## Social Reactions and Women's Decisions to Report Sexual Assault to Law Enforcement

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#### Abstract

Following sexual assault, little is known about how the social reactions women receive from informal supports and community-based providers relate to decisions to report to law enforcement. Among 213 diverse women who had disclosed a recent sexual assault to a community-based provider, 56% reported to law enforcement. Law enforcement reporting was associated with more positive (tangible aid) and less negative (distraction, being treated differently) reactions from informal supports and more tangible aid and less emotional support from community-based providers. Tangible aid from community-based providers predicted law enforcement reporting over the subsequent 9 months among women who had not initially reported.

#### **Keywords**

sexual assault, social reactions, reporting, criminal justice system, law enforcement, community-based providers, informal social supports

Sexual assault remains one of the most under-reported crimes, with only a minority of women who have been sexually assaulted reporting the incident to law enforcement (Wolitzky-Taylor et al., 2011). To date, research on sexual assault reporting has focused on women's reasons for reporting to law enforcement as well as women's demographic characteristics and characteristics of the sexual assault. Relatively little

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**Corresponding Author:** Anne P. DePrince, Professor, Department of Psychology, University of Denver, 2155 S. Race Street, Denver, CO 80208, USA. Email: Anne.deprince@du.edu is known about women's reporting decisions in relation to the social reactions they receive when they disclose to community-based providers or informal supports (e.g., friends, family; Konradi, 2007; Schei, Sidenius, Lundvall, & Ottesen, 2003). Better understanding of these links between social reactions and reporting decisions could inform public education programs as well as community-coordinated responses to sexual assault, which bring together criminal justice and community-based professionals (Greeson & Campbell, 2013). Little research is available to guide community-coordinated responses on how reactions women receive from one part of the coordinated response (e.g., positive and negative social reactions from community-based providers) relate to engagement with other parts of the coordinated response (e.g., reporting to law enforcement). The current study addresses this research gap by identifying social reactions from community-based providers and informal supports that are linked with reporting to law enforcement.

# Previous Research on Reporting Sexual Assault to Law Enforcement

## Reasons for Reporting

Researchers have documented a range of factors women consider when reporting to law enforcement (Carbone-Lopez, Slocum, & Kruttschnitt, 2016; Fisher, Daigle, Cullen, & Turner, 2003). For example, many women described not wanting to become involved with the criminal justice system (Bachman, 1998; Fisher et al., 2003; Hattem, 2000) and being concerned that criminal justice system representatives would blame women or not believe their accounts of the assault (Carbone-Lopez et al., 2016; Hattem, 2000; Nixon, Tutty, Downe, Gorkoff, & Ursel, 2002). In addition, women who feel greater shame or fear related to the sexual assault are more likely to report to law enforcement (Dukes & Mattley, 1977; Greenberg & Ruback, 1992; Tomlinson, 2000). Furthermore, women's beliefs that the police would or could not do anything about the assault have been linked to reporting decisions (Bachman, 1993, 1998; Carbone-Lopez et al., 2016; Dukes & Mattley, 1977).

## Victim Demographic Characteristics and Reporting to Law Enforcement

Regarding the relationship between women's demographic characteristics and reporting, lower socioeconomic status (SES) and education level have been linked with decreased likelihood of reporting (Chen & Ullman, 2010; Davis & Brickman, 1996; Fisher et al., 2003; Pino & Meier, 1999). However, few other consistent demographic predictors emerge. For example, neither age nor marital status have consistently been linked with reporting to law enforcement (Carbone-Lopez et al., 2016; Chen & Ullman, 2010; Clay-Warner & Burt, 2005; Du Mont, Miller, & Myhr, 2003; Fisher et al., 2003). No consensus exists regarding the relationship between women's race or ethnicity and reporting, as prior research has found either no association or conflicting patterns (Bachman, 1998; Carbone-Lopez et al., 2016; Chen & Ullman, 2010; Davis & Brickman, 1996; Du Mont et al., 2003; Feldman-Summers & Ashworth, 1981; Fisher et al., 2003; Greenberg & Ruback, 1992; Lizotte, 1985; Pino & Meier, 1999; Wyatt, 1992). In addition, women's lifetime criminal history and mental health status appear unrelated to reporting to law enforcement (Carbone-Lopez et al., 2016; Du Mont et al., 2003).

