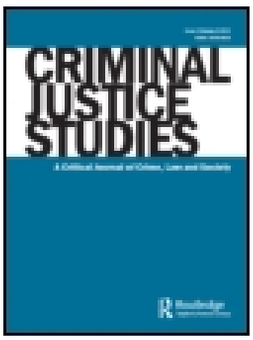

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ARTICLE

The mental health of community correctional officers: supervising persons with serious mental illness

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ABSTRACT

Few studies have investigated factors that contribute to the mental health of probation and parole officers (PPOs). Addressing the needs of supervisees with serious mental illness (SMI) can create unique challenges for PPOs, which in turn may increase job-related stress and impact PPOs' mental health. Using statewide survey data from 795 PPOs, we examine whether the number of supervisees with SMI on an officer's caseload is associated with depressive symptoms reported by PPOs and whether this relationship is mediated by work stress. In addition, we examine the mediating effects of role conflict and overload in the relationship between the number of persons with SMI on an officer's caseload and work stress. Findings reveal that PPOs supervising more people with SMI report significantly higher levels of depressive symptoms and this relationship is mediated by work stress. Additionally, the association between the number of supervisees with SMI on an officer's caseload and work stress is completely explained away by role conflict and role overload. These findings highlight the mental health significance for parole and probation practitioners working with persons with SMI.

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Community supervision; serious mental illness; mental health; work stress; role conflict; role overload

Introduction

The mental health of workers is important in any profession, but the responsibilities of public safety and rehabilitation make the implications especially important for probation and parole practitioners. Compared to other mental health problems in the US, depression is among the most common, disabling, and costly (Kessler, Chiu, Demler, Merikangas, & Walters, 2005; Kessler et al., 1994) and has been linked to absenteeism and diminished job performance (Charbonneau et al., 2005; Kessler et al., 2008; Leopold, 2001; Lerner et al., 2010; Stewart, Ricci, Chee, Hahn, & Morganstein, 2003). Research on PPOs not only highlights the risk for depressive symptoms (Collins, Coffey, & Cowe, 2009; Gayman & Bradley, 2013) but also identifies the need for a 'mental health day' as a primary reason for missing work (Finn & Kuck, 2005). Despite the importance of mental health for work performance, research on factors that contribute to the mental health of PPOs is limited. For example, few investigations have examined whether supervising persons with serious mental illness (SMI) negatively impacts officers' psychological well-being (Gayman, Powell, & Bradley, 2018).

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To fill this gap in the literature, we use statewide data to assess whether supervising more people with SMI increases officers' risk for depressive symptoms. To the extent that the number of persons with SMI on an officer's caseload increases risk for depressive symptomatology, research identifying possible linking mechanisms in this relationship is important. In general, prior studies have shown that working with persons with SMI can increase experiences of work stress (Green, Miller, & Aarons, 2013; Van Daalen, Willemsen, Sanders, & Van Veldhoven, 2009) and work stress has been shown to have negative implications for mental health (Pearlin, 1989; Thoits, 2010; White, 1997). Thus, increased work stress associated with the number of persons with SMI on an officer's caseload may translate into greater depressive symptoms among PPOs. To date, however, no studies have assessed whether work stress mediates the relationship between the number of persons with SMI on an officer's caseload and depressive symptoms among officers.

Finally, to the extent that the number of persons with SMI on an officer's caseload increases the risk of work stress, it is useful to identify those factors that mediate this relationship. Two possible pathways that link the number of persons with SMI on an officer's caseload with officer work stress may be through increased role conflict and role overload. Prior research has shown that role conflict and role overload contribute to work stress among PPOs (Gayman & Bradley, 2013). Although we are aware of no studies that have examined the impact of the number of persons with SMI on an officer's caseload for role conflict and role overload, there are reasons to anticipate these relationships. For example, when supervising persons with SMI, officers may encounter role conflict when attempting to simultaneously balance the need to be supportive and ensure compliance among persons with SMI (Skeem, Louden, Polasheck, & Cap, 2007). Furthermore, PPOs may experience role overload by performing additional roles in order to assist clients with SMI navigate mental health treatment and related services (Epperson, Canada, Thompson, & Lurigio, 2014). This study extends prior research by examining the mediating effects of role conflict and overload in the relationship between the number of persons with SMI on an officer's caseload and work stress.

Background

Supervising persons with SMI and officer mental health

Generally, research on law enforcement officers, first responders, and other helping professions collectively demonstrates a heightened risk for psychological problems among workers (Beutler, Nussbaum, & Meredith, 1988; Fisher, 2003; Gilmartin, 2002; Lipsky & Burk, 2009). Although research on the antecedents of mental health among PPOs is limited, research in other 'people-oriented' fields (e.g. social work, counseling) demonstrates that practitioners often experience depressive symptoms when assisting clients with mental health needs (Evans et al., 2006; Farrell & Turpin, 2003; Van Daalen et al., 2009; Sweeney & Nichols, 1996; Paris & Hoge, 2010). For example, a study of community mental health workers reveals that those with more frequent interactions with patients experience more depressive symptoms (Van Daalen et al., 2009).

Among the nearly five million probationers and parolees in the United States, people with serious mental illness (SMI) – schizophrenia, bipolar, major depression – are significantly overrepresented (Crilly, Caine, Lamberti, Brown, & Friedman, 2009; Ditton, 1999; Kaeble,

Maruschak, & Bonczar, 2015; Lurigio, Epperson, Canada, & Babchuk, 2012; Wolff et al., 2014). Working with persons with SMI may increase the risk for depressive symptoms among PPOs due to greater supportive needs and emotional involvement with SMI supervisees. PPOs describe the need to be extra supportive when supervising persons with SMI (Epperson et al., 2014; Wolff et al., 2014), which entails emotionally investing in clients by building rapport, exercising empathy, and displaying compassion (Blasko, Friedmann, Rhodes, & Taxman, 2015; Umamaheswar, 2012). However, as with other 'people-oriented' professions, there are mental health consequences to such emotionally demanding work (Madsen, Rugulies, & Diderichsen, 2014) and some scholars argue that it is only a matter of time before practitioners become psychologically affected by providing these types of services (Figley, 1995; Herman, 1992; Lipsky & Burk, 2009; McCann & Pearlmann, 1990; Newell & MacNeil, 2010).

The likelihood of experiencing depressive symptoms may also be higher for PPOs supervising people with SMI when confronted with the reality that justice-involved persons with mental health needs are often facing extremely difficult life circumstances (Epperson et al., 2014; White, Chafetz, Collins-Bride, & Nickens, 2006). For example, many justice-involved persons with mental health problems also experience comorbid substance abuse and/or homelessness (Draine, Salzer, Culhane, & Hadley, 2002; James & Glaze, 2006; Skeem, Louden, Manchak, Vidal, & Haddad, 2009; Swartz & Lurigio, 1999), which increases their risk for victimization and rearrests (White et al., 2006). Prior research demonstrates a tendency for PPOs to be psychologically impacted by their work with supervisees (Lewis, Lewis, & Garby, 2013; Lutze, 2014; Salyers, Hood, Schwartz, Alexander, & Aalsma, 2015). Thus, given the increased risk of recidivism and other poor outcomes for persons with SMI (Cloyes, Wong, Latimer, & Abarca, 2010; Draine et al., 2002; Ostermann & Matejkowski, 2014; Porporino & Motiuk, 1995; Silver, Mulvey, & Swanson, 2002; Skeem & Louden, 2006; White et al., 2006), PPOs supervising more people with SMI may be at greater risk for poor mental health. The current study assesses whether supervising more persons with SMI will increase depressive symptoms among officers.

