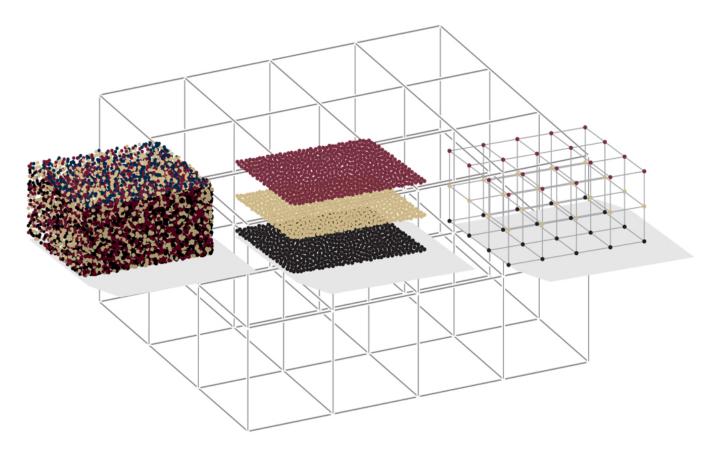


# Understanding Unmet Treatment Need Among Formerly incarcerated men with substance use disorders: A mixed methods exploration



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#### Abstract

Extant research has substantiated the prevalence of substance use disorders (SUDs)among incarcerated and formerly incarcerated populations. Substance abuse services are crucial for justice-involved individuals as unmet treatment need increases reincarceration risk. A limited understanding of behavioral health needs (i.e. health literacy) can be one of the reasons for unmet treatment need. Furthermore, social support is critical to positive post-incarceration outcomes. However, little is known about whether social support influences service utilization among formerly incarcerated individuals. Given these gaps in knowledge, this study aims to provide preliminary identification of how formerly incarcerated men and their social support partners understand the treatment needs of SUDs and ways in which individuals' understanding of SUDs impacts their service utilization. The findings of this study emphasize the need for psychoeducation during and after incarceration on behavioral health issues and the incorporation of social support into the treatment process.

#### Introduction

Low service utilization for substance use disorders (SUDs) is a growing problem. The ongoing drug epidemic and limited service utilization are further complicated amidst an era of mass reentry from prison to the community. The term 'mass reentry' refers to the staggering rate of persons releasing from prison as a result of mass incarceration (Chamberlain & Wallace, 2016). At the end of 2016, there were 2 million men and women incarcerated (Kaeble & Cowhig, 2018) with 626,000 individuals released from state and federal institutions (Carson, 2018). Individuals released from prison face many challenging conditions during reentry (Mallik-Kane & Visher, 2008), including increased risk for reincarceration. A recent recidivism report suggests that over 80% of all formerly incarcerated people released in 2005 were rearrested within nine years following their release (Alper & Durose, 2018).

Results from the 2016 National Survey on Drug Use and Health (NSDUH) capture the current state of the drug epidemic which estimates over 20 million individuals aged 12 or older met diagnostic criteria for a SUD (SAMHSA, 2017). A review of research over the past 50 years focusing on drug and alcohol use among the incarcerated has yielded SUD rates ranging from 10 to 61% for men (Fazel, Yoon, & Hayes, 2017). Furthermore, data from the 2007 and 2008/2009 National Inmate Surveys (NIS) highlight that 58% of individuals incarcerated in state prisons and 64% of those serving a jail sentence met diagnostic criteria for drug dependence (Bronson, Stroop, Zimmer, & Berzofsky, 2017). The prevalence of SUDs among incarcerated individuals is 10 to 12 time higher when compared to members of the general public (McCarthy, 2017).

While incarceration rates have declined since 2009 (Kaeble & Cowhig, 2018), rates for SUDs have not. The 2016 NSDUH found that rates of SUDs have remained consistent with prior year survey results (SAMHSA, 2017), indicating an increased need in support and treatment for individuals. Concurrently, there is limited SUD treatment availability for formerly incarcerated individuals after they return to their communities (Priester, Browne, Iachini, Clone, DeHart, & Seay, 2016; SAMHSA, 2015; Warner & Luekefeld, 2001). SUD treatment is critical to successful reentry as drug overdose has been

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found to be the leading cause of death for formerly incarcerated persons two weeks after their release (Binswanger et al., 2007). Despite this necessity of SUD treatment (Binswanger et al., 2007; Baillargeon, Binswanger, Penn, Williams, & Murray, 2009; Woods, Lanza, Dyson, & Gordon, 2013; Begun, Early, & Hodge, 2016), most justice-involved individuals cannot access or utilize these needed behavioral health services (Chandler, Fletcher, & Volkow, 2009) due to a range of limitations.