## Sexual Assault Characteristics and Reporting to Law Enforcement

Research has more consistently identified links between characteristics of the sexual assault and reporting to law enforcement (Fisher et al., 2003; Greenberg & Ruback, 1992; Schei et al., 2003). Studies indicate that more severe assaults are more likely to be reported to law enforcement (Du Mont et al., 2003; Schei et al., 2003). For example, a woman is more likely to report to law enforcement if the offender used force (Bachman, 1993; Carbone-Lopez et al., 2016; Chen & Ullman, 2010; Du Mont et al., 2003), a weapon (Carbone-Lopez et al., 2016; Fisher et al., 2003; Russell & Bolen, 2000), or if the victim suffered serious injury (Carbone-Lopez et al., 2016; Chen & Ullman, 2010; Du Mont et al., 2003; Schei et al., 2003). Findings are mixed about the impact of women's drug or alcohol use during the assault and reporting to law enforcement, with some studies finding victim drug or alcohol use at the time of the assault related to decreased likelihood of reporting (Carbone-Lopez et al., 2016; Clay-Warner & Burt, 2005), and other studies finding no relationship with reporting to law enforcement (Du Mont et al., 2003; Fisher et al., 2003). However, the perpetrator's substance use and other criminal activity during the assault do not appear to predict victims' law enforcement reporting (Carbone-Lopez et al., 2016; Clay-Warner & Burt, 2005; Fisher et al., 2003). A majority of studies indicate that women are more likely to report when the perpetrator is a stranger (Chen & Ullman, 2010; Felson & Paré, 2005; Fisher et al., 2003; Ruback & Ménard, 2001; Russell & Bolen, 2000; Schei et al., 2003).

## Social Reactions to Victims and Victim Reporting to Law Enforcement

When women disclose sexual assault, they may receive positive (e.g., tangible aid, emotional support) and/or negative (e.g., victim blame) reactions from others (Ullman, 2010), referred to collectively as social reactions. Although relatively little is known about how the social reactions women receive to disclosures of sexual assault relate to whether or not they report the assault to law enforcement, a handful of studies suggest the potential value in this line of inquiry (Greenberg & Ruback, 1992; Hattem, 2000; Sit, 2015). For example, a qualitative study of women who had experienced sexual assault revealed that one third of participants described feeling discouraged from reporting or seeking additional support after they received a negative response from an informal support person, such as a friend or family member (Sit, 2015). Conversely, when women receive a positive response from an informal support, more than a quarter of women revealed that the positive interaction helped ease worries about the negative reactions they might receive from formal supports

(Sit, 2015). Ahrens (2006) examined negative social reactions among women who stopped speaking about the assault after the first disclosure and found that women were concerned about having similarly negative experiences if they disclosed again to others, including police officers during the reporting process. Women feared being blamed; receiving insensitive reactions such as questioning, doubting, or minimizing; being ineffective in their disclosures, as by not successfully eliciting support or resources; and receiving inappropriate support, such as being told to stay silent, or needing to comfort the support provider.

Despite these indications that social reactions may be linked with reporting to law enforcement, systematic research testing links between social reactions and reporting is lacking. Following a sexual assault, women may disclose to informal supports (e.g., friends, family, romantic partner) and/or formal supports (e.g., community-based providers, such as counselors, community-based victim advocates, or health providers). Both informal and formal supports could respond to women's disclosures with positive and/or negative reactions, and these reactions may influence whether women report to law enforcement. Alternatively, women's action of reporting to law enforcement may also influence the quality of social reactions they receive from informal and/ or formal supports. Identifying links between social reactions and reporting has the potential to guide policy and practice. Where the literature has focused largely on factors that cannot be controlled (e.g., women's demographic characteristics, sexual assault characteristics), public education campaigns and formal training can guide and inform social reactions to disclosure in ways that support women's decisions and actions related to reporting to law enforcement.