Work stress as a mediator

To the extent that supervising persons with SMI increases officers' risk for poor mental health, it is important to identify linking mechanisms in this relationship. Given the well-established relationship between stress and mental health (Pearlin, 1989; Thoits, 2010; White, 1997) and the known association between assisting clients with SMI and work stress (Green et al., 2013; Van Daalen et al., 2009), it is plausible that work stress may serve as a mediator in the relationship between the number of persons with SMI on an officer's caseload and officer mental health. In general, community supervision is an innately stressful career (Finn & Kuck, 2005; Lee, Joo, & Johnson, 2009; Lindquist & Whitehead, 1986; Lutze, 2014; Pitts, 2007; Simmons, Cochran, & Blount, 1997; Slate, Johnson, & Wells, 2000; Whitehead, 1985) and PPOs exhibit greater levels of stress than the general population (Slate, Wells, & Johnson, 2003; Tabor, 1987). Most research on the topic has examined PPO job stress in relation to administrative factors (e.g., paperwork, unrealistic deadlines, etc.), rather than caseload composition (Finn & Kuck, 2005; Lutze, 2014; Slate et al., 2000, 2003; Whitehead, 1987; Whitehead & Lindquist, 1985). More specifically, we are aware of no studies that assess whether the number of people with SMI on officers' caseloads is associated with PPO work stress, and whether work

stress serves as a mediator between the number of people with SMI on officers' caseloads and officer mental health.

Despite the paucity of research on the relationship between the number of people with SMI on officers' caseloads and PPO work stress, there are reasons to anticipate such an association. In addition to the various job-related activities that PPOs take on in relation to all supervisees, when working with supervisees with SMI, PPOs often engage in crisis intervention, monitor medication compliance, and serve as a gatekeeper to mental health services (Babchuk, Lurigio, Canada, & Epperson, 2012; Epperson et al., 2014; Lurigio et al., 2012; Wasserman et al., 2008; White, Aalsma, Holloway, Adams, & Salyers, 2015). This may reflect research demonstrating an association between supervising persons with SMI and job difficulty reported by PPOs (Van Deinse, Cuddeback, Wilson, & Burgin, 2017), which is consistent with research in other 'people-oriented' professions where assisting clients with SMI is linked to greater work stress (Green et al., 2013; Van Daalen et al., 2009). Together, we anticipate that PPOs supervising more people with SMI will report greater work stress.

When experiencing high levels of work stress, it is common for criminal justice practitioners to subsequently undergo mental health problems (Anson & Bloom, 1988; Gayman & Bradley, 2013; Gershon, Barocas, Canton, Li, & Vlahov, 2009; Ghaddar, Mateo, & Sanchez, 2008; Patterson, 1992; Schaufeli & Peeters, 2000). For example, police officers enduring high levels of work stress are significantly more susceptible to depression (Gershon et al., 2009) and there is a significant inverse relationship between job-related stress and mental health among institutional correctional officers (Ghaddar et al., 2008). However, it is unclear whether supervising persons with SMI contributes to work stress and whether that, in turn, contributes to PPO mental health. The current study assesses whether work stress mediates the relationship between the number of persons with SMI on officers' caseloads and PPO depressive symptoms.

Role conflict and role overload as mediators

To the extent that the number of persons with SMI on officers' caseloads increases work stress and subsequent depressive symptoms among PPOs, an upstream approach to mitigating these problems requires identifying factors that mediate the link between working with persons with SMI and work stress. As community supervision officers seek to blend accountability functions with rehabilitative efforts, role conflict and role overload often emerge as significant sources of stress (Allard, Wortley, & Stewart, 2003; Gayman & Bradley, 2013; Lindner & Bonn, 1996; Lindner & Koehler, 1992; Sigler, 1988; Whisler, 1994; White, Gasperin, Nystrom, Ambrose, & Esarey, 2005; Whitehead, 1985, 1987). Officers working with persons with SMI may encounter role conflict when attempting to balance providing support with monitoring sentence compliance (Skeem et al., 2007) and experience role overload when taking on additional roles, such as navigating mental health treatment and related services (Epperson et al., 2014). Thus, supervising more people with SMI may result in increased work stress via role conflict and overload.

Role conflict and work stress

Role conflict occurs when there are competing expectations for roles being performed by PPOs (Sigler, 1988). Research in other criminal justice fields (e.g. institutional correctional staff and other community-based law enforcement) frequently illustrates the propensity

for role conflict to cause stress (Blair, Black, & Long, 1981; Dignam, Barrera, & West, 1986; Hageman, 1982; Hepburn & Allonetti, 1980; Kroes, Hurrell, & Margolis, 1974; Poole & Regoli, 1980; Terry, 1981; Violante, 1983). Thus, it is not surprising that role conflict is a common stressor for PPOs (Allard et al., 2003; Gayman & Bradley, 2013; Sigler, 1988; West & Seiter, 2004). For example, PPOs experience pressure from government agencies to prioritize law enforcement functions; yet, they personally perceive the most important aspect of their jobs as rehabilitation (Deering, 2010).

These contradictions are especially evident when supervisees have mental health needs. When supervising people with SMI, factors on both ends of the law enforcement – rehabilitation continuum may contribute to the competing expectations of PPOs and result in role conflict. For example, on the one hand, the (mis)perception that persons with SMI are more prone to violence and therefore dangerous (Angermeyer & Matschinger, 1995; Corrigan & Cooper, 2005; Markowitz, 2011) may lead officers to place more weight on their law enforcement role (i.e. surveillance, sanctions, etc.). On the other hand, given the increased need for rehabilitative measures when working with persons with SMI (Babchuk et al., 2012; Epperson et al., 2014; Lurigio et al., 2012; Wolff et al., 2014), officers may feel the need to place greater emphasis on being supportive rather than punitive. These competing demands may contribute to role conflict and, in turn, increase work stress for PPOs supervising people with SMI.

Role overload and work stress

PPOs experience role overload when there are excessive demands on the quality and quantity of their work (White et al., 2005). Role overload is consistently reported as a source of stress for PPOs (Lindner & Bonn, 1996; Lindner & Koehler, 1992; Whisler, 1994; White et al., 2005). In fact, a recent study employing the same PPO data as this project revealed a significant correlation between role overload and work stress (Gayman & Bradley, 2013). However, no studies to date have examined the relationship between supervisees with SMI, role overload, and PPO work stress.

Supervising people with SMI inherently requires officers to perform an additional role (Furman & Jackson, 2002; Rosenblatt & Atkisson, 1993). However, beyond simply adding another role, this particular role may be significant due to the increased risk of reoffending when persons with SMI are not receiving appropriate mental health services (Wolff, Bjerklie, & Maschi, 2005) and having to serve as a gatekeeper to mental health services (Epperson et al., 2014; Holloway, Brown, Philip, & Aalsma, 2013; Lewis et al., 2013; Lutze, 2014; Wasserman et al., 2008; White et al., 2015). It is unknown whether role overload mediates the relationship between the number of supervisees with SMI on an officer's caseload and work stress.

