

Gender differences in experiences of social support among men and women releasing from prison

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Abstract

Objectives: Positive social support is critically important to postprison well-being outcomes. However, researchers and program developers are still trying to understand how to best promote stable and sustainable social support for formerly incarcerated individuals during reentry to the community. We sought to add to the body of knowledge on social support and prisoner reentry by comparing men and women releasing from prison on the quality (e.g., positive or negative) and amount of informal social support.

Methods: A random sample of 395 male ($n = 165$) and female ($n = 230$) releasing prisoners participated in the study. After unadjusted bivariate comparisons, multivariate regression was conducted to identify gender differences in preincarceration social support quality of influence and anticipated number of postrelease support persons while controlling for important covariates such as substance abuse and mental illnesses.

Results: Males reported higher rates of negative social support overall, and females reported higher rates of both mixed and positive social support compared to their male counterparts. Older participants reported higher levels of positive support compared to younger participants. Men of color reported significantly higher levels of positive support than their White male counterparts. Overall, women had higher

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prevalence of behavioral health factors that complicate quality of support. However, there were no differences in gender found for the amount of perceived social support available postrelease in the unadjusted models.

Implications: Study findings suggest the need for gender-specific and culturally tailored targets for prisoner reentry programs addressing social support. Possible adaptations for interventions are explored.

Keywords

Gender responsive, incarceration, prison, reentry, social support

Approximately 640,000 adults are released from prison back into communities across the nation annually (Carson & Anderson, 2016), and 50% of these individuals are reincarcerated within 3 years (Durose, Cooper, & Snyder, 2014). The process of transitioning from prison back to the community (i.e., prison reentry) is often accompanied by stress, financial difficulties to meet basic material needs, substance abuse, parental challenges, and a lack of adequate social support (Visher & Travis, 2003). Experiencing a successful transition home requires positive social support networks (Bahr, Harris, Fisher, & Armstrong, 2010; Visher & Travis, 2011). However, deficits in both the quality and quantity of available social support are common among those recently released from prison (Pettus-Davis, Howard, Roberts-Lewis, & Scheyett, 2011; Reisig, Holtfreter, & Morash, 2004).

Cullen (1994) argued for social support to be an organizing principle of criminal justice research based on robust evidence showing the importance of social support in both the involvement in and desistance from criminal behavior. Similar to other theoretical orientations within criminal justice, Cullen (1994) spoke of social support as a gender-neutral factor that is experienced in the same way by both males and females. However, recent research examining social support among women incarcerated in prison compared to incarcerated men has identified important differences that require further exploration (Clone & DeHart, 2014; Cobbina, Huebner, & Berg, 2012; Jiang & Winfree, 2006; Mitchell, Spooner, Jia, & Zhang, 2016; Taylor, 2015). Holtfreter and Wattanporn (2014) argued that risk and protective factors related to criminal behavior, such as social support, can be either gender-neutral or gender-specific, thus researchers need to examine risk and protective factors for gender responsiveness.

Given the critical role that social support has shown in helping formerly incarcerated individuals transition from prison to the community (Visher & Travis, 2011), greater understanding into how social support operates in males compared to females could help to guide interventions seeking to maximize and sustain social support in a gender-responsive manner. Extant research has identified differential amounts of social support and impact of social support by gender on outcomes of those who experience incarceration (Jiang & Winfree, 2006; McCoy & Miller, 2013). Prior studies have also identified females as placing greater value on social support after prison than males (Barrick, Lattimore, & Visher, 2014; Cobbina et al., 2012) and females relying more heavily on social support after release from prison than males (Clone & DeHart, 2014). Current research findings that there are differences in social support among incarcerated

males and females are consistent with relational theorists' proposition that connections to others have different roles and meaning for males and females (Heidemann, Cederbaum, & Martinez, 2014).

More research is needed to understand the contributors to gender differences in social support for releasing prisoners in order to identify the best mechanisms of action to target among prisoner reentry services seeking to increase social support for those releasing from prison. Examination of the nature of support accessible to males and females may provide some important insight into gender differences (Nargiso, Kuo, Zlotnick, & Johnson, 2014). Yet, little research has explored variations in the quality of social support experienced by males and females and how quality of support might ultimately relate to outcomes. The current study aims to advance existing literature by using a comparison sample of males and females to investigate differences in both the quality and quantity of social support experienced and anticipated as the individuals release from prison. We include individual characteristics and risk and protective factors to further compare and understand male and female's experiences of social support.

Background

Social support

Social support is a multidimensional construct with varied definitions and a lengthy theoretical history in social and behavioral sciences. We use the definition that describes social support as a process of social interaction that involves the provision or exchange of social resources that persons perceive to be available or are actually provided by others (Cohen, Underwood, & Gottlieb, 2000). Cohen, Underwood, and Gottlieb's (2000) *main effect model* of social support posits that resources from social relationships have beneficial effects regardless of whether individuals are experiencing stress. According to the main effect model, social support is a result of integration into a social network. The social network exposes individuals to familial and nonfamilial social controls that influence adaptive (normative) behaviors. Participation in social networks is critically important, particularly after an incarceration experience because it can help to buffer stress and provide predictability, purpose, and a sense of stability and belonging.