A recent literature review on populations with co-occurring disorders conducted by Priester et al. (2016) found several reasons for low service utilization among individuals in need of behavioral health services, including: lack of treatment availability, lack of specialized services, lack of coordination of care between incarceration and the community, far distances to access treatment, an inability to pay for treatment, and lack of insurance coverage. Lack of insurance coverage was reported in the literature at higher rates among lower income individuals and men of color (Priester et al., 2016). Furthermore, the Priester study (2016) identified personal characteristics that contributed to low service utilization. These personal characteristics included avoidance of treatment because of perceived societal stigma and lack of trust in treatment providers. This fragmented service delivery system along with an increased risk for stigma are critical barriers for formerly incarcerated persons accessing needed substance abuse treatment (Baillargeon et al., 2010; Begun et al., 2016).

Specific to formerly incarcerated populations, Mallik-Kane and Visher (2008) identify high utilization of the emergency department post-release, particularly among those individuals diagnosed with SUDs or mental health disorders. While high emergency department utilization may suggest acute care needs are being met, this is not meeting the long-term care needs of SUDs. Perhaps contributing to this high utilization of short-term and/or acute care is-limited health literacy (i.e. a lack of an understanding of their SUDs). A recent study examining the health literacy of recently incarcerated persons found that individuals with poor health literacy had an increased likelihood of visiting the emergency department (Hadden et al., 2018). Studies on health literacy involving incarcerated populations are limited and not well understood (Hadden et al., 2018), especially related to SUDs. Moreover, the role that social support

plays in formerly incarcerated persons service utilization post-release for SUDs is not well-established either. While not specific to substance abuse, a recent study by Souza, Lösel, Markson, & Lanskey (2015) in England found that post-release problems anticipated by social support partners predicted problems later experienced by the formerly incarcerated men. As it relates to SUD, these findings suggest that risks assessed and understood properly can lead to taking appropriate action to address the problem (Souza et al., 2015), such as substance abuse treatment.

The need for more affordable and accessible SUD treatments for an individual's postincarceration is clear. An increase in treatment availability alone is not likely to close the treatment gap. There is also a need to increase the understanding and awareness of SUDs, including the necessary treatments required for proper. The current study aims to build on existing research that suggests personal beliefs (e.g. knowledge and understanding) influence the likelihood to obtain treatment, by working with/using a sample of formerly incarcerated individuals and their social support partners/loved ones. We seek to understand how the loved ones of formerly incarcerated individuals understand SUDs and how they prioritize help-seeking behaviors, like service utilization. Identification of these malleable individuals factors could lead to the development of SUD literacy interventions for formerly incarcerated individuals and their loved ones.

#### Background

#### Substance Use Disorders Among Incarcerated and Formerly Incarcerated Individuals

Over two million people were incarcerated at the end of 2016, with over 1.5 million making up the prison population (Kaeble & Cowhig, 2018). The same year, there were over 600,000 people released from state and federal prisons (Carson, 2018). Among an array of challenges faced during reentry, a common challenge for individuals released from prison included a high prevalence of SUDs (Mowen & Visher, 2015; Wallace, Fahmy, Cotton, Jimmons, McKay, Stoffer, & Syed, 2016; Begun et al., 2016; McKeganey et al., 2015). While a more recent literature review cites approximately 25% of incarcerated

persons meet the diagnostic criteria for either alcohol or other SUDs (Fazel et al., 2017), other studies have reported rates of drug or alcohol abuse as high as 75% for justice-involved men (Mallik-Kane & Visher, 2008). As outlined above, these rates are further complicated by low service utilization upon release into the community.

The prognosis of SUDs stresses the need for service utilization, given the high comorbidity with mental health disorders. NSDUH's 2016 report established 8.2 million (or 3.4%) adults aged 18 years or older have a cooccurring substance use and mental health disorder (SAMHSA, 2017). Among criminal justice populations, the cooccurring rate is much higher, with overall estimations at least 12-15% (Steadman et al., 2013; SAMHSA, 2015). In one study, these rates were as high as 8 in 10 formerly incarcerated men reported more than one chronic health condition, including mental health and substance abuse (Mallik-Kane & Visher, 2008). Moreover, Baillargeon et al.'s (2009) study examined the association of severe mental illness and recidivism and found that inmates diagnosed with psychotic disorders had higher rates of drug possession. They also found former inmates with serious mental illness. While drug possession does not indicate comorbidity of SUDs, it does indicate the increased prevalence of substance use and mental health issues and its impact on recidivism.

Other factors that impact SUD recovery for individuals released from criminal justice institutions are medical illnesses and other social stressors, including housing, unemployment, and lack of high school or college degree. The stress of these variables and/or disorders further complicate the challenges of reintegration, such as securing housing, finding employment, and locating affordable social services (Chandler et al., 2009; Mallik-Kane & Visher, 2008; Hamilton & Belenko, 2016; Hadden et al., 2018), including treatment for SUDs. These multiple service needs can further complicate the SUDs of justiceinvolved individuals, putting them at further risk for reincarceration. This elevated risk illuminates the importance of continued research on behavioral health service availability, service utilization, and the negative impact of unmet treatment needs for those individuals with SUDs.