## Current Study

The current study addresses the dearth of research on links between the social reactions women received from community-based providers and informal supports, and reporting to law enforcement. Among women who disclosed a recent sexual assault to a community-based provider, we predicted that more positive and less negative social reactions from those providers would be associated with reporting the assault to law enforcement. Likewise, we predicted that more positive and less negative social reactions from informal supports would be associated with reporting to law enforcement. Given past research on correlates of sexual assault reporting, we first tested associations between demographic (i.e., age, ethnicity/race, sexual orientation, education level) and sexual assault characteristics (i.e., severity of the sexual assault, relationship to perpetrator), and reporting to law enforcement. Next, multivariate, cross-sectional analyses examined the relative contributions of social reactions to reporting (yes/no) in separate models for community-based social reactions and informal support social reactions. Follow-up analyses focused on women who had not initially reported the assault to law enforcement. A small subgroup reported the assault later, allowing us to further probe the findings in the larger sample by testing the prospective contributions of tangible aid to subsequent reports.

## Method

## Participants

Women were recruited as part of a larger, longitudinal study examining social reactions to sexual assault disclosure (DePrince, Dmitrieva, Gagnon, & Srinivas, 2017). The full sample included 228 women who had experienced a sexual assault within the past year (on average, 5 months after the assault) and disclosed it to at least one formal support person (community-based provider and/or criminal justice personnel). This article focuses on a subset of 213 women who had disclosed the sexual assault to a community-based provider, to allow us to test the contributions of social reactions from those particular formal supports to law enforcement reporting. Demographic information was collected regarding age, racial and ethnic background, sexual orientation, education, and work status. Women in this subset ranged in age from 18-62 (M = 34.8, SD = 11.9) years. Nearly half of the sample (n = 94; 44%) identified with one or more racial and/or ethnic minority groups. Participants were 69% White (n = 146), 19% Black or African American (n = 41), 17% Hispanic or Latina (n = 36), 3% Asian (n = 6), 2% Pacific Islander (n = 4), 10% Native American or Alaskan Native (n = 21), and 6% other (n = 12); the total percentage exceeds 100% because women could endorse multiple racial or ethnic identities. Just over one in five (21%) women identified as bisexual, lesbian, or asexual (for analyses, we combined asexual with lesbian and bisexual because of the low frequency of endorsement and because some women who identified as asexual responded that this was their sexual orientation). The sample also represented a diverse range of education level, with 9% indicating some high school (n = 19); 17% high school graduation (n = 36); 51% some college, associate's degree, or other professional degree (n = 109); 18% four-year college degree (n =38); and 5% postgraduate education (n = 11). Women's work statuses varied widely, with 21% employed full time (n = 45), 10% employed part time or seasonally (n = 22), 42% unemployed and/or receiving disability (n = 90), 0.9% retired (n = 2), 20% students (n = 43), and 5% homemakers (n = 11).

## Materials

Sexual assault characteristics. The Sexual Experiences Survey–Short Form Victimization (SES-SFV; Koss et al., 2007) was used to assess characteristics of the sexual assault. Women were first asked whether they had experienced a particular behavioral description of an unwanted sexual act during the sexual assault incident and how the perpetrator(s) completed that act (e.g., verbal pressure, physical force, taking advantage of the women being under the influence of alcohol/drugs). Based on women's responses, a prevalence score for each sexual assault category (sexual contact, attempted sexual coercion, sexual coercion, attempted rape, rape) was created based on Koss and SES Collaboration (2008) scoring (1 = endorsed, 0 = not endorsed). Of note, women could endorse experiencing more than one sexual assault category during the incident. Additional follow-up probes determined women's relationships to the perpetrator(s), which were then coded from 0-2 based on Goldberg and Freyd's (2006) framework. Not close relationships (e.g., stranger) were coded as 0, relationships with some degree of association (e.g., acquaintance, casual dating partner) were coded as 1, and relationships with close association (e.g., partner) were coded as 2.

Fear and shame. The Trauma Appraisal Questionnaire (TAQ; DePrince, Zurbriggen, Chu, & Smart, 2010) was used to assess feelings of fear and shame related to the sexual assault. The TAQ is a self-report measure that assesses appraisals of emotions, beliefs, and behaviors related to traumatic experiences, including fear and shame. Women were asked to think about their current thoughts and feelings in relation to the sexual assault and responded with how much they agreed or disagreed with each item from 1 = strongly disagree to 5 = strongly agree. The fear subscale comprised 11 items, such as "Danger is always present" and "I don't think I'll survive." The shame subscale comprised 7 items, including "I feel humiliated" and "It's as if my insides are dirty." Average scores were calculated for fear and shame. Both the fear and shame subscales displayed good internal consistency (Cronbach's  $\alpha s = .87$ , .84, respectively).

