the views or the official position of the National Institute of Justice or any other organization.

Conflict of Interest: The PI and Collaborators have no conflicts of interest to disclose.

Financial Disclosure: The PI and Collaborators have no financial relationships relevant to this study to disclose.

Acknowledgments: Thank you to the Sexual Assault Interagency Council for their partnership in recruiting for this study, particularly the Blue Bench, Denver District Attorney’s office, Denver Police Department Victim Assistance Unit, Denver Health Sexual Assault Nurse Examiner’s Program, and metro area campuses; the Traumatic Stress Studies Group for project support, particularly Michelle Lee and Julie Olomi; and to the women who participated in the study.

Address correspondence to: Anne P. DePrince, Professor, University of Denver, Department of Psychology, 2155 S. Race Street, Denver CO 808208, anne.deprince@du.edu.

¹University of Denver

²University of California Los Angeles

Purpose of the Project

Following sexual assault, women may disclose to formal (e.g., law enforcement, counselors, clergy, health providers) or informal (e.g., friends, romantic partners, co-workers, family) supports (Starzynski, Ullman, Filipas, & Townsend, 2005). Women have described receiving positive as well as negative social reactions to their disclosures (Borja, Callahan, & Long, 2006; Ullman, 2000; Ullman, Townsend, Filipas, & Starzynski, 2007). The Social Reactions Questionnaire (SRQ) is a widely used instrument designed to measure perceptions of social reactions. Studies using the SRQ have generally asked women to report on social reactions from “other persons told about the assault” (Ullman, Starzynski, Long, Mason, & Long, 2008, p. 1242), without specifying which persons. Using this approach, researchers have documented links between social reactions and trauma-related distress for sexual assault (Ullman, 2010) as well as other forms of intimate violence (DePrince, Welton-Mitchell, & Srinivas, 2014). The purpose of this project was to develop and test a modified version of the SRQ that asked women to report separately on social reactions from criminal justice personnel, community-based providers, and informal supports. Addressing gaps in the literature, we examined changes in social reactions longitudinally as well as the impact of social reactions on criminal justice engagement and posttraumatic distress among diverse women following a recent sexual assault.

Project Participants

Participants ($N = 228$) ranged in age from 18 to 62 (average age = 34.9 years; $SD = 11.8$). Women reported their racial/ethnic backgrounds to be 68% White or Caucasian, 20% Black or African American, 17% Hispanic or Latina, 3% Asian, 2% Pacific Islander, 9% Native American or Alaskan Native, and 5% other (total percentage is greater than 100% because women could endorse more than one racial/ethnic identity). Women’s highest level

of education was: 9% some high school, 17% high school graduate/GED, 50% some college or equivalent (e.g., technical degree), 18% two-year Associate's degree, 12% four-year college degree or beyond. Nearly one-fifth (19%) of women identified with a sexual minority group (e.g., lesbian, bisexual). Retention was 80% at T2, 73% at T3, and 75% at T4.

Project Design, Methods, and Analyses

Women who experienced a recent sexual assault that was disclosed to a formal support person (e.g., counselor, advocate, police officer, health provider) were invited to participate in a four-wave, longitudinal research project. Interviews were conducted at baseline (T1) and then, 3-, 6-, and 9-months later (T2, T3, and T4 respectively). Study materials and protocols were reviewed and approved by a university institutional review board prior to data collection. Flyers advertising the "Women's Health Project" were widely circulated in the Denver Metro area. Women interested in the project phoned the research team, at which point inclusion criteria were assessed. Inclusion criteria were: identification as a woman, aged 18 or older, and an unwanted sexual experience in the previous year¹ that was disclosed to a formal support person.

At the beginning of each study visit, women were greeted by a female, graduate-level interviewer. Consent information was presented in writing and orally, and understanding was assessed with a consent "quiz" (DePrince & Chu, 2008). Women were asked to respond to a battery of measures that included well-validated and reliable measures of core constructs. For example, the Sexual Experiences Survey – Short Form Victimization (SES; Koss et al., 2006) was used to characterize the sexual assault. Subsequent measures (e.g., SRQ, Posttraumatic Diagnostic Scale) were anchored to the recent sexual assault. The SRQ was administered up to three times, depending on whether women had disclosed to informal supports, criminal justice

¹ The original research protocol sought to recruit women within four months of an unwanted sexual experience; however, the timeframe was expanded to one year to assist with recruitment.

personnel, and/or community-based responders. At follow-up interviews, interviewers reviewed consent information and re-administered the consent quiz. Women then responded to a study battery that was similar to the first interview. Women were paid \$50, \$55, \$60, and \$65 for the respective interviews; and offered either \$10 to offset transportation costs or cab fare.