Data and methodology

Sample

This project employs data from a 2009 study (see Gayman & Bradley, 2013; Gayman et al., 2018; Van Deinse et al., 2017), which distributed a statewide survey to all probation and parole officers (PPOs) working for the North Carolina Department of Corrections (DOC). Given that North Carolina officers supervise both probation and parole cases, there is no distinction between the two in this study. All PPOs were invited to participate (n = 1371) and

893 completed the survey, which represents 65.1% of North Carolina PPOs. For the purposes of this investigation, only officers who indicated having one or more people with mental health needs on their caseloads were included (n = 830). Note that, at the time of the survey, there were no specialized officers supervising caseloads consisting only of people with SMI. Because information on race and gender was not asked as part of the survey, administrative data were used to identify the race and gender of the study respondents. There were 34 officers with missing administrative data on race and gender, which were excluded from the analysis. Based on preliminary analysis, female officers (75.68%) were more likely than males (69.98%) to participate ($\chi 2 = 8.00$, $p = .005$) and white officers (75.45%) were more likely than African-American officers (67.70%) to participate ($\chi 2 = 13.02$, $p = .000$). There were no differences in participation by age ($t = .13$, $p = .898$) or education ($t = 1.26$, $p = .207$). From the remaining 796 cases, one officer had missing data on depressive symptoms and was excluded from the analysis. Thus, the final analytic sample consists of 795 respondents.

Measures

Supervisees with serious mental illness (SMI)

Serving as the main independent variable, supervisees with SMI was measured by asking officers how many people on their caseloads were diagnosed or suspected of having psychological problems (i.e. schizophrenia, bipolar disorder, major depression) and in need of mental health services. This measure provides a count of supervisees with mental health needs (range = 1–110).

Depressive symptoms

Serving as a dependent variable, depressive symptoms were measured using a 12-item version of the Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977). Example items include: You felt that you could not shake off the blues; You felt depressed; and You felt that everything you did was an effort. Responses range from 1 = Not at all to 4 = Almost all the time. The 12 items were averaged to create a mean depressive symptoms score, with higher values representing more symptoms ($\alpha = .91$).

Work stress

Serving as a dependent and mediating variable, work stress was measured using a condensed version of Wheaton's chronic stress scale (1991, 1994). Example items include: I want to change jobs but do not feel I can; My job often leaves me feeling both mentally and physically tired; and My work is boring and repetitive. Responses range from 1 = Strongly Disagree to 4 = Strongly Agree. The five items were averaged to create a mean work stress score, with higher values representing more work stress ($\alpha = .63$).

Role conflict

Serving as a mediating variable, role conflict was adapted from well-established organizational climate measures (Glisson, 1994; Glisson & Hemmelgarn, 1998). The measure was composed of eight questions, with example items including: I am unable to satisfy the conflicting demands of people over me; Rules and regulations often get in the way of getting things done; and Inconsistencies exist among the rules and regulations that I am

required to follow. Responses range from 1 = Strongly Disagree to 4 = Strongly Agree. The eight items were averaged to create a mean role conflict score, with higher values representing greater role conflict (α = .87).

Role overload

The second organizational climate measure (Glisson, 1994; Glisson & Hemmelgarn, 1998), involves a 7-item scale of role overload. Example items include: No matter how much I do, there is always more to do; The amount of work I have to do interferes with how well it gets done; and There are not enough people in my department to get the work done. Responses range from 1 = Strongly Disagree to 4 = Strongly Agree. The seven items were averaged to create a mean role overload score, with higher values representing greater role overload (α = .82).

Controls

Job Tenure measures respondents' total experience working in corrections. The survey question reads, 'In total, how many years of experience do you have working in corrections?' We control for job tenure rather than age because previous studies demonstrate seniority is a better predictor of officers' well-being than age (Thomas, 1988). This is a simple count (range = 0–50 years). Race (1 = white and 0 = black) and gender (1 = Women and 0 = Men) were measured using employee administrative data.

Analytical strategy

Descriptive statistics on the study sample and variables are provided in Table 1. Table 2 presents correlations used to assess the bivariate relationships among study variables, and to determine if the mediating variables are associated with both the independent and dependent variables, which is a requirement for mediation. Ordinary least squares (OLS) regression was used to assess whether the number of supervisees on an officer's caseload with SMI is associated with officer mental health (Table 3). Models 1 and 2 assess the bivariate and independent relationships, respectively. Model 3 assesses whether the relationship between the number of supervisees on an officer's caseload with SMI and officer

Table 1. Descriptive Statistics.

Variable	% (N)	Mean (S.D.)
# of Supervisees with Serious Mental Illness (SMI)[1]		13.89 (14.15)
Depressive Symptoms[2]		1.83 (.58)
Work Stress[3]		2.70 (.51)
Role Conflict[4]		2.59 (.51)
Role Overload[5]		3.05 (.53)
Gender		
Women	53.2 (423)	
Men	46.8 (372)	
Race		
White	65.1 (517)	
Black	34.9 (278)	
Job Tenure[6]		10.79 (6.987)

Notes. N = 795. [1]Range = 1–110; Represents the number of people on an officer's caseload that have been diagnosed or the officer suspects having psychological problems; only includes officers that reported 1 or more clients on their caseload with mental health problems. Range: [2]Range = 1–4. [3]Range = 1–4. [4]Range = 1.13–4.00; [5]Range = 1.43–4.00; [6]Range = 0–32 (years in corrections).

Table 2. Correlation Matrix.

	(1)	(2)	(3)	(4)	(5)	(6)
(1) Depressive Symptoms	-					
(2) # of Supervisees with Serious Mental Illness (SMI)	.107**	-				
(3) Work Stress	.555***	.075*	-			
(4) Role Conflict	.509***	.119***	.567***	-		
(5) Role Overload	.443***	.179***	.543***	.592***	-	
(6) Job Tenure	.090*	−.043	.083*	.103*	.091**	-

N = 795.
*p < .05, p < **.01, p < ***.001

Table 3. Depressive Symptoms Regressed on Study Variables.

	(1)	(2)	(3)
# of Supervisees with Serious Mental Illness	.107 (.001)**	.112 (.005)**	.070 (.003)*
Job Tenure	-	.095 (.008)	.047 (.004)
Women (Men = ref.)	-	.025 (.029)	−.003 (−.004)
White (Black = ref.)	-	.029 (.036)	.040 (.049)
Work Stress	-	-	.547 (.622)***
	R^2 = .011	R^2 = .022	R^2 = .316

Notes. N = 795. Standardized OLS regression coefficients with standard errors in ().
*p < .05, p < **.01, p < ***.001

mental health is mediated by work stress. Mediation analysis was conducted using a Sobel test (Sobel, 1982). Finally, shown in Table 4, we test whether the number of supervisees on an officer's caseload with SMI is associated with work stress (Models 1 and 2), and the potential mediating role of role conflict and role overload (Models 3–4).