#### Service Utilization and Help-Seeking Behavior

Research has shown that perception of treatment need is associated with service utilization (Hamilton & Belenko, 2017). Closely connected to perception of treatment need is health literacy, which is defined as a person's understanding and perception of health and associated service needs (Paasche-Orlow & Wolf, 2007). The relationship between perception of treatment need and health literacy can impact an individual's likelihood of receiving services and can ultimately lead to an increase in help-seeking behavior (Mojtabai, Olfson, & Mechanic, 2002).

In one of the few studies examining health literacy among formerly incarcerated individuals, Hadden et al. (2018) discovered that 60% of their sample had low health literacy and was associated with more emergency department visits and less confidence managing their prescribed medications. The participants were also more likely to have burdensome chronic health conditions as well as less education. While this study did not screen for or include SUDs, these findings suggest that lower health literacy connects to a lack of understanding or confidence in attending to one's chronic health conditions. Moreover, it suggests that lower health literacy may decrease the chances that formerly incarcerated persons with chronic health conditions will be seeking and/or utilizing the care and services that are most appropriate. Essentially, an increased understanding or literacy of chronic health illnesses, such as SUDs, could increase the chances that formerly incarcerated persons will seek out and utilize the treatment they need.

A more studied area of research exists on the impact of health literacy on general health outcomes among the general population (Paasche-Orlow & Wolf, 2007; Harris, Baxter, Diminic, Pirkis, & Whiteford, 2016). This research shows that health literacy can improve health outcomes, specifically impacting a person's ability to communicate with providers and receive adequate care (Lee, Arozullah, & Cho, 2004). Mojtabai and colleagues' (2002) study examined perceived treatment need among individuals in the general population diagnosed with either a mood, anxiety or SUD. Only 14% of study participants meeting the criteria for SUD perceived a need for treatment, with less than half of those with a disorder (3%) seeking help from a mental health professional. Given the higher rates of SUDs among justiceinvolved individuals compared to the general population, it is likely that these SUD rates would be similar, if not higher, among formerly incarcerated individuals.

Studies concerning health literacy and health-seeking behavior among incarcerated and/or formerly incarcerated populations are limited, especially within the context of SUDs. This reinforces the need for health literacy studies with incarcerated and formerly incarcerated populations, as treatment is often not sought, received, or sustained. The results of our study will provide preliminary evidence on understanding how SUDs impact formerly incarcerated individuals' perception of need and utilization of services, while also considering the role of their social support partner. Because perceived need, or health literacy, is influenced by social contexts (Mojtabai et al., 2002), it is imperative that studies examine how social systems can further improve help-seeking behavior.

#### Social Support and Perceived Need for Substance Use Disorder Treatment

Informal social supports are heavily relied on by formerly incarcerated people reintegrating into the community (Pettus-Davis, 2012), and include family and other close loved ones (Pettus-Davis et al., 2014). Most families of incarcerated individuals offer some type of support that is critical to individuals releasing into the community, primarily housing (Cobbina, Huebner, & Berg, 2012). However, families and other close social support networks are who formerly incarcerated persons also turn to for emotional support and other tangible support including advice, transportation, and financial support (Bakken & Visher, 2018). In fact, social support is so critical during post-release that Souza and colleagues' (2015) study found that post-release expectations from the social support partners accurately and significantly predicted the kinds of problems men faced during their reintegration process from prison.

While research has established the importance of the social support's role on incarcerated and formerly incarcerated persons, how a person's social support system impacts health literacy and related behaviors, such as service utilization, is not extensively studied or well understood (Lee et al., 2004;

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Edwards et al., 2013). Edwards and colleagues' (2013) developed a conceptual model reflecting the ways in which health literacy is "shared and supported" among an individual's social support network and how it impacts an individual's behavior and decision-making regarding their health (p. 1189). They also found four areas where health literacy skills and practices were distributed among participants with chronic health conditions and their social networks. These areas included 1) shared knowledge and understanding, 2) accessing and evaluating information, 3) support with communication, and 4) supporting decision making (Edwards et al., 2013, p. 1187-1189). Additional research suggests that social support can help establish a foundation for health literacy, including increasing the use of routine and preventative visits. This is particularly important for poor and marginalized populations (Lee et al., 2004), such as formerly incarcerated individuals. The results of this research collectively illustrate how social support partners can influence their loved one's understanding or perception of health needs and how they seek and access services, like SUDs.

The aim of this current mixed methods study is to provide preliminary identification of how formerly incarcerated persons and their support persons understand the treatment needs of SUDs and how this understanding impacts their service utilization and/or help-seeking behavior. The mixed method design facilitates identification of how the formerly incarcerated person and social support partner understand treatment needs with the quantitative and qualitative data working to complement one another. The following questions guided this research study: 1) How do support persons understand the treatment needs of their loved ones (herein "formerly incarcerated person") with SUDs who recently released from prison? and 2) Does perception of service need associate with service utilization among formerly incarcerated men?