Women reported the following experiences during the recent sexual assault: 79% of women reported experiencing rape, 28% attempted rape, 40% sexual coercion, 13% attempted sexual coercion, and 67% sexual contact (women could report more than one type of sexual victimization during the assault). More than a quarter of women (26%) described the relationship with the offender as very close (e.g., intimate partner), 43% close (e.g., acquaintance, casual dating partner), and 31% not close. Nearly all (93%) disclosed the sexual assault to a community-based provider, 60% to the criminal justice system, and 88% to informal supports.

During each wave of data collection, participant responses were logged by the interviewers in Qualtrics or via paper/pencil measures. Participant's open-ended responses to questions about advice for victim service providers were audio-recorded and transcribed. Direct and indirect identifiers were removed from transcripts. A coding system for content analysis of qualitative data was developed using a combined top-down (involving pre-identification of relevant thematic categories) and bottom-up (capturing additional thematic categories that emerged during preliminary content analysis) approaches. Paper/pencil measures were double-entered to ensure accuracy. Standard procedures were used to explore and check data (e.g., examining distributions of variables, calculating Cronbach's alphas for scale scores, use of a codebook for open-ended responses, calculating Kappas to assess inter-rater reliability).

Analyses were conducted in SPSS 24, AMOS 24, and Mplus 7.1.

Findings

As described below, six papers reporting on core findings are under review or in preparation for peer review. In addition, we have disseminated preliminary findings via six conference presentations; and one dissertation is underway.

Women Receive Different Social Reactions from Formal versus Informal Supports

(DePrince, Dmitrieva, Gagnon & Srinivas, under review). Using a multilevel confirmatory factor analytic approach, we analyzed SRQ items that were anchored to reactions from criminal justice personnel, community-based providers, or informal supports. The multilevel analytic approach examined within-individual and between-individual variance to reveal several important findings. First, the majority of variance was accounted for by within-individual variability, which taps the variability in reactions that participants received *across criminal justice personnel, community-based providers, and informal supports*; in contrast to between-individual variability, which taps variability in experiences individuals reported *in general*. This finding points to the importance of asking women about responses they receive from specific groups of people, rather than asking about social reactions generally. Further, the findings inform decisions about scoring the SRQ, which has been scored in a variety of ways in the research literature. When asking participants to report on social reactions received related to particular disclosures (e.g., disclosures to community-based providers), a seven-factor scoring appears to be a better choice than two- or three-factor approaches. Between-individual variability was less meaningful, suggesting that when participants are asked generally about reactions, data organize into broad positive/negative characterizations; and a two-factor scoring is warranted.

The structure of the seven scales as originally described by Ullman (2000) was remarkably consistent, with one important divergence. Several items loaded onto more than one scale; and what was considered a negative Egocentric response in the original scale development

included items that seem to reflect greater personal involvement on the part of the person reacting to the disclosure. For example, the item “Held you or told you that you were loved” loaded onto both the Emotional Support/Tangible Aid scale as well as the Egocentric scale. Items such as these may not have the negative connotation that other items on the original scale appear to have (e.g., “Wanted to seek revenge on the perpetrator”), though they seem to reflect greater personal involvement in terms of expressing strong reactions to the victim.

Overall, women reported significant differences in reactions received from informal supports, criminal justice personnel, and community-based providers. Informal supports reacted significantly more negatively across all negative scales (treated differently, taking control, distraction, victim blaming, and egocentric responses) relative to criminal justice personnel or community-based providers. Women also reported that informal supports provided less tangible aid/information than criminal justice personnel and community-based providers.

Demographic/Assault Characteristics Did Not Consistently Predict Social Reactions.