Results

Descriptives

Table 1 provides descriptive statistics on the sample and study variables. The average number of supervisees on PPOs' caseloads that were reported as having mental health needs was 13.89 (range = 1–110, s.d. = 14.15). The mean score for depressive symptoms was 1.83 (range = 1–4, s.d. = .58). On average, respondents reported a work stress score of 2.70 (range = 1–4, s.d. = .51). The mean for role conflict was 2.59 (range = 1.13–4.0, s.d. = .51) and the average score for role overload was 3.05 (range = 1.43, s.d. = .53). Based on the assigned values, these responses most closely reflect 'Agree.' 53.2% (n = 423) of the respondents were Women and 65.1% were White (n = 517). Finally, the average years of job tenure was 10.79 (range = 0–32, s.d. = 6.99).

Table 4. Work stress regressed on study variables.

	(1)	(2)	(3)	(4)	(5)
# of Supervisees with Serious Mental Illness	.075 (.003)*	.077 (.003)*	.009 (.000)	−.021 (−.001)	−.027 (−.001)
Job Tenure	-	.088 (.006)*	.026 (.002)	.034 (.003)	.014 (001)
Women (Men = ref.)	-	.052 (.053)	.041 (.042)	.054 (.056)	.046 (.047)
White (Black = ref.)	-	−.019 (−.021)	.023 (.025)	.014 (.015)	.029 (.031)
Role Conflict	-	-	.564 (.566)***	-	.378 (.380)***
Role Overload	-	-	-	.543 (.526)***	.323 (.313)***
	R^2 = .006	R^2 = .016	R^2 = .324	R^2 = .298	R^2 = .390

Notes. N = 795. Standardized OLS regression coefficients with standard errors in ().
*p < .05, p < **.01, p < ***.001

Correlations

Regarding the variables that constitute the main relationships, Table 2 consists of a correlation matrix for all continuous study variables. Increased levels of depressive symptoms among officers are associated with having a higher number of supervisees with SMI on one's caseload (r = .107, p = .002), overall work stress (r = .555, p = .000), role conflict (r = .509, p = .000), role overload (r = .443, p = .000), and job tenure (r = .090, p = .05). Greater PPO work stress is associated with higher numbers of supervisees with SMI on officers' caseloads (r = .075, p = .035), role conflict (r = .567, p = .000), role overload (r = .543, p = .000), and job tenure (r = .083, p = .05). Role conflict is associated with a higher number of supervisees with SMI on officers' caseloads (r = .119, p = .000), role overload (r = .592, p = .000), and job tenure (r = .103, p = .05). Additionally, role overload is associated with a higher number of supervisees with SMI on officers' caseloads (r = .179, p = .000) and job tenure (r = .091, p = .01). Finally, given the highest correlation between the study variables is .592, there is no indication of potential multicollinearity in subsequent multivariable analysis.

PPO mental health

Table 3 displays the regression of PPOs' mental health on key study variables (standardized OLS regression coefficients shown). Results in Model 1 indicate that more supervisees with SMI on an officer's caseload are associated with greater depressive symptoms among PPOs (β = .107, s.e. = .001, p = .002). One standard deviation increase in the number of supervisees with SMI is associated with a .107 standard deviation increase in PPOs' depressive symptoms. Also shown in Model 2, the increased risk for depressive symptoms associated with having more supervisees with SMI on an officer's caseload (β = .112, p = .002) is independent of all control variables – gender, race, and job tenure. Therefore, Models 1 and 2 demonstrate that the number of supervisees with SMI on an officer's caseload is associated with greater depressive symptoms.

Model 3 tests whether the association between the number of supervisees with SMI and officers' mental health is mediated by work stress. After stepping in work stress (β = .547, p = .000), we observe a 38% reduction in the main relationship between the number of supervisees with SMI and depressive symptoms (1–[.07/.112] = .38). Although the relationship between the number of supervisees with SMI and depressive symptoms remains statistically significant, a Sobel test indicates that work stress significantly mediates this relationship (Sobel test z = 2.96, p = .003).

In addition to mediating the relationship between the number of supervisees with SMI and PPO depressive symptoms, nearly a third of the variability in depressive symptoms is explained by work stress (R^2 = .316). Together, the findings underscore not only the importance of work stress as a mediator in the relationship between the number of supervisees with SMI on officers' caseloads and officers' mental health but also as a significant contributor to overall mental health.

PPO work stress

Given the importance of work stress in mediating the relationship between supervising persons with SMI and officer psychological well-being, as well as the direct effect of work

stress for officer mental health, it is important to identify factors that link supervisees with SMI and PPOs' work stress. To this end, Table 4 regresses work stress on the number of supervisees with SMI as well as two potentially mediating officer-level variables – role conflict and role overload.

Table 4 reveals that the increased risk for work stress stemming from having more clients with SMI on an officer's caseload (β = .077, p = .029) is independent of study controls – gender, race, and job tenure. Next, we assess whether the association between the number of supervisees with SMI on an officer's caseload and work stress is mediated by role conflict and/or role overload (Model 4). After entering role conflict (Model 3; β = .564, p = .000), the main relationship between the number of supervisees with SMI and work stress is no longer significant. Comparing the coefficients in Models 2 and 3, results indicate that role conflict explains approximately 88% of the relationship between the number of supervisees with SMI and officers' work stress (1-[.009/.077] = .88) and this coefficient reduction is statistically significant (Sobel test z = 3.91, p = .000). Similarly, after controlling for role overload (Model 4; β = .543, p = .000), 73% of the relationship between the number of supervisees with SMI and work stress is explained away (1–[.021/.077] = .73), and is no longer statistically significant. Sobel test indicates this coefficient reduction is statistically significant (Sobel test z = 6.53, p = .000).

Model 5 includes both role conflict and overload, indicating that each factor is independently associated with work stress, with role conflict (β = .378, p = .000) having a slightly stronger association with work stress than role overload (β = .323, p = .000). The results indicate a substantial proportion of the variability in work stress is explained by role conflict and role overload (R^2 = .39). Together, the findings underscore the importance of role conflict and overload as a linking mechanism between work stress and supervising persons with SMI, as well as their independent contribution to work stress.

Discussion

Despite the high number of persons with SMI on parole/probation, little is known about the mental health consequences for PPOs working with this population. The findings indicate that officers with a higher number of persons with SMI on their caseloads have an increased risk for depressive symptomatology. This is consistent with the argument that working with persons with SMI may increase risk for depressive symptoms among PPOs, possibly due to greater supportive needs and emotional involvement when supervising persons with SMI (Babchuk et al., 2012; Epperson et al., 2014; Lurigio et al., 2012; Wolff et al., 2014).