Social reactions. To assess the social reactions women received upon disclosing their sexual assault to either informal supports (e.g., friends, family) or community-based providers (e.g., counselors, community-based victim advocates, medical, or mental health professionals), women were asked to whom they had disclosed the sexual assault. The Social Reactions Questionnaire (SRQ; Ullman, 2000) was then administered, asking participants to respond to items regarding the reactions they received from informal supports such as family or friends, and separately, regarding the reactions from community-based providers.

The SRQ is a behaviorally defined self-report questionnaire, with 48 items that comprise seven scales. Positive social reaction scales include Emotional Support (e.g., "Reassured you that you are a good person") and Tangible Aid (e.g., "Helped you get medical care"). Negative social reaction scales include Treated Differently (e.g., "Pulled away from you"), Distraction (e.g., "Distracted you with other things"), Take Control (e.g., "Told others without your permission"), Victim Blame (e.g., "Told you that you were to blame/shameful"), and Egocentric/Personal Involvement (e.g., "Focused on his or her own needs and neglected yours"). The response scale ranged from 0 = never to 4 = always. Scoring for the scales was based on a multilevel factor analysis conducted with this sample (see DePrince, Dmitrieva, Gagnon, & Srinivas, 2017 for details). Internal consistency for SRQ scales tied to social reactions from informal supports ranged from acceptable to excellent (Cronbach's as ranged from .77-.93). Internal consistency for social reactions from community-based providers ranged from acceptable to excellent for Emotional Support, Tangible Aid, Treated Differently, Take Control, and Victim Blame (Cronbach's  $\alpha$ s ranged from .72-.92). Internal consistency for Distraction and Egocentric/Personal Involvement scales for community-based providers, however, was less than .70; therefore, those scales were not included in the analyses. Women who reported to a community-based provider (n = 213) were asked to

respond to the SRQ regarding their experiences with community-based providers. Of these 213 women, 189 women also disclosed to an informal support person and were asked to report on reactions received from the informal supports. Of these 189 women, 1% (n = 2) did not respond to the SRQ regarding their experiences with informal supports. Therefore, analyses of reactions from informal supports are based on 187 women.

**Reporting.** Women were asked whether they had reported the sexual assault to law enforcement at each interview. Responses were dummy coded as 0 = no report to law enforcement as of the initial Time 1 interview and 1 = reported the sexual assault to law enforcement as of the initial Time 1 interview. Among women who had not reported as of the initial Time 1 interview, we coded whether they reported the sexual assault to law enforcement at a later time point: 0 = no report and 1 = subsequent report.

## Procedures

All procedures were approved by a university institutional review board. Women (18 or older) were recruited using flyers distributed via community-based (e.g., hospitals, victim service) and criminal justice agencies located around the metro area of a large Western city. The flyers invited women to participate in the "Women's Health Project" if they were 18 years of age or older and had an unwanted sexual experience in the last year that they disclosed to a formal support person, such as a doctor, counselor, or the police. Flyers also described the longitudinal interview schedule and compensation. A total of 354 women interested in participating initiated contact with the research team. Nineteen percent (n = 66) of those women did not respond to follow-up efforts or were ineligible. The 288 women who screened positive for the inclusion criteria during a phone call (i.e., aged 18 years or older, able to read and speak English, experienced a sexual assault incident in the last year that they disclosed to a formal support person such as a counselor or law enforcement) were invited to an in-person interview at the university research offices. Sixty-two eligible women did not complete interviews because they did not respond to contact attempts or had scheduling conflicts, leaving a total of 228 women who were enrolled in baseline interviews. All women who were scheduled and arrived for their interview elected to participate in the study. Of the 213 women who were included in the sample because they disclosed to a community-based provider, the majority (70%) learned about the study from flyers available at community-based agencies, 14% from criminal justice agencies, and 15% through others sources such as family and friends.