People releasing from prison may have access to different dimensions of social support both during and after imprisonment, such as "formal" and "informal" support (Vaux, 1988). Formal social support encompasses support provided from an institution such as local social service offices, hospitals, or correctional agencies (McCamish-Svensson et al., 1999; Walker, 2010). Informal social support is that which comes from naturally occurring relationships or individuals not receiving pay for their efforts (McCamish-Svensson et al., 1999), such as family, intimate partners, natural mentors, or neighbors. For the purposes of the current study, we specifically focus on the quality and quantity of informal social support (herein *social support*).

Moreover, social support of formerly incarcerated individuals can be of varying quality. Negative social support is likely to occur when necessary social support resources are provided by law breaking individuals, which has shown to facilitate criminal activity of those recently released from prison (Bui & Morash, 2010; Schroeder,

Giordano, & Cernkovich, 2007) or when support providers and recipients are in conflict (Wallace et al., 2016). On the other hand, positive social support for former prisoners has been described as relationships that support the termination of reoffending and enhance postrelease adjustment (Hepburn & Griffin, 2004; Mallik-Kane & Visser, 2008). Evidence also suggests that both negative *and* positive behaviors can be exercised simultaneously by the same social support person resulting in a *mixed* influence (Karakos, 2014) of social support instead of an exclusively “positive” or “negative” quality. For example, a loved one who provides critical housing stability to a former prisoner is providing positive support. However, if that loved one is also selling illegal substances out of the home, the former prisoner is at risk of recidivism by directly or indirectly engaging in illegal behavior. In this scenario, a former prisoner is experiencing *mixed* influence of social support. For the purposes of this article, we refer to social influence of support as “quality” of support: positive, negative, or mixed support.

Social support and prisoner reentry

Ample gender-neutral or single-sex research has explored the role of social support in prisoner reentry. Studies with males released from prison have found males to depend on social support from family members for housing, financial, and emotional support (La Vigne, Shollenberger, & Debus, 2009; Naser & La Vigne, 2006). Children have also been shown to be important sources of social support for formerly incarcerated fathers (Swanson, Lee, Sansone, & Tatum, 2012). However, negative social support from family, particularly high levels of conflict, can also increase stress, drug use, and crime during the transition back to the community (La Vigne et al., 2009; Mowen & Visser, 2015). Remarkably, for males returning from prison, negative social support from family members can significantly deteriorate mental health, but a similar improvement in mental health is not associated with positive family social support (Wallace et al., 2016). These findings highlight the powerful and detrimental impact that negative social support can have on individuals after prison.

Parallel research within female-only samples has been primarily based on the gendered pathways theory. Salisbury and Van Voorhis (2009) identified gender-specific pathways to criminal behavior that demonstrated the influence of negative social support (particularly from male intimate partners) in both starting and sustaining criminal behavior among females. However, maintaining positive social support relationships with family both in prison and in the community has been shown to lower the likelihood for reincarceration of women postrelease. In contrast, nonfamily relationships during incarceration is found to increase the likelihood of return to prison for females (Barrick et al., 2014). Fortunately, studies have found that prior to release, women prisoners perceive high levels of social support from family (Heidemann et al., 2014) and positive social support from family has been integral to females’ well-being following prison (Clone & DeHart, 2014). Researchers have also found social support to be highly motivating to incarcerated females. Women report that their primary reentry concern is to be reunited with children and to reengage in relationships with family and intimate partners (La Vigne, Brooks, & Shollenberger, 2008). Research with female-only samples has played an important role in improving reentry services by helping to contribute to the growing use of gender-specific treatment for females with incarceration histories.

In a study of both male and females releasing from prison, Visher and O'Connell (2012) investigated the relationship between varying qualities of social support and postrelease attitudes. Positive family support and having children increased individuals' optimism, while negative family support (i.e., criminal history and drug use) reduced optimism (Visher & O'Connell, 2012). Unfortunately, differences in gender were not investigated.

Gender comparison and differences in social support

Underscoring the need for a gendered view of social support, comparisons of men and women with prison histories have demonstrated that women may require more social support both inside and outside prison relative to their male counterparts (Clone & DeHart, 2014). Jaing and Winfree (2006) found that imprisoned females report significantly higher levels of social support compared to males. Moreover, once females are released to the community from prison, they are more likely than formerly incarcerated males to reconnect with family and seek out family ties (Cobbina et al., 2012). Beyond differences in the amount of social support, the impact of social support on postrelease outcomes has also differed by gender. A meta-analysis on the relationship between social support provided from prison visitations and postrelease recidivism found that recidivism was only reduced for males but not for females (Mitchell et al., 2016). In contrast, higher levels of social support from family focused on an individual's instrumental needs following release from prison (such as help with childcare and transportation) were shown to decrease the likelihood of any criminal offense with females but increase the likelihood for males (Taylor, 2015).

Cobbina, Huebner, and Berg (2012) additionally identified differential associations between the relationship type of the social support provider and rearrest depending on gender. For instance, positive social support from parents reduced rearrest in both males and females. However, this same correlation was not true of social support provided by intimate partners. Social support from intimate partners reduced risk of rearrest for formerly incarcerated females but had no significant effects for formerly incarcerated males (Cobbina et al., 2012). Cobbina and colleagues' (2012) study is the only research we found that specifically looked at quality of social support by gender within a sample of former prisoners. The study by Cobbina et al. (2012) is somewhat limited because the measure of social support was gleaned from an overall risk assessment tool versus a validated social support measure. Although the study used the best measure possible, the tool provided a fairly weak proxy for quality of social support, resulting in the need for more research. Additionally, their primary focus on quality of social support was to identify the impact on rearrest rates, which is an important contribution, but does little to inform how to intervene on social support differently by gender in reentry programs.