Demographic and sexual assault characteristics did not consistently predict social reactions. For example, attempted rape was linked with more negative reactions (being treated differently, distracted, and blamed) from criminal justice providers, while sexual coercion was linked with less tangible aid as well as less negative reactions (being treated differently, blamed) from community-based providers. Rape predicted more tangible aid from informal supports.

Positive and Negative Reactions Decline Over Time (paper in preparation). Changes in social reactions over time were tested using repeated measures General Linear Mixed-effects Models (GLMMs) selecting ar(1) error variance covariance structure for the repeated measures and a random effect for subject for data available from all persons who had SRQ scores for two or more time points. Table 1 summarizes paired comparisons used to probe significant ($p < .05$)

time effects. Women reported significant decreases in tangible aid across criminal justice personnel,

community-based providers, and

informal supports.

Negative social

reactions from

Table 1. Probing Significant Time Effects across SRQ scales.

	Criminal Justice Personnel:	Community-based:	Informal Supports:
Emotional Support	T1>T2, T3, T4		
Tangible Aid	T1>T2, T3, T4	T1>T2, T3, T4	T1>T2, T3, T4
Treated Differently			T1>T2, T3, T4; T2>T4
Distraction	T1<T2		T1>T2, T3, T4; T2>T3, T4
Take Control			T1>T2, T3, T4; T2>T4; T3>T4
Victim Blame			T1>T2, T3, T4; T2>T4
Egocentric/Personal Involvement	T1>T2, T3, T4		T1>T2, T3, T4; T2>T4; T3>T4
<i>Note:</i> For paired comparisons, differences at $p<.05$ are described.			

informal supports declined as a function of time. In sum, while negative reactions declined over time, so too did tangible aid, particularly over the three-month period from T1 to T2.

Past research on social reactions and symptoms have largely relied on cross-sectional methods as well as assumed that social reactions cause later changes in symptoms (see Ullman, 2010). Using bivariate autoregressive time cross-lagged model (also known as a residualized change model; Bollen & Curran, 2004), we examined changes in social reactions and PTSD, depression, and alcohol use symptoms over time, testing both the impact of social reactions on symptoms as well as symptoms on social reactions. We found evidence (validated across SRQ scales and different forms of symptoms) that symptoms predict social reactions. For example, a model focused on victim blame by informal supports revealed that baseline PTSD symptoms predicted victim blame at T2, controlling for victim blame at baseline. However, the reverse was not true: victim blame at baseline did not predict T2 PTSD symptoms. Further, decreases in T3 PTSD symptoms predicted decreases in T4 victim blame. These patterns held while controlling for negativity bias, suggesting results are not attributable to an overall negative response style.

Social Reactions Predict Engagement with the Criminal Justice System (papers in preparation). To test links between the social reactions from community-based providers and

women's decisions to report to law enforcement, we focused on a subset of 213 women who had disclosed the sexual assault to a community-based provider (190, or 89%, of whom had also disclosed to an informal support person). About half of women (119, 56%) had reported the sexual assault to law enforcement, while 91 (43%) women had not. Chi-square analyses tested associations between reporting (yes/no) and demographic as well as sexual assault characteristics, revealing trends for sexual orientation (such that lesbian/bisexual/asexual were less likely to have reported) and sexual coercion (such that women whose assaults involved sexual coercion were less likely to report). Also, a trend suggested that women who reported had greater fear related to the assault. Given these trends, sexual orientation, sexual coercion, and fear were included in two binary logistic regression analyses that examined the contributions of social reactions from 1.) community-based providers, and 2.) informal supports to whether women had reported the assault to law enforcement. For the model that included social reactions from community-based providers, higher scores on the Tangible Aid scale and lower scores on Emotional Support were linked with reporting. For the model that included social reactions from informal supports, higher scores on the Tangible Aid and Treated Differently scales as well as lower scores on the Distraction scale were linked with reporting.

A small minority of women ($n = 10$) made a delayed report to law enforcement (defined as reporting after the T1 interview), allowing us to look prospectively at T1 predictors of subsequent reporting. Using a Firth Logistic Regression (which uses a penalized maximum likelihood to account for biases when predicting rare events; Firth, 1993) to identify variables that distinguished women who made delayed reports from those who never reported, we found that tangible aid from community-based providers increased the likelihood of making a delayed report, while controlling for attitudes about police and prosecutors.