At the university research offices, a graduate-level female interviewer administered the study protocol, which began with a consent process. After consent information was presented in writing and orally, participants were administered a "consent quiz" (DePrince & Chu, 2008) to ensure that only those who understood consent information were enrolled in the study. Participants were next asked to respond to a battery of measures, described above. They were compensated US\$50 for participating in the Time 1 interview and US\$10 for transportation or cab fare to and from the interview site. Child care was provided as needed. Participants were invited to follow-up

	М	SD
Social reactions from informal supports	(n = 187)	
Emotional Support	2.61	0.88
Tangible Aid	1.54	1.07
Treated Differently	1.19	0.97
Distraction	1.53	0.93
Take Control	1.33	0.93
Victim Blame	1.21	1.13
Egocentric/Personal	2.10	0.82
Involvement		
Social reactions from community-based	supports ( $n = 213^{a}$ )	
Emotional Support	2.79	0.88
Tangible Aid	2.58	0.98
Treated Differently	0.41	0.76
Take Control	0.57	0.73
Victim Blame	0.36	0.76
Emotions $(n = 211)$		
Fear	3.39	0.97
Shame	3.1	0.82

#### Table I. Descriptive Statistics.

<sup>a</sup>From the sample of 213 women who disclosed to a community-based provider, this group includes 187 women who disclosed to an informal support person.

interviews 3, 6, and 9 months later. The procedure for follow-up interviews was the same. Participants received US\$55, US\$60, and US\$65 for participating in Time 2-4 interviews, respectively, and were compensated for transportation as described above.

## Results

## **Descriptive Statistics**

Table 1 provides descriptive statistics for continuous measures, including social reactions. All data were derived from the Time 1 interview, with the exception of data for subsequent reporting to law enforcement, which was derived from Time 2-4 interviews.

Data from the SES-SFV revealed that women experienced sexual assaults involving sexual contact (144, 68%), attempted sexual coercion (27, 13%), sexual coercion (84, 39%), attempted rape (60, 28%), and rape (175, 82%); totals add up to more than 100% because these sexual assault categories were not mutually exclusive. Thirty percent of women described their relationship to the perpetrator as not close (n = 63), 43% as some association (n = 92), and 27% as close association (n = 57).

Of the 213 women who had disclosed the sexual assault to a community-based provider, 89% (n = 189) had also disclosed to an informal support person; therefore, analyses of social reactions from informal supports include women who reported to

both informal and formal supports. Slightly more than half of women (119, 56%) had reported the sexual assault to law enforcement at Time 1, whereas 43% (n = 91) of women had not reported; data on reporting to law enforcement were missing for three women, who were therefore excluded from analyses. Of the women who had not reported to law enforcement at Time 1, nine women indicated during a follow-up interview that they had subsequently reported the assault to law enforcement.

## Links Between Demographic and Sexual Assault Characteristics, and Reporting to Law Enforcement

Chi-square analyses were used to test associations between categorical demographic and sexual assault characteristics, and reporting to law enforcement (yes/no). There were no associations detected for ethnic minority status,  $\chi^2(1) = 2.08$ , p = .15; level of education,  $\chi^2(4) = 5.00$ , p = .29; relationship to the offender,  $\chi^2(2) = 4.21$ , p = .12; sexual contact,  $\chi^2(1) = .54$ , p = .46; attempted sexual coercion,  $\chi^2(1) = .92$ , p = .34; attempted rape,  $\chi^2(1) = .38$ , p = .54; or rape,  $\chi^2(1) = .12$ , p = .72. Independent sample *t* tests were used to test links between women's age and their appraisals of fear and shame tied to the assault, and reporting (yes/no). No differences in age, t(208) =.50, p = .62, or shame, t(204, unequal variances assumed) = .59, p = .55, were detected between women who did and did not report.

Three trends were noted in relation to reporting to law enforcement. First, there was a trend for sexual orientation,  $\chi^2(1) = 2.85$ , p = .09, suggesting that women who identified as lesbian, bisexual, or asexual were less likely to have reported than women who identified as heterosexual. Specifically, 60% of heterosexual women reported to law enforcement, compared with 45% of women who identified as lesbian, bisexual. Second, a trend for assaults that involved sexual coercion,  $\chi^2(1) = 3.52$ , p = .06, was noted, such that women who experienced sexual coercion were less likely to report. In particular, 49% of women who experienced sexual coercion reported the incident to law enforcement, compared with 62% of women who had not experienced sexual coercion. Finally, a trend suggested that women who reported to law enforcement had greater fear tied to the incident (M = 3.19; SD = .85) than their peers (M = 2.97; SD = .77), t(206) = 1.89, p = .06. Given these trends, sexual orientation (yes/no), sexual coercion (yes/no), and fear were included in analyses as controls, allowing us to explore the relative contributions of social reactions, over and above these factors.