The current study sought to examine whether positive, negative, and mixed quality and amount of social support is experienced differently among incarcerated males and females nearing release from prison. We used validated social support and social network measures to examine social ties. We also explored the association between risk factors and social support by gender. Our study seeks to advance current knowledge by providing a better understanding of the factors contributing to composition of networks and how those factors

might vary by gender for people releasing from prison. Study findings will help to refine knowledge about the role of social support in prisoner reentry and suggest ways to tailor current practice and policy approaches in the field of reentry services.

To achieve our study goals, we focused on three primary research questions:

1. How do incarcerated males and females differ in quality of social support?
2. How do incarcerated males and females differ in the amount of perceived social support?
3. What risk factors predict quality and amount of social support differently for males and females nearing release from prison?

Method

Procedures

The study used a cross-sectional research design to administer validated psychosocial assessment tools to a probability random sample of 395 male and female prisoners incarcerated in a southeastern state. Study protocol were approved by two university human subjects review boards as well as the human subjects committee of the state's Department of Public Safety. Approval from two university review boards was necessary because members of the research team were affiliated with two universities.

Data collection occurred at multiple intervals between July 2009 and June 2012. Twelve prisons were selected for recruitment based on a high number of prisoners releasing each month and proximity of the prison to the research team. The prisons represented all custody levels—maximum, medium, and minimum. The sample was randomly selected using a census of all eligible men and women located within the 12 prison-based study sites. To be eligible for the study, individuals had to meet the following criteria: 18 years or older, speak English, scheduled to be released within 25–180 days of the study start date, cognitively able to provide informed consent, and indicated that they understood the nature of the study and the role of being a study participant. No one was excluded based on offense type. Of 191 eligible male prisoners, 165 signed the consent form yielding an 86% response rate. Overall, 277 women were asked to participate in the research and 230 signed the consent form, yielding an 83% response rate. All participants who agreed to be involved in the study completed the assessment interview protocol the same day. Research team members conducted assessment interviews by reading out loud the questions and writing down participants' responses. Interviews lasted between 60 and 120 min and were conducted by one member of the research team in a private room. Researchers either had a doctoral degree in social work or were graduate students of social work. Participants were not compensated for study involvement.

Measures

Quality of social support. Quality of social support was assessed using the *Important People Drug & Alcohol Interview* (IPDAI; Zywiak et al., 2009), a 14-item interview that asks participants to provide the name and relationship of up to six members of their

social network who were important to them in the 6 months prior to the current incarceration. Because assessing the quality of informal social support postrelease would be prospective, we chose to use social support reported in the months prior to the most current incarceration. The IPDA includes items on the quality of informal social support provided in terms of it having a positive or negative influence on the respondent.

For this study, we constructed the first dependent variable to be a three-level ordinal variable (*negative* = 1, *mixed* = 2, *positive* = 3) of quality of social support. We included the category of “mixed” to capture those social support providers that had both a positive and negative influence on the participant. This dependent variable was derived from 8 items on the IPDAI. We considered several issues in determining what type of behavior influenced a relationship to be of a positive, mixed, or negative quality of social support. For instance, social support that encouraged the participant to use drugs was classified as a negative influence, whereas social support that was strongly supportive of the participant seeking drug treatment (if needed) was classified as a positive influence for that item. After deciding which behaviors were appropriate for positive or negative classification, decision rules were jointly made by two researchers in advance of coding a social support provider as positive, negative, or mixed quality of influence. A series of rules determined the quality of social support for each individual relationship that a respondent reported. Baseline decision rules were then made about the overall quality of social support score *across* all six possible relationships. A series of additional rules were developed for unique social support systems. Two research team members separately coded the quality of social support. A quality score of social support was obtained for each of the social support providers listed. Finally, whenever a case was not able to be determined by the preset rules or showed potential for ambiguity, the research team members consulted with each other and came to consensus on categorization.

Amount of perceived social support. Anticipated postrelease social support was measured using the Social Support Survey (Richman, Rosenfeld, & Hardy, 1993), which is a 34-item interview about six types of informal social support respondents perceive as available. The Social Support Survey was used to create a continuous dependent variable reflecting the amount of social support that a participant anticipated postincarceration. Participants were instructed to respond to the questions thinking about people they believed would provide them with help to remain drug-free and crime-free after release from prison. Participants were told to list only those people who do not get paid to provide support to the individual (i.e., informal support providers). Participants were then asked to list all persons who they believed would provide a given support, by subtype of support (listening, task, emotional, challenge, tangible, and personal assistance; defined in Table 1). The number of social support persons was tallied across all types for each participant.

Depression. Deficits in social support have been shown to be related to an individual’s depression (Kendler, Myers, & Prescott, 2005), thus we controlled for this risk factor in the analysis. The Mini International Neuropsychiatric Interview (Sheehan et al., 1998) was used to measure whether an individual ever experienced an episode of depression during his or her lifetime. “Depression” was a binary variable coded as 1 = *yes* and 0 =

Table 1. Subtypes of Social Support.

| | |
|-------------------------|---|
| Listening | People who will listen to participant without giving advice or forming an opinion about him/her |
| Task appreciation | People who participant indicates know he/she has tried to reach his/her goal and tell him/her that they know the work he/she is trying to do can be hard work |
| Emotional support | People who participant thinks will comfort him/her and tell him/her they are on his/her side and care for them |
| Emotionally challenging | People who ask participant to think differently about his/her ideas, attitudes, and feeling in ways that are different than how he/she normally thinks |
| Tangible support | People who help participant with money, food, or other legal products |
| Personal assistance | People who help participant by driving him/her places or helping him/her go to the store or other types of help like these activities |

no in response to the following question, “have you ever been consistently depressed or down, most of the day, nearly every day, for at least 2 weeks?”