Women's Advice to Providers (Gagnon, Wright, Srinivas, & DePrince, under review).

Women made recommendations for how criminal justice personnel and community-based providers (referred to as providers) could better serve victims of sexual assault. Of 226 women, 91% provided specific advice for providers. Six specific recommendations were common among the women: (1) a female officer/provider be available to survivors, (2) better trauma-informed training for responders, (3) better communication with survivors as well as within and between departments, (4) providing information about and/or helping survivors obtain resources, (5) believing and not blaming survivors for the sexual assault, and (6) greater sensitivity to and understanding of trauma-related responses and approaching survivors with greater overall care and compassion. Women who had reported their sexual assault to law enforcement were asked about their experiences of validation and invalidation in interactions with the criminal justice system. 67% of women shared feeling both validated and invalidated by the criminal justice system. Three common themes were prevalent for both validation and invalidation: communication, believing women, and having a choice in the case proceedings. Women also described feeling uniquely validated when they received information about resources and felt listened to, and, conversely, feeling invalidated when they thought there was a lack of progress/the process was taking too long.

Sexual Revictimization is Common (paper in preparation). Over nine months, approximately 40% of women reported a new incident of sexual assault. A binary logistic regression tested the contribution of variables derived from betrayal trauma (e.g., betrayal appraisals, dissociation) and ecological (alcohol use, victim blame) theories to revictimization. Women who ascribed less betrayal to the original incident and reported greater dissociation were more likely to be revictimized, consistent with research and theory suggesting that unawareness

of social betrayal may increase risk for victimization (DePrince, 2005).

Engaging Women in Trauma-Focused Research Following a Recent Sexual Assault

(Gagnon & DePrince, under review). Addressing a gap in research on women's perceptions of participating in sexual assault-focused research following recent sexual assaults, we assessed women's perceptions of the research (both by self-report and behaviorally). At the initial interview, sexual assault characteristics (recency, severity) were not related to self-reported costs of research participation. Neither assault characteristics, research participation perceptions, nor PTSD symptoms predicted dropout. Within each interview, women reported greater benefits than costs to research participation. Together, these findings demonstrate that conducting sexual assault-focused research with survivors of recent assaults is more beneficial than costly.

Implications for Criminal Justice Policy and Practice in the United States

Sexual assault responses nationally have shifted toward community-coordinated responses, characterized by bringing together criminal justice and community-based systems (e.g., Sexual Assault Response Teams; SARTs). The literature on community-coordinated responses to sexual assault has remained in its infancy, focusing primarily on the perceptions of team members regarding how they assess their work with victims (see Greeson & Campbell, 2013). This study has major implications for using the SRQ as a tool to assess *women's* own perceptions of criminal justice personnel and community-based provider reactions. Assessing women's perceptions is critical in light of long-held concerns that criminal justice personnel react to women's disclosures of sexual assault in ways that may be harmful (Campbell, Dworkin, & Cabral, 2009; Lievore, 2005) and to giving local communities empirical tools to assess – and thereby potentially improve – their coordinated responses to sexual assault.

These findings provide evidence for the importance of investing in multidisciplinary,

community-coordinated responses to sexual assault. At T1, having reported the sexual assault to law enforcement was linked with receiving greater tangible aid *from community-based providers*. Tangible aid from community-based providers at T1 significantly increased the likelihood that women made a subsequent report to law enforcement. Thus, the help provided by community-based providers may be important to women's entrance into the criminal justice system.

This project also has implications for education efforts. Women reported that informal supports were significantly more negative and less positive in their reactions than criminal justice or community-based providers, pointing to the urgent need for campaigns that educate the public broadly about how to respond to sexual assault disclosures (e.g., Archambault & Lonsway, 2017, Starzynski et al., 2005). This suggests the importance of preparing both formal and informal supports to respond with compassion and support in the face of the distress expressed by victims. A significant decline in tangible aid over three months (from T1 to T2) among both criminal justice personnel as well as community-based providers (in addition to the decline in emotional support from criminal justice personnel during this same time period) was striking, particularly when considered in combination with the advice survivors gave to providers. Together, these data point to the importance of preparing providers to work in a trauma-informed way that is responsive to victims' inter-related needs following sexual assault.