## Links Between Social Reactions and Reporting to Law Enforcement

Bivariate correlations among predictor variables are reported in Table 2. Two binary logistic regression analyses were conducted with reporting (0 = no report; 1 = report) at Time 1 as the outcome variable. The first model used SRQ scale scores specific to social reactions women received from informal supports; the second model used SRQ scale scores specific to social reactions from community-based supports. Table 3 summarizes the results of each binary logistic regression analysis for variables predicting

<b>Table</b> Assaul <sup>:</sup>	<b>Table 2.</b> Bivariate Correlations Among Social Reactions Subscales From Informal Supports, Community-Based Supports, and Women's Assault-Related Fear ( $N = 213$ ).	ins Amor 3).	ng Social	Reactions	s Subscale	s From In	formal Su	pports, C	ommunity	/-Based Si	upports, a	nd Wome	n's
		2	e	4	5	9	7	8	6	10	Ξ	12	13
Social	Social reactions from informal supports	support	s										
_	Emotional Support	.52***	60***	29***	46***	47***	.70***	.31***	.23***	= -	- 4	17*	10
2	Tangible Aid		27***	.08	07	15*	.49***	.20**	.29***	00 <sup>.</sup>	90.	.07	07
m	Treated Differently			.64***	.71***	.58***	21**	04	01	.22***	.31***	.28***	.26***
4	Distraction				.70***	.55***	.12	90.	.04	.21***	.29***	.24***	.26***
S	Take Control					.66***	01	.03	ю <u>.</u>	.20**	.29***	.30***	.20**
9	Victim Blame						=.	<u>00</u>	.02	.16*	.20**	.29***	01.
7	Egocentric/Personal							.36***	.31***	04	03	05	.05
	Involvement												
Social	Social reactions from community-based supports	hity-based	d support	S									
8	Emotion Support								***69.	50***	46***	34***	60.
6	Tangible Aid									35***	32***	27***	.12
0	Treated Differently										.76***	.58***	.12
=	Take Control											.63***	60.
12	Victim Blame												.12
Emotion	n												
13	13 Fear												

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

	Informal support social reactions				Community-based provider social reactions			
Variables	В	SE	Wald	Exp(B)	В	SE	Wald	Exp(B)
Sexual Orientation	0.91*	0.41	4.86	2.48	0.53	0.39	1.81	1.70
Sexual Coercion	0.71*	0.35	4.20	2.03	0.40	0.33	1.46	1.49
Fear	0.44^	0.22	3.82	1.55	0.28	0.20	1.93	1.32
Emotion Support	-0.07	0.38	0.04	0.93	-0.80**	0.29	7.57	0.45
Tangible Aid	0.63**	0.21	8.84	1.88	1.34***	0.26	25.74	3.83
Treated Differently	1.00**	0.30	10.90	2.73	0.04	0.37	0.01	1.04
Distraction	-0.80**	0.31	6.75	0.45				
Take Control	-0.52	0.32	2.65	0.59	0.35	0.38	0.81	1.41
Victim Blame	0.31	0.21	2.23	1.37	-0.24	0.29	0.67	0.79
Egocentric/Personal Involvement	0.29	0.34	0.73	1.34				

 Table 3.
 Summary of Two Logistic Regression Analyses for Variables Predicting Reporting to Law Enforcement.

Note. Reporting: I = yes, 0 = no. Sexual orientation: 0 = heterosexual, I = lesbian/bisexual/asexual. Sexual coercion: 0 = absent, I = present.

 $^{p}$  < .10.  $^{p}$  < .05.  $^{**}p$  < .01  $^{***}p$  < .001.

reporting to law enforcement. For the model that included social reactions from informal supports, higher scores on the Tangible Aid and Treated Differently scales and lower scores on the Distraction scale were linked with greater likelihood of reporting to law enforcement at Time 1. For the model that included social reactions from community-based providers, higher scores on the Tangible Aid scale and lower scores on the Emotional Support scale were linked with greater likelihood of reporting to law enforcement at Time 1.