Substance abuse. A substance use disorder or problematic use of substances predicts lower levels of social support (Souza, Villar Luis, Ventura, Barbosa, & Santos, 2016; Staton-Tindall, Royse, & Leukfeld, 2007). Lifetime histories of substance use disorders were scored using the Composite International Diagnostic Interview Substance Abuse Module (CIDI-SAM; Cottler, Robins, & Helzer, 1989). The CIDI-SAM is a 38-item assessment instrument that has been used with a wide range of adolescent and adult populations for clinical and research purposes to screen for and diagnosis substance use disorders using the diagnostic criteria in *Diagnostic and Statistical Manual for Mental Disorders*, fourth edition. The CIDI-SAM items ask respondents to report current and lifetime substance use, consequences associated with substance use, and substance abuse treatment history. When asked about “current” substance use, participants were asked to report use that occurred during the 12 months prior to incarceration.

Participants were coded as screening positive for a history of a substance use disorder if they reported significant impairment or distress as a result of substance misuse in two or more aspects of social roles and interpersonal functioning during the 12 months prior to incarceration (1 = *yes*, 0 = *no*). In addition, participants were asked to indicate which substance caused them the most problems in their daily life. Each problematic substance was dichotomized (*yes* = 1, *no* = 0) and the categories included alcohol, marijuana, and heavy drugs which collapsed various problematic substances such as heroine, methamphetamine, and cocaine into a single category.

Individual-level variables. Race was initially measured as a six-group categorical variable that included Black, White, Latino/a, Asian, Native American, and Other. For analysis, the variable was collapsed into a binary of *White* = 1 or *people of color* = 2 to help account for small cell sizes for non-Black people of color. The measure of most serious offense captured the highest offense classification within an individual’s current conviction history incurred in the state where the study was conducted. Most serious offense was used because many study participants had an official record of more than one

conviction tied to their current incarceration. Most serious offense was coded as a four-level ordinal variable from lowest to highest offense classification, and the categories were *misdemeanor* = 1, *drug offense* = 2, *property offense* = 3 and *violent or sexual offense* = 4. The covariate of most serious offense was used as an indicator of criminal involvement, which is shown to be negatively correlated with social support (Andrews & Bonta, 2010). Age was a continuous variable starting at age 18. Age is associated with both the amount and overall quality of social support (Siedlecki, Salthouse, Oishi, & Jeswani, 2014), thus age was important to account for in the current investigation.

Analyses

Examination of both the independent and dependent variables began with bivariate comparisons across gender using either independent samples *t* test for continuous variables or χ^2 test for categorical variables. Next, multivariate regression models were fitted for each dependent variable to control for important covariates that are associated with an individual's social support. Ordinary least squares (OLS) linear regression was used for the dependent variable of amount of perceived social support. Ordered logistic regression was used to examine the outcome of quality of social support. Ordered logistic regression was chosen because quality of social support was a three-level categorical variable that was ordered from negative to positive social support quality (1 = *negative social support*, 2 = *mixed social support*, and 3 = *positive social support*). This ordinal categorical variable violated the assumption of OLS regression that the dependent variable be measured at either interval or ratio (Tabachnick & Fidell, 2013). The primary assumption for ordered logistic regression is the proportional odds assumption that the relationship between each of the ordered categories in the dependent variable is similar. The likelihood ratio test of proportionality of odds across all three categories of quality of social support was found to be nonsignificant in all three analysis samples, thus the proportionality of odds assumption was upheld in all the ordered regression models. OLS regression assumptions include normality and multicollinearity; both assumptions were met for all independent variables within both the full sample and the separate male- and female-only samples. Missing data were never greater than 2% for any one variable and the pattern of missing data was found to be consistent with missing completely at random (MCAR) by Little's MCAR test (Little, 1988), thus the procedure of listwise deletion was used (Tabachinik & Fidell, 2013). All analyses were conducted in STATA 14 (StataCorp, 2015).

Results

Sample characteristics

Males and females differed on several demographic characteristics (see Table 2). The proportion of males of color was significantly higher than females of color ($p < .01$), and in terms of substance abuse, females were reported to have a substance use disorder at significantly higher rates than males ($p < .01$). Examination of the substances that were the most problematic found no difference between males and females in terms of alcohol

Table 2. Sample Characteristics.