Much of prior discussions and policies have focused on limiting the number of persons with SMI on an officer's caseload and/or creating specialized caseloads (with or without caps) when working with persons with SMI (Epperson, Canada, & Lurigio, 2013; Skeem, Emke-Francis, & Louden, 2006). In this vein, the rationale is that limiting the number of persons with SMI on an officer's caseload will allow officers to better address the needs of persons with SMI. While this may be true, our findings extend this story by underscoring the importance of the number of persons with SMI on an officer's caseload to the officer themselves. With the high volume of persons with SMI and limited resources in the criminal justice system, administrators may be less inclined to adhere to caseload caps and, in fact, most probationers and parolees with mental health needs are still supervised

in non-specialized settings (Wolff & Pogorzelski, 2005). However, in the context of our findings, not adhering to caps may have negative unintended (or latent) consequences for the officer's psychological well-being and, in turn, supervisee success. While exceeding caps may alleviate problems associated with limited resources, it may create other problems (and even costs) resulting from poor officer mental health. Indeed, poor psychological health for officers has been shown to have implications for job competency (Lewis et al., 2013; Salyers et al., 2015) and the ability to assist with mental health needs of supervisees (White et al., 2015).

Other studies have looked at caseload ratios and whether the size of officers' caseloads impacts their psychological well-being (DeMichele, 2007; DeMichele & Payne, 2007). However, with few exceptions (Gayman et al., 2018), little research has focused on the association between caseload composition (e.g. the number of supervisees with SMI on a caseload) and PPO mental health, and we are aware of no studies that have specifically investigated specific ratio caps pertaining to the number of supervisees with SMI and officer mental health. Given that the findings from the current investigation underscore the importance of the number of supervisees with SMI for officer mental health, understanding whether there are 'tipping points' or 'thresholds' regarding the mental health consequences associated with the number of supervisees with SMI on an officer's caseload is an important next step.

After establishing a link between the number of persons with SMI on an officer's caseload and officer mental health, we sought to assess whether this relationship is mediated by work stress. When working with supervisees with SMI, PPOs often engage in crisis intervention, monitor medication compliance, and serve as a gatekeeper to mental health services (Babchuk et al., 2012; Epperson et al., 2014; Lurigio et al., 2012; Wasserman et al., 2008; White et al., 2015). Together, this may increase the risk of job stress among officers working with more supervisees with SMI. This is consistent with research showing a link between supervising persons with SMI and job difficulty reported by PPOs (Van Deinse et al., 2017).

When experiencing high levels of work stress, it is common for criminal justice practitioners to subsequently undergo mental health problems (Anson & Bloom, 1988; Gayman & Bradley, 2013; Gershon et al., 2009; Ghaddar et al., 2008; Patterson, 1992; Schaufeli & Peeters, 2000). Our study demonstrates that supervising more persons with SMI contributes to both work stress and mental health. In addition, the findings suggest that one way working with more persons with SMI translates into poor officer mental health is through increased work stress.

These findings may reinforce the importance of limiting the number of persons with SMI on an officer's caseload as a way to reduce (or deter) the stress officers experience. However, when budgetary and resource constraints prevent (or deter) adherence to caseload caps, it is important to recognize that such decisions have important implications for officer stress and subsequent mental health. Certainly, addressing the funding and resource components is an important part of the equation but an additional factor to consider is the availability of psychosocial coping resources to manage the work stress associated with more persons on their caseload with SMI. For example, perceived social support and a sense of mastery are important for coping with stress and deterring the negative mental health consequences associated with stress (Pearlin, 1999). Thus, in addition to limiting the number of persons with SMI assigned to an officer's caseload, it may be necessary for administrators to devote resources to building a work environment that promotes the development and maintenance of psychosocial coping skills for officers

(e.g. emotional support, self-esteem, mastery). By investing in officers' ability to manage and cope with work stress and subsequent depressive symptoms associated with the number of persons with SMI on their caseloads, administrators may be able to mitigate the issues associated with psychological problems among officers, such as absenteeism (Finn & Kuck, 2005) and poor work performance (Lewis et al., 2013; Salyers et al., 2015; White et al., 2015).

In order to better understand how supervising persons with SMI increases work stress, we identified role conflict and role overload as two possible pathways. Our study indicated that the association between the number of supervisees with SMI on an officer's caseload and work stress is completely explained away by role conflict and role overload. These findings support our argument that officers may encounter role conflict by attempting to be supportive while still monitoring sentence compliance when supervising persons with SMI. (Skeem et al., 2007). Additionally, PPOs may experience role overload by performing additional roles in order to assist supervisees with SMI navigate mental health treatment and related services (Epperson et al., 2014). Again, caseload caps, specialized caseloads, and/or psychosocial coping skills may all contribute to the central relationships in this study and provide targets for prevention/intervention efforts.

While further research is needed before making policy recommendations, the current study underscores the importance of including the number of supervisees with SMI on an officer's caseload, role conflict, role overload and work stress in future program evaluations. Although other studies have evaluated the role of work stress for addressing psychological problems among officers (Lewis et al., 2013; Patterson, Chung, & Swan, 2014), we are aware of no studies that have included an evaluation of work stress within the context of the number of supervisees with SMI on an officer's caseload, as well as role conflict and overload.

Limitations and future directions

To guide further research on this topic, it is necessary to identify and address the limitations of this investigation. First, the data was collected in 2009 and criminal justice reform has been a primary focus among many state and federal legislations since this time. Indeed, particular attention has been devoted to probation and parole practices (Executive Session on Community Corrections, 2017). Despite the more recent attention devoted to PPOs and possible changes within North Carolina and other states in terms of policies and practices, even if changes have been made to address the number of supervisees with SMI on an officer's caseload, level of role conflict/overload, and work stress, such changes do not challenge the *relationships* identified in this study. Thus, the findings can still inform current/future policies that fail to address these factors. These data are also uniquely situated to assess these important relationships because they include standardized measures of mental health, work stress, role conflict, and role overload across a large sample of PPOs with a high degree of variability in their length of job tenure.

Second, this study is limited to one state. Research is needed to provide a more contemporaneous account of the current working environment for PPOs working with persons with SMI and to identify successful models in other states. Nevertheless, as with the date of the data collection, this limitation does not challenge the relationships identified, nor the importance of the study variables in understanding officer mental health.

Third, because this study utilizes cross-sectional data, we cannot draw definitive conclusions regarding the temporality between study variables. Although we can be fairly certain that officers' mental health is not affecting the number of persons with SMI on their caseload (and if it was, we would expect an inverse relationship), we cannot rule out the possibility that officer mental health may lead to perceived work stress, role conflict, and/or role overload. We speculate that these relationships are reciprocal over time, and longitudinal research is needed to identify these pathways and their relative strength over time.

Fourth, as with any study, we are unable to account for all possible factors that might contribute to our mental health or work stress outcomes. Given their well-established link to mental health (Kessler & Zhao, 1999) and various sources of social stress (Pearlin, 1999), income and education should be included in future studies assessing the relationship between the number of supervisees with SMI and depressive symptoms.

Finally, all study variables are limited to the subjective experiences of officers. This is an important limitation because officers' self-reports of psychological well-being may influence their perceptions regarding the mental health needs of supervisees; whereby officers who are stressed out may be more likely to label a supervisee with a serious mental illness. In addition, we do not have indicators of actual psychological diagnosis or severity. While these are important considerations, which warrant attention in future research, it has long been recognized that what one perceives as real is real in its consequences (Thomas & Thomas, 1928). Here, officers' perceptions of the psychological well-being of supervisees have important implications for officer mental health.