Exploratory follow-up analyses. Tangible Aid emerged as significantly related to law enforcement reporting in both the informal and community-based provider models in cross-sectional analyses. We followed up those cross-sectional analyses to explore the prospective effect of Tangible Aid on later reporting to law enforcement in the subset of women who had not initially reported to law enforcement. Of the women who had not reported to law enforcement at Time 1 (n = 91), a small minority (n = 9) indicated at a follow-up interview that they had made a subsequent report to law enforcement. Given the low frequency of subsequent reporting, we used the Firth logistic regression, which relies on a penalized maximum likelihood to account for biases when predicting rare events (Firth, 1993). We ran two models: one with Tangible Aid from community-based providers and another with Tangible Aid from informal supports. Greater Tangible Aid from community-based providers significantly predicted subsequent reporting to law enforcement (B = .89, SE = .46,  $\chi^2 = 4.33$ , p = .04). Tangible Aid from informal supports did not have an effect on subsequent reporting to law enforcement (B = .33, SE = .44,  $\chi^2 = .56$ , p = .45).

## Discussion

Greater tangible aid from both informal supports as well as community-based providers was associated with reporting sexual assault to law enforcement in a sample of women initially interviewed an average of 5 months after the assault. Tangible aid includes actions such as helping women access information about coping, helping them access health care or the police, and providing information and options. In light of the cross-sectional nature of these data, at least two interpretations of these findings are possible. First, practical assistance, offered by either informal supports or community-based providers, may increase the likelihood that women make a report to law enforcement. When informal supports or community-based providers take actions such as offering to take women to the police and providing information on resources, they may make it easier for women to report. This interpretation makes sense, particularly in light of research documenting that crime victims are often frustrated and overwhelmed by their need for accurate, practical information about their legal options in the aftermath of the crime (DePrince, Srinivas, & Lee, 2014). Thus, these findings point to the importance of preparing both lay people and professionals alike to respond to disclosures of sexual assault with information and practical assistance.

Second, women may receive more practical help from informal supports as well as community-based providers in response to having made a law enforcement report. For the community-based providers, this interpretation appears especially likely when combined with the surprising and seemingly counter-intuitive finding that reporting was linked with less emotional support from community-based providers. Items on the SRQ Emotional Support scale include actions such as "Listened to your feelings," "Saw your side/did not make judgments," and "Showed understanding." The pattern of more tangible aid and less emotional support may reflect how community-based providers respond to the particular challenges facing women when they are actively engaged with the criminal justice system. Women who report to law enforcement are likely to face a host of specific and time-sensitive needs, such as accessing information about the criminal justice process (DePrince, Srinivas, & Lee, 2014) and victim compensation. As community-based providers focus on those tangible needs, there may be a cost in terms of expressing emotional support. The act of focusing on practical problems, therefore, may result in community-based providers actually providing less emotional support or being perceived by women as providing less emotional support. Furthermore, this pattern of more tangible aid and less emotional support may also reflect the relative emphasis encouraged by trauma-focused, phase-oriented mental health interventions. Such interventions focus on addressing basic needs and safety prior to addressing trauma-related problems, such as posttraumatic stress disorder and dissociation (Herman, 2005). Thus, the combination of higher tangible aid and lower emotional support may reflect a phase-oriented approach, whereby community-based providers may prioritize addressing practical needs, and not on providing broader emotional support related to the distress caused by the sexual assault. Although reporting was not linked with any negative reactions from community-based providers, these findings may encourage provision of practical support in a way that simultaneously maximizes communication of emotional support. By validating women's experiences and working collaboratively with women to address their needs, providers will be able to find a balance of tangible aid and emotional support that supports women engaging with the criminal justice system. While negative social reactions from community-based providers were unrelated to law enforcement reporting, greater distraction from informal supports was associated with *not* reporting. Distraction items included actions such as "Told you to go on with your life" and "Told you to stop thinking about it." When informal supports react to assault disclosures with this kind of minimization, women may be less likely to decide to report to law enforcement. Indeed, this finding fits with Greenberg and Ruback's (1992) report that women were less likely to report to the police when someone else advised them not to do so. Alternatively, when an incident has already been reported to law enforcement, informal supports may be less likely to attempt to distract women because involvement with the criminal justice system requires ongoing engagement with incident-related activities.