| | Male (n = 156) | | Female (n = 230) | | <i>t</i> / χ^2 | Missing (n = 386) | |
|------------------------------|---------------------|----------------------|---------------------|----------------------|---------------------|-------------------|----------|
| | <i>M</i> / <i>n</i> | <i>SD</i> / <i>%</i> | <i>M</i> / <i>n</i> | <i>SD</i> / <i>%</i> | | <i>n</i> | <i>%</i> |
| Demographics | | | | | | | |
| Age (in years) | 31.81 | 11.26 | 33.70 | 9.90 | -1.70 | 0 | 0% |
| Race | | | | | 75.47** | 0 | 0% |
| White | 17 | 11% | 125 | 54% | | | |
| People of color | 139 | 89% | 105 | 46% | | | |
| Substance use disorder | | | | | 7.10** | 0 | 0% |
| No | 19 | 12% | 11 | 5% | | | |
| Yes | 137 | 88% | 219 | 95% | | | |
| Marijuana most problematic | | | | | 3.42 | 3 | 0.8% |
| No | 126 | 81% | 199 | 87% | | | |
| Yes | 30 | 19% | 28 | 12% | | | |
| Alcohol most problematic | | | | | 0.66 | 3 | 0.8% |
| No | 130 | 83% | 196 | 85% | | | |
| Yes | 26 | 16% | 31 | 13% | | | |
| Heavy drugs most problematic | | | | | 14.33** | 0 | 0% |
| No | 93 | 60% | 92 | 40% | | | |
| Yes | 63 | 40% | 138 | 60% | | | |
| Most serious offense | | | | | 1.23 | 0 | 0% |
| Misdemeanor offense | 23 | 15% | 43 | 19% | | | |
| Property offense | 52 | 33% | 99 | 43% | | | |
| Drug offense | 34 | 22% | 60 | 26% | | | |
| Violent or sex offense | 47 | 30% | 28 | 12% | | | |
| Lifetime depression | | | | | 26.73** | 6 | 1.6% |
| No | 96 | 61% | 80 | 35% | | | |
| Yes | 58 | 37% | 146 | 63% | | | |
| Quality of social support | | | | | 8.94* | 6 | 1.6% |
| Negative support | 45 | 29% | 38 | 16% | | | |
| Mixed support | 49 | 31% | 94 | 41% | | | |
| Positive support | 60 | 38% | 94 | 41% | | | |
| Anticipated social support | 4.13 | 2.23 | 3.94 | 1.89 | 0.88 | 6 | 1.6% |

* $p < .05$. ** $p < .01$.

or marijuana. In contrast, the rates of heavy drugs being the most problematic were significantly different by gender ($p < .01$), with females reporting heavy drugs to be most problematic at a rate almost 20 percentage points higher than males. Females also reported significantly higher rates of lifetime depression ($p < .01$). Although no significant difference was present, over half of both males and females reported a property or drug offense to be the most serious offense committed.

Bivariate tests were also conducted to examine the unadjusted differences in gender in both the outcomes of quality of social support and anticipated amount of social support. There was a significant difference found for quality of social support by gender ($p < .05$). Males reported higher rates of negative social support overall, and females reported higher rates of both mixed and positive social support compared to their male

counterparts. There were no differences in gender found for the amount of anticipated social support persons postrelease in the unadjusted models.

Multivariate regression

Quality of social support. In light of these findings regarding bivariate differences in gender, multivariate regression models were fitted to examine the factors that predicted either quality of support or anticipated social support within the total sample and then also separately for males and females (see Table 3). The first set of models using ordered logistic regression were focused on the individuals' quality of social support. An individual's age had a significant association within both the total sample (odds ratio [OR] = 1.04, $p < .01$) and females ($OR = 1.03, p < .05$) and males ($OR = 1.05, p < .01$) separately. With every 1 year increase in age, the likelihood of reporting positive social support increased by 3–5% versus the lower quality support categories. In contrast, a participant's race related differently across the three analysis samples. While both the total sample and female sample demonstrated no relationship between race and quality of support, male participants of color relative to their White male counterparts were 4.53 times more likely to have positive social support than either mixed or negative support ($p < .01$).

Moreover, the relationship between substance use and quality of social support also showed a number of notable differences across the three analysis samples. The total sample of participants ($OR = 2.91, p < .01$) reported a substance use disorder to increase the odds of reporting positive social support compared to a lower quality of social support, but no similar relationship between substance use disorder and quality of social support was found in either the female-only or male-only sample. Nevertheless, when examining the different types of drugs reported by participants to be the most problematic, a different relationship between substance use and quality of support was found. For example, within both the total sample and females-only sample, the report of problematic use of either marijuana or heavy drug use significantly decreased the likelihood of reporting positive social support. In the total sample, the odds of positive social support decreased by 70% ($p < .01$) when marijuana was identified as a participant's most problematic drug and by 45% ($p < .05$) when heavy drugs were the most problematic. Similarly, within the female sample, the odds of positive social support compared to lower quality support decreased by 90% ($p < .01$) and 72% ($p < .01$) for problematic use of either marijuana or heavy drugs, respectively. Moreover, females with problematic alcohol use also had a significantly lower likelihood to report positive social support prior to incarceration ($OR = .25, p < .01$). Paralleling the findings with substance use disorders, the male-only sample again reported no significant relationship with problematic marijuana, heavy drug use, or alcohol. The disparate findings regarding problematic alcohol use between genders cancelled each other out in the total sample, with no significant relationship found.