#### Methodology

Study Overview

The research reported in this study is part of a larger social support intervention trial. The trial involved incarcerated men with SUDs and their social support partner (n=57 men and 57 social support partners). Men recruited into the study were within 25-45 days of their scheduled release from prison. Upon release from prison, the men and their social support partner participated in a group-based intervention in which the social support person would attend group sessions with the formerly incarcerated person once per week for 10 weeks. The purpose of the intervention was to assist men in developing a positive social support network in the community. Data for the current study included during and post-incarceration interviews with the incarcerated men study participants and qualitative interviews with the loved ones.

#### Study Sample

All men that participated in the study were incarcerated in one of 10 prisons in one southeastern state and scheduled to be released within 25-45 days to one large urban county. Eligibility requirements for participation in the trial included: 1) positive screen for a substance-use disorder, 2) at least 18 years of age, 3) had a planned release to a large urban county in a southeastern state, 4) ability to speak conversational English, and 5) displayed cognitive understanding of the study requirements for participation. If eligibility was met, participants were enrolled prior to their release from prison.

Of the 187 men screened for eligibility, 94 of the men were excluded because of not meeting one or more of the inclusion criteria (n=72) or declined to participate in the study (n=22). Of the 93 men eligible for randomization, 36 men were lost prior to randomization leaving a total of 57 participants. Participants in the current study included all participants who completed the pre-release baseline interview regardless of their randomization assignment for the subsequent post-incarceration intervention trial.

Incarcerated study participants provided contact information for up to four social support partners. The social support partners were then contacted to be screened for study eligibility. Eligibility for the social support partners included: 1) refrain from use of illicit substances, 2) did not drink to intoxication on a weekly basis, 3) no histories of violence towards the study participant, 4) no criminal justice involvement within the past year, 5) at least 18 years of age, 6) spoke conversational English, and 7) displayed cognitive understanding of the study requirements for participation. University Human Subjects Review Boards and the Department of Correction Human Subjects Committee approved study protocol.

#### Measures

This was a mixed methods study used to examine the research questions. Quantitative data were collected from incarcerated study participants at baseline (prior to release from incarceration), within a week after release from incarceration, immediately after intervention ended, and six months after intervention ended. Qualitative interviews were conducted with support persons prior to the loved one's release from incarceration and three months after the loved one's release from incarceration.

*Substance use*. Study participants were screened for history of SUDs using the Substance Abuse Module of the Comprehensive International Diagnostic Instrument [CIDI-SAM] (Cottler, Robins, & Helzer, 1989). Study participants were also asked to indicate at baseline which substance caused them the most trouble prior to their incarceration.

*Service Perception & Utilization*. This measure was developed for the study and asked participants postrelease whether they perceived a need for a particular type of service and whether they received a particular type of service. Service questions centered on six domains where formerly incarcerated persons with SUDs may have issues: mental health, substance abuse, medical, employment, education, and general social services.

*Qualitative interviews*. Qualitative interview questions for support persons included: (a) When did you feel like you were effective at providing support? (b) Has there ever been a time when you felt like you did not know how to be more supportive? (c) What is the most effective thing you can do to help them stay out of trouble? (d) Have you ever felt that you needed support from someone else or an organization

to provide support to your loved one (i.e. the formerly incarcerated participant)? (e) What is the most satisfying part about being a support person? (f) What has been the most challenging part about being a support person? and (g) Is there a transition plan?

#### **Data Analysis**

Descriptive statistics were used to describe sample characteristics of participants and their social support partner relationships, along with perception of service need and service utilization across the six domains. Time point data was aggregated to determine 1) if the participant perceived a service need post-release (0=no; 1= yes) and 2) if the participant received a service post-release (0=no; 1= yes). Chi-squares were conducted utilizing StataSE version 15 to determine associations among the perceived service need and service utilization variables.

An a priori thematic analysis was conducted on the transcripts utilizing an inductive/deductive co-coding process (Padgett, 2017), allowing for broad to narrow focused coding. Two of the research members coded transcripts with one team member designated to lead the analysis and maintain the audit trail to manage and document the data analysis process, analytic decisions, and rationale for those decisions. The two research members met over the course of four meetings to review coding and reach codebook consensus. Percent of agreeability of the codes were 85% indicating strong validity. Once the codebook was confirmed, three themes were developed that related to how social support partners understand the treatment needs of formerly incarcerated persons with SUDs.

#### Results

#### Sample Characteristics

Most incarcerated study participants identified as African American or Black (91%) and were not married at time of arrest (93%). Study participants reported a mean age of 29 (SD= 9.58) years old and the most serious offense of participants were similar to state level trends: property offense (37%), violent offense (28%), drug offense (18%), other offense (10%), and sex (7%). 100% of participants met criteria

for a SUD based on the *Diagnostic Statistical Manual for Mental Disorders* (4<sup>th</sup> ed., text rev.; American Psychiatric Association, 2000).