Counter to our prediction that less negative social reactions would be linked with having reported to law enforcement, being treated differently by informal supports was significantly associated with reporting. Items on the SRQ Treated Differently scale included actions such as "Pulled away from you," "Avoided talking/spending time with you," and "Acted as if you were damaged goods." As with the other counter-intuitive finding regarding less emotional support by community-based providers and reporting, this finding may make more sense when considering how informal supports may behave *in response to* women having made a law enforcement report. This finding may reflect the reality that crime victims face enormous pressures to stop discussing the crimes with their social networks (Herman, 2005). Thus, women engaged with the criminal justice process may face particular pressure from their informal support networks to stop talking about the assault and the prosecution, given that prosecution can be a very stressful and time-consuming process.

The exploratory prospective analyses allowed us to follow-up on the links between tangible aid and reporting. In terms of the community-based providers specifically, the link between tangible aid and reporting at a later time points to the value of multidisciplinary, community-coordinated responses to sexual assault. Tangible aid from community-based providers may support women, such that they have the information and knowledge they need to report to law enforcement. To the extent that communitybased providers and criminal justice personnel both represent formal responses to sexual assault, tangible aid from community-based providers may demonstrate to women that formal responses to the assault can be useful. Seeing the utility of formal responses from community-based providers may encourage women to engage in the criminal justice system for further assistance and support.

## Limitations and Conclusions

The current study makes important contributions to the research literature by documenting links between women's perceptions of social reactions from informal supports and community-based providers and their reporting to law enforcement following sexual assault. However, the cross-sectional nature of these data leaves open the question of whether social reactions influence reporting decisions, or vice versa. For example, informal supports and community-based providers may offer more tangible aid to women who reported the incident to law enforcement, rather than the tangible aid contributing to women's decision to report. We were able to take advantage of prospective data to provide an initial test of the impact of tangible aid on subsequent reporting decisions; however, the small sample size and rare occurrence of subsequent reporting limited the kinds of analyses that could be employed. Informed by the cross-sectional analyses, though, Firth logistic regression was used, as this approach is appropriate for predicting rare events to test the impact of tangible aid on later law enforcement reporting. We selected tangible aid as the focus of the follow-up analyses because of its emergence as a significant predictor in both the informal support and community-based models as well as its potential importance to policy and practice. Although the follow-up analyses provided evidence that tangible aid from community-based providers may indeed affect women's decisions to report to law enforcement, future research is needed with larger sample sizes that can test social reactions beyond tangible aid prospectively. Although we initially interviewed women an average of 5 months following the incident, 56% of this sample had already reported the incident to law enforcement and only nine women indicated making a report after the initial interview. A challenge for researchers will be to engage women in research quickly enough to assess immediate social reactions prior to reporting decisions.

Despite limitations related to the directionality of these effects, this is the first study (of which we are aware) to document links between social reactions and reporting. Furthermore, this study systematically assessed women's perceptions of social reactions received from informal supports, separate from community-based providers. These findings indicate the importance of preparing lay and professional communities to respond to disclosures of sexual assault with tangible help. For example, community-based agencies who serve victims of sexual assault may benefit from cross-trainings with other agencies to learn about resources in the community so that they are prepared to make referrals when victims' needs extend beyond what each agency offers and to help victims understand their options in terms of the criminal justice system as well as for support services. Similarly, trauma-informed training on common responses to and coping with sexual assault may prepare providers to help victims access information important to coping in the aftermath of assault.

Of course, implicit in this study is the assumption that facilitating reporting to law enforcement is of value. For example, reporting is a first and necessary step to engaging with the criminal system for women who want to seek justice through that system. Reporting can initiate a criminal justice process that holds offenders accountable and protects the public. Nonetheless, there should never be blanket assumptions that reporting is in women's best interests; only women themselves can make such decisions. Understanding the social reactions that facilitate and/or inhibit women's decisions to report, and that tend to accompany women's actions regarding reporting, can be helpful for creating communities that both maximize women's ability to make autonomous reporting decisions and offer sustained support once women have followed through with such decisions.

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