Anticipated social support. The OLS regression models fitted to predict the number of anticipated social support persons postrelease found one significant covariate relationship within either the total sample or the separate samples of males and females (see

Table 3. Multivariate Models Comparing Gender for Quality of Support and Anticipated Support

| | Total Sample | | | Females | | | Males | | |
|--|--|------------------------------|--|------------------------------|--|------------------------------|--|------------------------------|--|
| | Quality of Support Odds Ratio [95% CI] | Anticipated Support [95% CI] | Quality of Support Odds Ratio [95% CI] | Anticipated Support [95% CI] | Quality of Support Odds Ratio [95% CI] | Anticipated Support [95% CI] | Quality of Support Odds Ratio [95% CI] | Anticipated Support [95% CI] | |
| Age | 1.04** [1.02, 1.06] | -.003 [-.03, .02] | 1.03* [1.00, 1.06] | -0.02 [-0.04, 0.01] | 1.05** [1.01, 1.08] | 0.01 [-0.02, 0.05] | | | |
| Substance use disorder (reference = yes) | 2.91** [1.42, 5.98] | .02 [-.78, .82] | 3.14 [0.95, 10.42] | 0.61 [-0.59, 1.80] | 1.55 [0.59, 4.05] | -0.68 [-1.91, 0.55] | | | |
| Marijuana (reference = yes) | 0.30** [0.15, 0.58] | .17 [-.58, .91] | 0.10** [0.04, 0.29] | 0.002 [-1.00, 1.01] | 0.85 [0.32, 2.25] | 0.63 [-0.55, 1.80] | | | |
| Alcohol (reference = yes) | 0.76 [0.40, 1.50] | .08 [-.64, .81] | 0.25** [0.09, 0.67] | 0.16 [-0.79, 1.11] | 2.86 [0.98, 8.38] | 0.15 [-1.06, 1.36] | | | |
| Heavy drugs (reference = yes) | 0.55* [0.32, 0.94] | .07 [-.51, .66] | 0.28** [0.12, 0.63] | -0.13 [-0.85, 0.59] | 1.14 [0.47, 2.73] | 0.60 [-0.46, 1.66] | | | |
| Race (reference = people of color) | 1.40 [0.88, 2.21] | .67* [.16, 1.17] | 1.16 [0.68, 1.99] | 0.45 [-0.09, 0.99] | 4.53** [1.56, 13.14] | 1.46* [0.25, 2.67] | | | |
| Most serious offense (reference = misdemeanor) | 0.98 [0.54, 1.82] | .06 [-.60, .72] | 0.73 [0.34, 1.58] | -0.018 [-0.96, 0.61] | 1.45 [0.50, 4.18] | 0.47 [-0.71, 1.66] | | | |
| Property or drug offense | 1.38 [0.79, 2.42] | .04 [-.57, .65] | 1.43 [0.69, 2.94] | -0.04 [-0.79, 0.70] | 1.16 [0.45, 3.01] | 0.12 [-0.95, 1.19] | | | |
| Violent or sexual offense | 0.78 [0.51, 1.17] | -.09 [-.54, .35] | 0.83 [0.47, 1.45] | -0.06 [-0.61, 0.50] | 0.71 [0.37, 1.35] | -0.11 [-0.87, 0.65] | | | |
| Lifetime depression (reference = yes) | 0.66 [0.42, 1.04] | -.15 [-.64, .33] | — | — | — | — | | | |
| Gender (reference = male) | — | — | — | — | — | — | | | |

Note. For anticipated support, unstandardized coefficients from linear regression are presented with confidence intervals (CI). For quality of support, odds ratios from ordinal logistic regression are presented with the CI.

* $p < .05$. ** $p < .01$.

Table 3). The only substantial difference was the magnitude of the relationship between race and anticipated social support postrelease. In the total sample, persons of color anticipated, on average, .67 more support persons than their White peers postrelease ($p < .05$), and a similar relationship was also found in the male-only sample where persons of color anticipated an average of 1.46 more support persons in the community following prison ($p < .01$). The relationship between race and anticipated social support was not significant in the female-only sample. No other covariate significantly predicted participants' anticipated social support postrelease in any of three samples.

Discussion

Consistent with prior research, this study sample of incarcerated males and females differed on a number of risk and protective factors, including their experiences of social support.

Compared to males, the females in this study were more likely to report heavy substance use and a lifetime substance use disorder, had higher rates of depression, and were more likely to be White. The finding that women in this sample faced more difficulties in terms of mental health and substance use was consistent with research on the increased vulnerability of females who become incarcerated as compared to males (Fries, Fedock, & Kubiak, 2014; Langan & Pelissier, 2001; Zlotnick et al., 2008) and further supports the expansion of gender-tailored interventions within and after prison. The current study results specific to differential experiences of social support by gender suggest new intervention adaptation opportunities.

How do incarcerated males and females differ in quality of social support?

The total sample reported remarkable levels of negative social support in their networks of social support providers. For both males and females, over half of the social support reported fell into the categories of negative influence or mixed influence (i.e., both negative and positive). Females in this sample identified significantly higher rates of positive and mixed support when compared to males. In contrast, males indicated higher rates of negative support and had a lower likelihood of reporting positive social support than females.

Prior research has shown that both males and females with incarceration histories are particularly susceptible to the influence of negative social support (Bui & Morash, 2010; Schroeder et al., 2007). Notably (and as reviewed in the background section), research finds that males and females differ in whether they experience the protective role of social support depending on who is providing the support (e.g., a family member or an intimate partner) and under what circumstances the support is being provided (Cobbina et al., 2012; Mitchell et al., 2016; Taylor, 2015). Additional research is needed to examine under what conditions is social support perceived as positive and, in turn, whether that positive social support is able to buffer the effects of negative social support for males and females postprison.

One possible explanation for gender differences and quality of social support reported by the current study sample could be that women were, on average, two years older than

their male counterparts. Multivariate results showed that age increased the likelihood of positive support. Research with general community samples has also found that as individuals age, they cut down their social network to focus on high-quality relationships (Siedlecki et al., 2014). These findings that both women and older individuals are more likely to identify the protective factor of positive social support also aligns with research showing that both women and older individuals are at lower risk for criminal behavior compared to individuals who are male and younger in age (Lipsey & Derzon, 1998; Sweeten, Piquero, & Steinberg, 2013). The converging findings of research showing that women and older formerly incarcerated individuals have higher levels of positive social support and reduced criminal behaviors than their male counterparts underscore the importance of positive social support, in general, and against recidivism.