The most used drug category prior to their incarceration were reported as: ecstasy (25%), polysubstance (more than one drug) use (23%), marijuana (18%), other (10%), alcohol (5%), cocaine/crack (2%), and did not report (17%). The most harmful drug category the participants reported using prior to their incarceration were: marijuana (33%), alcohol (18%), cocaine/crack (12%), polysubstance use (12%), ecstasy (3%), heroin (2%), other (2%), and did not report (18%).

Nearly half of support partners were parents, followed by intimate partners and other loved ones: parent (49%), partner/spouse/girlfriend (19%), friend/mother of child (12%), sibling (11%), extended family member (5%), other (2%), and missing (2%). See Table 1 for sample characteristics of the formerly incarcerated men and their relationship to their social support partner.

#### [Table 1 about here]

#### **Bivariate** Analyses

Bivariate analyses were conducted to test the association between perception of service need with actual service utilization. Fisher's exact tests were conducted to correct for the smaller sample size (see Table 1). Despite the sample being screened into the study because of the presences of a SUD, over 90% (n=42) of participants did not perceive a need for substance abuse treatment. Of the four that perceived treatment need for their substance use, only two (50%) utilized the services. Furthermore, low perception of need was also identified for mental health services (15%, n=7) and medical services (26%, n=12). Of the participants that perceived they needed mental health or medical services, majority of them ended up utilizing the service (86% and 75%, respectively), which is a marked increase compared to substance abuse treatment. Education and general social services were the most perceived service needs post-release, followed by employment services (59% v 54%, respectively). Employment services were the highest service utilized (52%), followed by general social services (41%), and education (26%). The

association between perception of employment service need and utilization of employment services was the only statistically significant relationship,  $p \le .0001$ . Given the statistically significant results, the researchers can conclude that perceived need informs service utilization as it relates to employment services only. However, while not testable due to cell size violations, the perception of need and service utilization patterns for substance abuse, mental health, and medical services are promising.

#### Qualitative Themes

Three salient themes surfaced from the qualitative data: 1) Overall lack of awareness of what SUDs are, 2) Connection of substance use behaviors to other post-incarceration challenges, and 3) Emphasis on non-treatment needs.

#### Lack of Awareness of Substance Use Disorders

Many support persons had difficulty in using, avoided using, or did not know the direct language to use, regarding their loved one's SUD. In most cases when referring to substance abuse, the non-direct language focused on being *around* drugs and/or alcohol or *selling* drugs (rather than using them), disappearing from their residence, hanging out with bad influences (i.e. peers), or being out in the streets.

One support person referred to their loved one's substance use as the following: "That's the way he is. But uh, I know people that's got habits, they do whatever they have to do to maintain their habit." Later in the interview, this same support person described what would happen when he indulged in his "habit" stating, "When he'd get missing and we didn't hear from him, we were so scared for him. We would um, wait a while and we'd call downtown to see if he was there and were like (sigh of relief). I know that sound terrible...".

Another support person stated, "I just need to see that he does not hang around the wrong people because that's his downfall or if something upsets him you know really bad he'll go running to that..." In another interview, a support person spoke to the power of peer pressure and drugs saying "when he was living with his cousins, they were selling drugs, you know... [he needs to] not [let] people talk him into things...like his cousins are always asking him to come and pick them up and he does not need to be doing that."

One mother described the conflicting feelings she experienced during her son's release from prison:

I told him that I feared for him being home as well, you know, because I know that once he comes home he's going to be facing the same things that he faced prior to being locked up... So being incarcerated was a bad thing, but it was a good thing because he was safe... And some of the things that he agreed to while he was locked up, you know... you're out and now you're pulling away from all of those things that you agreed to do, and I can see it.

Some support persons described issues presented as an attitude from their loved one that impacted their behaviors. One support person described how their loved one went against their better advice saying:

He would, he had an attitude problem...Because if it's something that he really wanted to do, come hell or high water... He's gonna' do it...If [he] make up in his mind he gonna' do something you can rest assure he gonna' do it... Good or bad... if you tell him that he shouldn't go somewhere, maybe he shouldn't go out that night or he shouldn't go, you know, be on out in the street. His mind say "go".

One support person described the difficulty she experienced with her loved one's compulsivity:

I'm just trying to take it easy with him because I don't want him to get bored. Because if he gets bored he's going to hit that door... It seems like the only part of his brain that's working is the negative side. You know there's just never anything positive... it's like that's all he knows is the streets. I don't think he ever know any other way. It's scary.

Another support person described: "I'm really glad he's doing good about the drugs, uhm hhm, main thing is he's such a strong-willed person...so he does all the yelling and screaming and stuff and I just sit there. He has a very bad anger issue."