The findings have implications for advancing practitioner-researcher partnerships. Where community partners may be concerned about referring assault victims to research studies following *recent* crime, these findings provide evidence that assault-focused research can be carried out such that women perceive greater benefits than costs of participating. Consistent with the literature (e.g., Edwards et al., 2013), posttraumatic symptoms, rather than assault recency and victimization type, predict emotional reactions.

References

- Archambault, S. J., & Lonsway, K. A. (2017). *Reporting methods for sexual assault cases*. Retrieved from End Violence Against Women International: <http://www.evawintl.org/Library/DocumentLibraryHandler.ashx?id=35>
- Bollen, K.A., & Curran, P.J. (2004). Autoregressive latent trajectory (ALT) models: A synthesis of two traditions. *Sociological Methods and Research*, 32, 336-383
- Borja, S. E., Callahan, J. L., Long, P. J. (2006). Positive and negative adjustment and social support of sexual assault survivors. *Journal of Traumatic Stress*, 19, 905-914. doi:10.1002/jts.20169
- Campbell, R., Dworkin, E., & Cabral, G. (2009). An ecological model of the impact of sexual assault on women's mental health. *Trauma, Violence, & Abuse*, 10(3), 225-246. doi:10.1177/1524838009334456
- DePrince, A. P. & Chu, A. T. (2008). Perceived benefits in trauma research: Examining methodological and individual difference factors in responses to research participation. *Journal of Empirical Research in Human Research Ethics*, 3(1), 35-47.
- DePrince, A. P., Welton-Mitchell, C., & Srinivas, T. (2014). Longitudinal predictors of women's experiences of social reactions following intimate partner abuse. *Journal of Interpersonal Violence*, 29(13), 2509-2523. doi:10.1177/0886260513520469
- Edwards, K. M., Probst, D. R., Tansill, E. C., & Gidycz, C. A. (2013). Women's reactions to interpersonal violence research: A longitudinal study. *Journal of Interpersonal Violence*, 28(2), 254-272.
- Firth, D. (1993). Bias Reduction of Maximum Likelihood Estimates. *Biometrika*, 80(1), 27-38.
- Greeson, M. R. & Campbell, R. (2013). Sexual assault response teams (SARTs): An empirical

- review of their effectiveness and challenges to successful implementation. *Trauma, Violence, & Abuse, 14*(2), 83-95. doi:10.1177/1524838012470035
- Koss, M. P., Abbey, A., Campbell, R., Cook, S., Norris, J., Testa, M., Ullman, S., West, C., White, J. (2007). Revising the SES: A collaborative process to improve assessment of sexual aggression and victimization. *Psychology of Women Quarterly, 31*(4), 357-370. doi:10.1111/j.1471-6402.2007.00385.x
- Lievore, D. (2005). *No Longer Silent: A Study of Women's Help-Seeking Decisions and Service Responses to Sexual Assault*. Canberra: Australian Institute of Criminology.
- Starzynski, L. L., Ullman, S. E., Filipas, H. H., & Townsend, S. M. (2005). Correlates of women's sexual assault disclosure to informal and formal support sources. *Violence and Victims, 20*(4), 417-432.
- Ullman, S. E. (2000). Psychometric characteristics of the Social Reactions Questionnaire: A measure of reactions to sexual assault victims. *Psychology of Women Quarterly, 24*(3), 257-271. doi:10.1111/j.1471-6402.2000.tb00208.x
- Ullman, S. E. (2010). *Talking About Sexual Assault: Society's Response to Survivors*. Washington DC: APA Books.
- Ullman, S. E., Townsend, S. M., Filipas, H. H., & Starzynski, L. L. (2007). Structural models of the relations of assault severity, social support, avoidance coping, self-blame, and PTSD among sexual assault survivors. *Psychology of Women Quarterly, 31*(1), 23-37. doi:10.1111/j.1471-6402.2007.00328.x
- Ullman, S. E., Starzynski, L. L., Long, S. M., Mason, G. E., & Long, L. M. (2008). Exploring the relationships of women's sexual assault disclosure, social reactions, and problem drinking. *Journal of Interpersonal Violence, 23*(9), 1235-1257.