However, a recent study evaluating the efficacy of a reentry intervention focused on social support found an inverse relationship between age and the amount of positive supportive behaviors reported in the individual's social network (Pettus-Davis et al., 2016). Given these mixed findings, further research that follows longitudinally the relationships between gender, age, and perceived and experienced social support within a larger sample of reentering prisoners is worth exploration.

How do incarcerated men and women differ in amount of anticipated social support?

Our study found that there were no gender differences in the amount of social support participants expected to have postrelease. This finding is somewhat inconsistent with studies that have found incarcerated females to report higher levels of social support compared to males (Jaing & Winfree, 2006), and studies that report recently released females are more likely to seek out and connect with family ties than males (Cobinna, Huebner, & Berg, 2012). The current study revealed that both males and females anticipate having equally low numbers of people to support them after release. This finding was consistent with literature indicating that relatively low amounts of social support is experienced by both men and women upon release from prison (Denney, Tewksbury, & Jones, 2014) and further supports the need for reentry programming to aim to enhance social support.

What factors predict quality and amount of social support for men and women nearing release from prison?

Prior research with nonjustice-involved samples has shown that there are gender differences in behavioral health-related risk factors and social support experiences. In the current study sample, type of substances used, history of a substance use disorder, and race significantly predicted quality of support. However, the predictions varied by gender.

The relationship between problematic substance use and quality of support was complex and sometimes counterintuitive. As found in extant literature (Souza et al., 2016; Staton-Tindall et al., 2007), problematic use of either marijuana or heavy drugs (i.e., heroin, cocaine, street methadone, etc.) was associated with a decreased likelihood

of positive social support for the combined sample. For the female-only sample, problematic substance use, regardless of the type of substance used, lowered the likelihood of positive social support. However, in the male-only sample, the presence of problematic substance use did not have a significant impact on positive social support. These disparate findings may be related to gendered social norms. Females experience social stigma and self-shame related to parenting and female norms (Dodge & Pogrebin, 2001). Substance abusing females may be more likely to become isolated from positive social networks because their substance abuse varies from female norms. Moreover, research on female's pathways to criminality implicates negative social support to female offending and other deviant behaviors such as substance abuse more so than identified in males (O'Brien, 2001).

In contrast, results from analyses with the combined sample indicated that a lifetime substance use disorder increased an individual's likelihood for positive social support—which is perplexing and inconsistent with other studies. One hypothesis for the incongruent findings between the lifetime diagnosis for a substance use disorder and problematic use of substances is the time frame being captured in the different measures of substance use. The problematic use of substances was focused on the individual's overall functioning in the 12 months prior to the current incarceration. Individuals could have also received substance abuse treatment during that 12 months prior to incarceration and thus had improvements in the quality of their overall support system. Additionally, when reflecting on those most important to them in the 6 months prior to incarceration, respondents may consider those support providers who wanted the respondent to receive treatment more readily than those with whom they used substances. The lack of temporal overlap between the preprison social support measure (6 months prior to incarceration) and the preprison substance use measure (12 months prior to incarceration) may be contributing to the counterintuitive findings regarding substance use and quality of support. Nevertheless, this is all conjecture and the relationship between proximal preprison substance use on the social support of justice-involved individuals may warrant further exploration.

Notably, race was the only predictive factor that influenced the anticipated amount of social support postrelease; the significance of race was found for the combined sample and the male-only sample. Similarly, race was also an important predictive factor for quality of support for men. Men of color were significantly more likely to report positive social support than their White male counterparts. This finding was surprising, given that positive social support is considered a protective factor from criminal behavior but men of color are at the highest risk for reincarceration (Giordano, Cernkovich, & Rudolph, 2002). One possible explanation for this difference could be related to the well-documented structural racism that occurs within the U.S. criminal justice system (Chin, 2016). Men of color are keenly aware of the unearned additional risk they face in the United States simply due to the color of their skin and cite social support as an important means of coping (Hudson et al., 2016). Therefore, it could be that this sample represents the heightened demand people of color have to establish positive social support as an attempt to mediate institutional disadvantage. However, without additional data, further examination of this potential protective factor was not possible.

Limitations

The study had several strengths that helped to counter some of the study weaknesses. The sample was randomly selected for each gender, had suitable sample size to conduct gender comparisons, and achieved a good response rate. There were a greater number of females than males in the study which is not representative of the prison population in the United States (Carson & Anderson, 2016). We were able to obtain a larger female sample size because of the concentration of female prisoners in two women-only facilities and the proximity of those prisons to the research team compared to the male prisons. Another strength was that this study was designed to conduct a more nuanced examination of social support than is typically seen in research reporting on social support among people releasing from prison. With the more detailed analysis of social support came some limitations in the measurement of support.