Overall, most of the perceived need by support partners focused on getting away from the negative influences, as opposed to the need for SUD treatment. Moreover, most of what the support persons described is common among people with SUDs, yet none of the social support partners explicitly acknowledged this. This speaks to a lack of perceived need that was highlighted within the quantitative analysis of this study and the importance of health literacy in treatment utilization that can help cognitive reframe, alleviate and process anger, obtain sober supports, and structure time appropriately.

#### Substance Abuse and Post-incarceration Challenges

While most social support persons struggled to directly describe their loved ones' treatment needs, there were several support persons that described the drug and/or alcohol use of their loved ones and the challenges that substance use presented for them. Thus, for a small subset of study participants, the social support partners acknowledged the connection of SUDs to problematic post-release behaviors.

One mother described her son's use as a way for him to deal with his emotional and physical discomfort:

Well, my personal feeling is the only thing you can do for a drug addict is to support him and try to help. There's nothing else you can do, because they want to do drugs, they're gonna do drugs, you know, you can't stop 'em so, you know...basically that's probably why they started was to cope, now with [him] I think a lot of it had to do with his shoulder and all the pain he was in. You know, he looked to the wrong source for help. That's just where he turned.

Similarly, an intimate support partner conveyed how her loved one's service needs would continue to spiral unless he realized he needed treatment:

He lives in [his] world... It's either his way or it ain't no way... and I want him to come out of it cuz it's crazy... And I just feel like his addiction is so bad that [he] might turn into a crack head one day. And that's sad to say but that's how I feel because it's like you go from weed then you'll be high. And you go from pills and it's kinda' a little stronger high. And you go to powder which is a stronger high than pills but once the powder wears off you gonna' want something stronger. So I feel like the powder is just pills to him right now than something bigger and I want to prevent [him using something stronger]. But I don't think any resource would help [him], cuz [he] has to want help for himself and to me, right now, he just he doesn't want help.

Another support partner described that her loved one needed treatment because "he's out there getting high... he doesn't stop. Only way he stops is when police catches him." One mother addressed her son's addiction directly and was explicit in him needing treatment out of medical necessity:

He gets kind of ill sometimes. You know how it is. He's an alcoholic and that's the way they get... [he left when] he wanted something to drink I think. Cause some people kept telling me they saw him drunk out on that street... and I think the reason [he] come back is because the week before he had two seizures. See if he drinks he has seizures, fall out on the streets or anywhere. And it's going to kill him.

While there was limited conversation regarding active substance use treatment utilization of the formerly incarcerated person, one mother described multiple failed attempts at getting her son help:

When you go to all these different doctors and you're trying to get help and you're getting all these different answers and no one else can help and it's like where else do you turn? You know you're going to the physicians and he needs help. So, who is able to really help us? Nobody... they don't try to get you that help unless you know the right people and that's not fair. And I feel like, if they know something that's good for a child, you should deliver it to the next child just because your child wasn't sick doesn't mean you can't help somebody else child. You don't

know what's going on-help the next person, like depression and stress. He was so aggravated and mad at the whole world. Probably his self as well. He tried to commit suicide... we've been out to mental health already. We also set up an appointment. He got two appointments... there's a lot of appointments we're making to get him on the right track. So he has the medicine and stuff that he need.

Another mother described addressing her son's substance use by trying to encourage him to do the right thing:

I've tried to talk to him and explain what these drugs can do, and the things that you do, you've always got to pay a price for it- nothing's going to go unnoticed. I've tried to be there for him to give him support to let him know that if he needs anything he could always call on me, or his dad, and we would be there for him. We're not going to bail him out basically, but we're just going to be there to support him and try to get him on the right path...We've always try to persuade him not to be around certain people that have gotten him in to trouble- just that kind of support, just letting him know that we are there.

Other quotes in this theme highlight the use of alcohol and/or drugs to deal with physical and/or emotional discomfort, an inability to quit use, and also a need of their loved one to *want* to seek treatment. The quotes outlined in this section show more explicit language and awareness regarding SUDs and the consequences of continued use, including re-arrest, illness, and more frequent drug use. This theme connects more broadly to the importance of understanding SUDs (i.e. health literacy) and its connection to the perceived need for treatment.

#### Emphasis on Non-treatment Needs

The final theme captures the language social support persons used in describing what was needed for their loved one post-release. However, SUDs treatments were rarely discussed. The most common need reported was employment, followed by education. Support persons described employment as an essential need that would either a) structure their time and keep them busy or occupied, or b) build confidence and self-esteem.