Conclusion

Supervising persons with SMI increases the risk for depressive symptoms among officers, and the linking pathways are through work stress, role conflict, and role overload. In order to promote officer mental health and, in turn, supervisee success and public safety, special attention needs to be given to officers working with persons with SMI and their ability to manage and cope with the stressors associated with supervising this population. Although further research is needed, caseload caps, specialized caseloads, and/or psychosocial coping skills may all serve as targets for prevention/intervention efforts.

Disclosure statement

No potential conflict of interest was reported by the authors.

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References

Allard, T.J., Wortley, R.K., & Stewart, A.L. (2003). Role conflict in community corrections. *Psychology, Crime & Law*, *9*(3), 279–289.

Angermeyer, M.C., & Matschinger, H. (1995). Violent attacks on public figures by persons suffering from psychiatric disorders: Their effects on the social distance towards the mentally ill. *European Archives of Psychiatry and Clinical Neuroscience*, *245*, 159–164.

Anson, R., & Bloom, M.E. (1988). Police stress in an occupational context. *Journal of Police Science and Administration*, *16*(4), 229–235.

Babchuk, L.C., Lurigio, A.J., Canada, K.E., & Epperson, M.W. (2012). Responding to probationers with mental illness. *Federal Probation*, *76*(2), 41–48.

Beutler, P.D., Nussbaum, P.D., & Meredith, K.E. (1988). Changing personality of police officers. *Professional Psychology: Research and Practice*, *19*(5), 503–507.

Blair, R.B., Black, C.M., & Long, H.J. (1981). The state correctional officer as keeper and counselor: An empirical investigation of the role. *Journal of Sociology and Social Welfare*, *8*, 875–898.

Blasko, B.L., Friedmann, P.D., Rhodes, A.G., & Taxman, F.S. (2015). The parolee-parole officer relationship as a mediator of criminal justice outcomes. *Criminal Justice and Behavior*, *42*(7), 722–740.

Charbonneau, A., Bruning, W., Titus-Howard, T., Ellerbeck, E., Whittle, J., Hall, S., … Munro, S. (2005). The community initiative on depression: Report from a multiphase work site depression intervention. *Journal of Occupational and Environmental Medicine*, *47*, 60–67.

Cloyes, K.G., Wong, B., Latimer, S., & Abarca, J. (2010). Time to prison return for offenders with serious mental illness released from prison a survival analysis. *Criminal Justice and Behavior*, *37*(2), 175–187.

Collins, S., Coffey, M., & Cowe, F. (2009). Stress, support and well-being as perceived by probation trainees. *Probation Journal*, *56*(3), 238–256.

Corrigan, P.W., & Cooper, A.E. (2005). Mental illness and dangerousness: Fact or misperception, and implications for stigma. In P.W. Corrigan (Ed.), *On the stigma of mental illness: Practical strategies for research on social change* (pp. 165–179). Washington, DC: American Psychological Association.

Crilly, J.F., Caine, E.D., Lamberti, J.S., Brown, T., & Friedman, B. (2009). Mental health services use and symptom prevalence in a cohort of adults on probation. *Psychiatric Services*, *60*(4), 542–544.

Deering, J. (2010). Attitudes and beliefs of trainee probation officers: A 'new breed'? *Probation Journal*, *57*(1), 9–26.

DeMichele, M., & Payne, B.K. (2007). Probation and parole officers speak out – Caseload and workload allocation. *Federal Probation Journal*, *71*, 30–35.

DeMichele, M.T. (2007). *Probation and Parole's growing caseloads and workload allocation: Strategies for managerial decision making*. Lexington, KY: The American Probation & Parole Association.

Dignam, J.T., Barrera, M., Jr., & West, S.G. (1986). Occupational stress, social support, and burnout among correctional officers. *American Journal of Community Psychology*, *14*, 177–193.

Ditton, P.M. (1999). *Mental health and the treatment of inmates and probationers (NCJ 174463)*. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.

Draine, J., Salzer, M.S., Culhane, D.P., & Hadley, T.R. (2002). Role of social disadvantage in crime, joblessness, and homelessness among persons with serious mental illness. *Psychiatric Services*, *53*(5), 565–573.

Epperson, M.W., Canada, K.E., & Lurigio, A.J. (2013). Mental health court: One approach for addressing the problems of persons with serious mental illnesses in the criminal justice system. In J.B. Helfgott (Ed.), *Criminal psychology*(Vol. 1–4). Westport, CT: Praeger Publishers.

Epperson, M.W., Canada, K., Thompson, J., & Lurigio, A. (2014). Walking the line: Specialized and standard probation officer perspectives on supervising probationers with serious mental illnesses. *International Journal of Law and Psychiatry*, *37*(5), 473–483.

Evans, S., Huxley, P., Gately, C., Webber, M., Mears, A., Pajak, S., … Katona, C. (2006). Mental health, burnout and job satisfaction among mental health social workers in England and Wales. *British Journal of Psychiatry*, *188*, 75–80.

Executive Session on Community Corrections. (2017). *Toward an approach to community corrections for the 21st Century: Consensus document of the executive session on community corrections*. Cambridge, MA: Program in Criminal Justice Policy and Management, Harvard Kennedy School.

Farrell, R.S., & Turpin, G. (2003). Vicarious traumatization: Implications for the mental health of health workers? *Clinical Psychology Review*, *23*(3), 449–480.

Figley, C.R. (1995). Compassion fatigue as secondary traumatic stress disorder: An overview. In C.R. Figley (Ed.), *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized* (pp. 1–20). New York, NY: Brunner/Mazel.

Finn, P., & Kuck, S. (2005). Stress among probation and parole officers and what can be done about it. Retrieved from. http://www.ojp.usdoj.gov/nij

Fisher, P.M. (2003). Workplace stress & trauma in policing: Sources, outcomes & implications. A review document prepared for the Canadian Professional Police Association (CPPA) Annual General Meeting, Edmonton, Alberta.

Furman, R., & Jackson, R. (2002). Wrap-around services: An analysis of community-based mental health services for children. *Journal Of Child And Adolescent Psychiatric Nursing: Official Publication Of The Association Of Child And Adolescent Psychiatric Nurses, Inc.*, *15*(3), 124–131.

Gayman, M.D., & Bradley, M.S. (2013). Organizational climate, work stress, and depressive symptoms among probation and parole officers. *Criminal Justice Studies*, *26*(3), 326–346.

Gayman, M.D., Powell, N.K., & Bradley, M.S. (2018). Probation/parole officer psychological well-being: The impact of supervising persons with mental health needs. *American Journal of Criminal Justice*, *43*, 509–529.

Gershon, R.R.M., Barocas, B., Canton, A.N., Li, X., & Vlahov, D. (2009). Mental, physical, and behavioral outcomes associated with perceived work stress in police officers. *Criminal Justice and Behavior*, *36*, 275–289.

Ghaddar, A., Mateo, I., & Sanchez, P. (2008). Occupational stress and mental health among correctional officers. A cross-sectional study. *Journal of Occupational Health*, *50*, 92–98.

Gilmartin, K.M. (2002). *Emotional survival for law enforcement: A guide for officers and their families*. Tucson, AZ: E-S Press.

Glisson, C. (1994). The effect of services coordination teams on outcomes for children in state custody. *Administration in Social Work*, *18*, 1–23.