The quality of support measure used in this study was limited to six people. Participants were asked to retrospectively reflect upon social support received prior to incarceration. Although participants were asked to focus only on those most important to them, we did not measure whether those same individuals would be support providers after release. Similarly, the measure of perceived social support was limited in that participants were asked to anticipate social support they would have post release. In this measure, we asked people to think of those who only provided positive social support (defined as those that would help them to remain crime-free and drug-free). Given the prevalence of mixed social support, this could have resulted in some underreporting of the amount of positive support participants expected to have upon release. Research indicates that people who are about to be released from prison are more likely to underestimate the amount of support rather than overestimate that support (Brooker, 2005; Naser & La Vigne, 2006). However, we had no way of assessing whether participants were accurately appraising the quality of perceived support they would have available and/or the extent to which this support would be available upon release.

Given the relatively moderate sample size for gender comparisons and social support, we included a select few variables that were likely to influence quality and amount of social support. We used most serious offense to look at the relationship between the current offense type and social support. We chose most serious offense because much of the sample had multiple convictions on which their current sentence was based. Most serious offense was the cleanest way to standardize across participants. Another important measure of criminal history could have been the total number of felony convictions for each participant. Although we were not investigating recidivism as an outcome variable, extensive criminal history could damage ties to positive social support networks. Not measuring criminal history is a limitation of the study. In addition, we did not have a measure of sentence length in our study to control for possible negative effects that longer prison sentences may have on both the quality and amount of social support available upon release into the community (Martinez & Abrams, 2013). Because of the very small numbers of people that identified as a race other than White or Black, we collapsed the race variable into a dichotomous measure. The use of a binary variable for race likely limited some of the nuance in the findings regarding race that we may have been able to see with larger sample sizes.

Although we had very high response rates for both male and female prospective participants, we do not know if there are differences between those who volunteered for the study and those who did not. There is also a potential for systematic error because study protocols involved interviewers reading the measure out loud to participants and having participants respond with their answers rather than participants self-reporting responses in an unmonitored manner. We felt using interviewers was necessary because illiteracy rates among prison samples are higher than in the general population and prisoners are not consistent about notifying researchers to their literacy levels. We used research interviewers to improve comprehension of the study questions. Finally, the cross-sectional nature of the data limits any causal conclusions that can be made about the relationship between the constructs examined within the study.

Additional implications for research, practice, and policy

Despite decades of research on social support across diverse disciplines, the construct and how social support operates in people's lives remain difficult to dissect. Yet, the important role of social support in increasing well-being is consistently identified (Sarason & Sarason, 2009). Upon incarceration, men and women are removed from potential social support providers. As they return to the community, renegotiating those relationships may be challenging. Practitioners and researchers committed to improving the outcomes of people releasing from prison are in the nascent stages of figuring out how to best construct interventions that will enhance and sustain positive social support in former prisoners' lives (Pettus-Davis et al., 2015).

This study helps us to understand that race and gender may be particularly influential in how social support is experienced. More research should be done to figure out ways in which prisoner reentry interventions can be tailored to be culturally and gender responsive to social support needs. Before programs can be appropriately tailored, more research is warranted to understand why males, females, and people of color report differential amounts and quality of support. It will also be important to examine in more depth *who* is providing support and how that relationship may directly or indirectly influence perceptions of social support as well as individual and other well-being outcomes. For example, what are the mechanisms through which instrumental support from families is reducing recidivism of females, but not for males (Taylor, 2015)? Is it because males undervalue family support (La Vigne et al., 2009) and thus seek less family support after incarceration (Cobbina et al., 2012). Or do family pressures generate more negative stress for males versus females after prison (Naser & La Vigne, 2006; La Vigne et al., 2009)? Within gender, do variables such as race, age, and criminal history become moderators? Coupled with the results presented in this study, knowledge gained from additional research would arm practitioners with more details about how to best target prisoner reentry interventions. For example, the current study found that obtaining social support is a strength of people of color compared to their White counterparts, particularly men of color. What can both practitioners and researchers learn from this subgroup of people releasing from prison?

The current study findings suggest that gender-tailored approaches to prison reentry could provide a number benefits when addressing the identification of social support in

the community. Interventions with males may need to place more emphasis on men removing themselves from negative social support relationships while at the same time bolstering positive social support. Whereas interventions with females may be able to spend more time focusing on sustaining positive social support relationships during and beyond the tumultuous time of prisoner reentry.

Given the amount of mixed social support represented in this study, prisoner reentry programs may benefit from practitioners developing tools to help reentering prisoners distinguish positive and negative social support. Practitioners could then work with reentering prisoners to identify strategies for spending more time with positive social support providers and less time with negative social support providers. The current study suggests that in developing these tools, practitioners need to acknowledge that tools and strategies should be responsive to gender, relationship dynamics, cultural background, and age.

Due to four decades of mass incarceration policies and the related financial burdens imposed on governments, few resources have been expended on developing prisoner reentry programs with a solid grounding in research evidence. As such, reentry policies, like reentry programming, are still formative. The current study results can help to inform policy efforts to assist people returning to communities from prison. This study suggests that it is important for governmental entities to prioritize prisoner reentry initiatives that emphasize social support—especially a nuanced approach to strengthening social support. The study also points policy makers toward investing in innovations and rigorous evaluations of prisoner reentry programs as well as the development and testing of programs that strengthen the sustainability of social support. Programs that strengthen social support may include interventions with loved ones and providing those loved ones resources and skills development tools. Within correctional supervision entities, policies that seek to include versus exclude positive social support need to be generated. Collectively, the current and prior research highlights positive social support as an effective vehicle for promoting both public safety and public well-being. Prisoner reentry and social support researchers need to continue to generate the best available evidence to inform ways for practitioners to most efficiently and effectively tap into this potent naturally occurring resource—informal social support.

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