A support person concisely stated: "Well that, that comes first. That the way you have the most, to have a job....". This support person said that her years of unconditional emotional support have not helped her loved one "straighten up" so she believed it would take a job to help him "get back on the right track." Another said, "If he gets a job, he go'n be dedicated. But as long as his mind starts to sidetrack him, he, it's not go'n work." An additional support person described how she felt that she could help with any other need her loved one may have, but that employment would provide something to him nothing else could: "Because every other [thing] I could probably support him, but when it comes to him, his feeling him being the man and being a provider...I can't do anything in that matter to help him." One mother also shared her perspective on the employment needs of her son:

I mean, my biggest concern was I didn't – he just needed helping finding a job... He has a record so it's gonna' be tough. He has nothing to occupy his time. Oh my gosh, I don't know what to do with him.

Another mother acknowledged the issue of her son's alcohol use and expressed how a job would resolve his alcohol problems:

... [R]eally he'll kill himself if he does, if he keeps doing that... A regular job uh uh, that's what he needs but he ain't gonna' do it... I'd really like for him to get him a job somewhere and you know kind of show that he's a grown up... I would think if he could find a job, if he could work, he'd be so proud of it till it would solve all his problems. I really do think that.

Sometimes, support persons voiced multiple or competing needs of their loved ones reintegrating from prison. The following statement from a support person exemplifies the ambivalence of knowing exactly

what their loved one would need. While she feels providing a type of emotional support may be helping, she is comforted by the prospect of employment for her loved one: "Well just continue to talk to him maybe. I will feel much better once he get him a job."

This mother relayed multiple needs for her son, including employment. However, education took precedence:

I mean I want him to finish school; I want him to get a job. But I don't want him to get a job and think that he doesn't need school. I want him to know that school is more important than anything.

Collectively data in this theme suggest that many support partners prioritize employment and education over SUD and other behavioral health treatment. These findings are also consistent with findings from the quantitative data regarding what services were utilized from the formerly incarcerated men with SUDs, with employment as the most utilized service.

#### Discussion

Our study results indicate three points. First, perceived treatment/service need does associate with treatment/service utilization. While the statistically significant relationship was limited solely to employment services, the trend of perceived need and utilization across the domains of substance use, mental health, and medical services were over 50%, indicating that the majority of individuals who feel a service is needed will utilize it, if available. Existing research supports our finding as a study on perceived need and treatment utilization among populations with mental health and/or SUDs discovered at least 59% of individuals that perceived a need for treatment sough at least some form of professional help (Mojtabai et al., 2002).

Second, while our sample included formerly incarcerated men with SUDs, only 4% perceived a need for specific substance abuse treatment. This finding alone may suggest lower health literacy among

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individuals with SUDs releasing from prison, which is consistent with other studies examining vulnerable populations with chronic health conditions (Hadden et al., 2018). This finding is especially important as substance use treatment is a critical indicator of successful reintegration (Baillargeon et al., 2009; Woods et al., 2013; Begun et al., 2016) and without it can leave formerly incarcerated persons open to relapse, rearrest (Luther et al. 2011; Ali et al., 2018), and death (Binswanger et al., 2007).

Lastly, our study suggests that social support partners' understanding of treatment needs for SUDs does influence the services received by formerly incarcerated persons post-release. Study results indicate that while all participants met diagnostic criteria for a SUD, the majority of the formerly incarcerated participants and their support partners did not describe SUD treatment as a priority need for support. For both the formerly incarcerated men and the social support partners who voiced service needs, the majority focused on employment as the primary need, followed by education. While research does highlight the importance of employment during reintegration by decreasing recidivism upon release from prison (Bahr, Harris, Fisher, & Armstrong, 2010; Berg & Huebner, 2011), it is still critical that individuals with SUDs get additional behavioral health needs met (Bakken & Visher, 2018).

Rarely did support partners refer to their loved ones as having an addiction or SUDs. It is not entirely clear how to interpret this finding, however it could indicate an overall lack of awareness of SUD symptoms or even awareness of treatment. Our preliminary study findings suggest there may be a need for intervention development that educates family members on SUDs, the variety of treatment approaches, and how treatment may assist in a transition post-incarceration. Lee and colleagues' (2004) research supports the impact of low health literacy among marginalized populations and their utilization of healthcare services. Their research suggests that incorporating positive social support into intervention treatment may increase health knowledge, improve overall health conditions, and decrease services such as emergency department visits and other hospitalizations.

#### Study Limitations.

While there are interesting contributions of this research to the field of social work, public health, and criminal justice, there are a few limitations that should be noted. First, the smaller sample size prohibits generalization to other criminal justice populations and their service need perception and utilization patterns. The limited cell size in the quantitative analysis impacted the ability to detect effect, however the service utilization descriptive statistics show higher perceived need of non-treatment specific services (e.g. education and employment) among formerly incarcerated men diagnosed with SUDs. Second, while there was co-coding conducted to further strengthen the reliability of results, it is possible there could have been biases from the researchers coding and should be considered when applying results to similar populations. Furthermore, the support person was offering their feedback on the struggles experienced and what was most needed by their loved one (i.e. the formerly incarcerated person). While this is an important perspective given the research question, it may not have been the same struggles reported by the formerly incarcerated person. It should also be noted that the participants in the study are representative of one state, so results may not be generalizable to the broader formerly incarcerated persons with SUDs and their support networks. Lastly, self-report measures utilized in the study can be a limitation as there is no way to guarantee responses were accurate.