Glisson, C., & Hemmelgarn, A. (1998). The effects of organizational climate and interorganizational coordination on the quality and outcomes of children's service systems. *Child Abuse & Neglect*, *22* (5), 401–421.

Green, A., Miller, E., & Aarons, G. (2013). Transformational leadership moderates the relationship between emotional exhaustion and turnover intention among community mental health providers. *Community Mental Health Journal*, *49*(4), 373–379.

Hageman, M.J. (1982). Responses of police officers to stress. *Journal of Police Science Administration*, *10*, 235–243.

Hepburn, J.R., & Allonetti, C. (1980). Role conflict in correctional institutions: An empirical examination of the treatment-custody dilemma among correctional staff. *Criminology*, *17*, 445–459.

Herman, J. (1992). *Trauma and recovery*. New York, NY: Basic Books.

Holloway, E., Brown, J., Philip, S., & Aalsma, M. (2013). A qualitative examination of juvenile probation officers as gateway providers to mental health care. *Criminal Justice Policy Review*, *24*(3), 370–392.

James, D.J., & Glaze, L.E. (2006). Mental health problems of prison and jail inmates. (*Special Report, NCJ 213600*). Washington, DC: Government Printing Office, Bureau of Justice Statistics.

Kaeble, D., Maruschak, L.M., & Bonczar, T.P. (2015). *Probation and Parole in the United States, 2014*. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics. Retrieved from http://www.bjs.gov/content/pub/pdf/ppus14.pdf

Kessler, R., White, L.A., Birnbaum, H., Qiu, T., Kidolezi, Y., Mallett, D., & Swindle, R. (2008). Comparative and interactive effects of depression relative to other health problems on work performance in the workforce of a large employer. *Journal of Occupational and Environmental Medicine*, *50*, 809–816.

Kessler, R.C., & Zhao, S. (1999). The prevalence of mental illness. In A.V. Horowitz & T.L. Scheid (Eds.), *A handbook for the study of mental health: Social contexts, theories, and systems* (pp. 58–78). New York, NY: Cambridge University Press.

Kessler, R.C., Chiu, W.T., Demler, O., Merikangas, K.R., & Walters, E.E. (2005). Prevalence, severity, and comorbidity of 12-MOnth DSM-IV disorders in the National comorbidity survey replication. *Archives of General Psychiatry*, *62*, 617–627.

Kessler, R.C., McGonagle, K.A., Shao, S., Nelson, C.B., Hughes, M., Eshleman, S., … Kendler, K.S. (1994). Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States: Results from the National comorbidity survey. *Archives of General Psychiatry*, *51*, 8–19.

Kroes, N., Hurrell, J., & Margolis, A. (1974). Job stress in police administrators. *Journal of Police Science Administration*, *2*, 381–387.

Lee, W., Joo, H., & Johnson, W.W. (2009). The effect of participatory management on internal stress, overall job satisfaction, and turnover intention among federal probation officers. *Federal Probation*, *73*(1), 33–40.

Leopold, R.S. (2001). *A year in the life of a million American workers*. New York, NY: MetLife Disability Group.

Lerner, D., Adler, D.A., Rogers, W.H., Chang, H., Lapitsky, L., McLaughlin, T., & Reed, J. (2010). Work performance of employees with depression: The impact of work stressors. *American Journal of Health Promotion*, *24*(3), 205–213.

Lewis, K.R., Lewis, L.S., & Garby, T.M. (2013). Surviving the trenches: The personal impact of the job on probation officers. *American Journal of Criminal Justice*, *38*(1), 67–84.

Lindner, C., & Bonn, R.L. (1996). Probation officer victimization and fieldwork practices: Results of a national study. *Federal Probation*, *60*(2), 16–23.

Lindner, C., & Koehler, R.J. (1992). Probation officer victimization: An emerging concern. *Journal of Criminal Justice*, *20*(1), 53–62.

Lindquist, C.A., & Whitehead, J.T. (1986). Burnout, job stress and job satisfaction among Southern correctional officers. *Journal of Offender Counseling Services Rehabilitation*, *10*, 5–26.

Lipsky, L.V.D., & Burk, C. (2009). *Trauma stewardship: An everyday guide to caring for self while caring for others*. San Francisco, CA: Berrett-Koehler Publishers, Inc.

Lurigio, A.J., Epperson, M.W., Canada, K.E., & Babchuk, L.C. (2012). Specialized probation programs for people with mental illnesses: A review of practices and research. *Journal of Crime and Justice*, *35*(2), 317–326.

Lutze, F. (2014). *Professional lives of community corrections officers: The invisible side of reentry*. Thousand Oaks, CA: Sage Publishing.

Madsen, I., Rugulies, R., & Diderichsen, F. (2014). Does good leadership buffer effects of high emotional demands at work on risk of antidepressant treatment? A prospective study from two Nordic countries. *Social Psychiatry and Psychiatric Epidemiology*, *49*(8), 1209–1218.

Markowitz, F. (2011). Mental illness, crime, and violence: Risk, context, and social control. *Aggression and Violent Behavior*, *16*, 36–44.

McCann, L., & Pearlmann, L.A. (1990). Vicarious traumatization: A framework for understanding the psychological effects of working with victims. *Journal of Traumatic Stress*, *3*, 131–149.

Newell, J.M., & MacNeil, G.A. (2010). Professional burnout, vicarious trauma, secondary traumatic stress, and compassion fatigue: A review of theoretical terms, risk factors, and preventive methods for clinicians and researchers. *Best Practices in Mental Health: an International Journal*, *6*(2), 57–68.

Ostermann, M., & Matejkowski, J. (2014). Exploring the intersection of mental health and release status with recidivism. *Justice Quarterly*, *31*(4), 746–766.