#### Conclusion

#### Future Implications.

Future research should examine the types of relationships within social support networks and see if there are trends among which types of support are most effective in transferring health literacy. Findings from this type of research could help inform what, where, and who to place individuals with post-release so that the best reintegration outcomes can be achieved. Additionally, there should be more consistent data collection surrounding medical needs and primary healthcare access among individuals in need of, or qualifying for, substance abuse treatment.

The results of this research further begs the question: how can pre-release behavioral health interventions, and treatment planning post-release, be enhanced? While SUD treatment typically treats

individuals diagnosed with SUDs, more movement and consistency in including family and loved ones in the treatment process are needed. In some treatment settings, family counseling may be an option. However, this is not standard. One enhancement that can be made is starting with education pre- and postrelease and including support persons in the process. The education received could review common symptomology present among SUDs, common comorbidities experienced with SUDs, along with other related behavioral health needs (i.e. mental health and medical care) that can advance recovery. Including the families of reentering individuals into the critical intervention process speaks to treatment not as an isolated issue, but as a systemic, multidimensional one.

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## Running head: UNMET TREATMENT NEED Table 1.

| Sample Characteristics & Post-relea    | M/N           | SD/%                                 |
|--|---------------|--------------------------------------|
| Demographics                           |               |                                      |
| Age                                    | 29.02         | 9.58                                 |
| Race                                   |               |                                      |
| White                                  | 5             | 8.77                                 |
| African American                       | 52            | 91.23                                |
| Marital status                         |               |                                      |
| Not married                            | 53            | 92.98                                |
| Married                                | 4             | 7.02                                 |
| Drug of choice                         |               |                                      |
| Alcohol                                | 3             | 5.26                                 |
| Cocaine/crack                          | 1             | 1.75                                 |
| Marijuana                              | 10            | 17.54                                |
| Polysubstance                          | 13            | 22.81                                |
| Ecstasy                                | 14            | 24.56                                |
| Heroin                                 | 0             | 0.00                                 |
| Other                                  | 6             | 10.53                                |
| N/A                                    | 10            | 17.54                                |
| Drug of choice- most harm              | 10            | 17.54                                |
| Alcohol                                | 10            | 17.54                                |
| Cocaine/crack                          | 7             | 12.28                                |
| Marijuana                              | 19            | 33.33                                |
| Polysubstance                          | 7             | 12.28                                |
| Ecstasy                                | 2             | 3.51                                 |
| Heroin                                 | 1             | 1.75                                 |
| Other                                  | 1             | 1.75                                 |
| N/A                                    | 10            | 17.54                                |
| Most serious offense                   | 10            | 17.54                                |
| Violent                                | 16            | 28.07                                |
| Sex                                    | 4             | 7.02                                 |
| Drug                                   | 4<br>10       | 17.54                                |
| 0                                      | 21            | 36.84                                |
| Property<br>Other                      | 6             | 10.53                                |
| Other<br>Second Partners Palation alig | 0             | 10.55                                |
| Support Partner Relationship           | 28            | 40.12                                |
| Parent                                 |               | 49.12                                |
| Sibling                                | 6<br>3        | 10.53<br>5.26                        |
| Extended Family                        |               |                                      |
| Partner/spouse/girlfriend              | 11            | 19.30                                |
| Friend/Mother of their child           | 7             | 12.28                                |
| Other<br>Missing                       | 1             | 1.75                                 |
| <u>Missing</u>                         | 1             | 1.75                                 |
| Perceived Service Need                 | <u>No (%)</u> | $\underline{\operatorname{Yes}(\%)}$ |
| Medical                                | 34 (73.91)    | 12 (26.09)                           |
| Substance Abuse                        | 42 (91.30)    | 4 (8.70)                             |
| Mental Health                          | 39 (84.78)    | 7 (15.22)                            |
| Employment*                            | 21 (45.65)    | 25 (54.35)                           |
| Education                              | 19 (41.30)    | 27 (58.70)                           |
| General Social Services                | 19 (41.30)    | 27 (58.70)                           |
| Service Utilization                    |               |                                      |
| Medical                                | 37 (80.43)    | 9 (19.57)                            |
| Substance Abuse                        | 44 (95.65)    | 2 (4.35)                             |
| Mental Health                          | 40 (86.96)    | 6 (13.04)                            |
| Employment*                            | 22 (47.83)    | 24 (52.17)                           |
|  | 34 (73.91)    | 12 (26.09)                           |

General Social Services27 (58.70)Note. M = mean; SD = standard deviation. \* $p \le .0001$ 19 (41.30)