Paris, M., & Hoge, M. (2010). Burnout in the mental health workforce: A review. *The Journal of Behavioral Health Services & Research*, *37*(4), 519–528.
Patterson, B.L. (1992). Job experience and perceived job stress among police, correctional, and probation/parole officers. *Criminal Justice and Behavior*, *19*, 260–285.
Patterson, G.T., Chung, I.W., & Swan, P.W. (2014). Stress management interventions for police officers and recruits: A meta-analysis. *Journal of Experimental Criminology*, *10*(4), 487–513.
Pearlin, L.I. (1989). The sociological study of stress. *Journal of Health and Social Behavior*, *30*, 241–256.
Pearlin, L.I. (1999). The stress process revisited: Reflections on concepts and their relationships. In C. S. Aneshensel & J.C. Phelan (Eds.), *Handbook of the sociology of mental health* (pp. 395–415). New York, NY: Kluwer Academic/Plenum.
Pitts, W.J. (2007). Educational competency as an indicator of occupational stress for probation and parole officers. *American Journal of Criminal Justice*, *32*, 57–73.
Poole, E.D., & Regoli, R.M. (1980). Role stress, custody orientation, and disciplinary action: A study of prison guards. *Criminology*, *18*, 215–226.
Porporino, F.J., & Motiuk, L.L. (1995). The prison careers of mentally disordered offenders. *International Journal of Law and Psychiatry*, *18*, 29–44.
Radloff, L.S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychosocial Measurement*, *1*, 385–401.
Rosenblatt, A., & Atkisson, C. (1993). Assessing outcomes for sufferers of severe mental disorder: A conceptual framework and review. *Evaluation and Program Planning*, *16*, 347–363.
Salyers, M.P., Hood, B.J., Schwartz, K., Alexander, A.O., & Aalsma, M.C. (2015). The experience, impact, and management of professional burnout among probation officers in juvenile justice settings. *Journal of Offender Rehabilitation*, *54*(3), 175–193.
Schaufeli, W.B., & Peeters, M.C. (2000). Job stress and burnout among correctional officers: A literature review. *International Journal of Stress Management*, *7*, 19–48.
Sigler, R.T. (1988). Role conflict for adult probation and parole officers: Fact or myth. *Journal of Criminal Justice*, *16*(2), 121–129.
Silver, E., Mulvey, E.P., & Swanson, J.W. (2002). Neighborhood structural characteristics and mental disorder: Faris and Dunham revisited. *Social Science & Medicine*, *55*, 1457–1470.
Simmons, C., Cochran, J.K., & Blount, W.R. (1997). The effects of job-related stress and job satisfaction on probation officers' inclinations to quit. *American Journal of Criminal Justice*, *21*(2), 213–229.
Skeem, J., Louden, J.E., Manchak, S., Vidal, S., & Haddad, E. (2009). Social networks and social control of probationers with co-occurring mental and substance abuse problems. *Law and Human Behavior*, *33*, 122–135.
Skeem, J., Louden, J.E., Polasheck, D., & Cap, J. (2007). Assessing relationship quality in mandated treatment: Blending care with control. *Psychological Assessment*, *19*, 397–410.
Skeem, J.L., Emke-Francis, P., & Louden, J.E. (2006). Probation, mental health, and mandated treatment: A national survey. *Criminal Justice and Behavior*, *33*(2), 158–184.
Skeem, J.L., & Louden, J.E. (2006). Toward evidence-based practice for probationers and parolees mandated to mental health treatment. *Psychiatric Services*, *57*(3), 333–342.
Slate, R., Wells, T., & Johnson, W. (2003). Opening the manager's door: State probation officer stress and perceptions of participation in workplace decision making. *Crime & Delinquency*, *49*(4), 519–541.
Slate, R.N., Johnson, W.W., & Wells, T. (2000). Probation officer stress: Is there an organizational solution? *Federal Probation*, *64*, 56–59.
Sobel, M.E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. *Sociological Methodology*, *13*, 290–312.
Stewart, W.F., Ricci, J.A., Chee, E., Hahn, S.R., & Morganstein, D. (2003). Cost of lost productive work time among US workers with depression. *Journal of the American Medical Association*, *289*(23), 3135–3144.
Swartz, J.A., & Lurigio, A.J. (1999). Special section of mental ill offenders: Psychiatric illness and comorbidity among adult male jail detainees in drug treatment. *Psychiatric Services*, *50*(12), 1628–1630.
Sweeney, G., & Nichols, K. (1996). Stress experiences of occupational therapists in mental health practice arenas: A review of the literature. *The International Journal of Social Psychiatry*, *42*, 132–140.

Tabor, R.W. (1987). *A comparison study of occupational stress among juvenile and adult probation officers* (Unpublished doctoral dissertation). Virginia Polytechnical Institute and State University, Blacksburg, VA.
Terry, W. (1981). Police stress: The empirical evidence. *Journal of Police Science Administration*, *14*, 61–75.
Thoits, P.A. (2010). Stress and health: Major findings and policy implications. *Journal of Health and Social Behavior*, *51*, 41–53.
Thomas, R.L. (1988). Stress perceptions among select federal probation and pretrial services officers and their supervisors. *Federal Probation*, *52*, 48–58.
Thomas, W.I., & Thomas, D.S. (1928). *The child in America: Behavior problems and programs*. New York, NY: Knopf.
Umamaheswar, J. (2012). Bringing hope and change: A study of youth probation officers in Toronto. *International Journal of Offender Therapy and Comparative Criminology*, *57*(9), 1158–1182.
Van Daalen, G., Willemsen, T., Sanders, K., & Van Veldhoven, M. (2009). Emotional exhaustion and mental health problems among employees doing 'people work': The impact of job demands, job resources and family-to-work conflict. *International Archives of Occupational and Environmental Health*, *82*(3), 291–303.
Van Deinse, T.B., Cuddeback, G.S., Wilson, A.B., & Burgin, S.E. (2017). Probation officers' perceptions of supervising probationers with mental illness in rural and urban settings. *American Journal of Criminal Justice 43*(2), 267–277.
Violante, J. (1983). Stress patterns in police work. *Journal of Police Science Administration*, *11*, 211–216.
Wasserman, G.A., McReynolds, L.S., Whited, A.L., Keating, J.M., Musabegovic, H., & Huo, Y. (2008). Juvenile probation officers' mental health decision making. *Administration and Policy in Mental Health and Mental Health Services Research*, *35*, 410–422.
West, A.D., & Seiter, R.P. (2004). Social worker or cop? Measuring the supervision styles of probation & parole officers in Kentucky and Missouri. *Journal of Crime and Justice*, *27*(2), 27–57.
Whisler, P.M. (1994). *A study of stress perception by selected state probation officers* (Unpublished master's thesis). University of South Florida, Tampa, FL.
White, L.M., Aalsma, M.C., Holloway, E.D., Adams, E.L., & Salyers, M.P. (2015). Job-related burnout among juvenile probation officers: Implications for mental health stigma and competency. *Psychological Services*, *12*(3), 291–302.
White, M.C., Chafetz, L., Collins-Bride, G., & Nickens, J. (2006). History of arrest, incarceration and victimization in community-based severely mentally ill. *Journal of Community Health*, *31*(2), 123–135.
White, W., Gasperin, D., Nystrom, J., Ambrose, T., & Esarey, C. (2005). The other side of burnout: Exemplary performance and health among probation officers. *Perspectives: the Journal of the American Probation and Parole Association*, *29*(2), 26–31.
White, W.L. (1997). *The incestuous workplace: Stress and distress in the organizational family*. Center City, MN: Hazelden.
Whitehead, J.T. (1985). Job burnout in probation and parole: Its extent and intervention implications. *Criminal Justice and Behavior*, *12*(1), 91–110.
Whitehead, J.T. (1987). Probation officer burnout: A test of two theories. *Journal of Criminal Justice*, *15*(1), 1–16.
Whitehead, J.T., & Lindquist, C. (1985). Job stress and burnout among probation/parole officers: Perceptions and causal factors. *International Journal of Offender Therapy*, *29*, 109–119.
Wolff, N., Bjerklie, J.R., & Maschi, T. (2005). Reentry planning for mentally disordered inmates: A social investment perspective. *Journal of Offender Rehabilitation*, *41*(2), 21–42.
Wolff, N., Epperson, M., Shi, J., Huening, J., Schumann, B.E., & Sullivan, I.R. (2014). Mental health specialized probation caseloads: Are they effective? *International Journal of Law and Psychiatry*, *37*(5), 464–472.
Wolff, N., & Pogorzelski, W. (2005). Measuring the effectiveness of mental health courts: Challenges and recommendations. *Psychology, Public Policy, and Law*, *11*(4), 539–569.