IN THEIR OWN WORDS: SUPPORTS AND BARRIERS TO RECOVERY FOR PARTICIPANTS IN TWO NEIGHBORING DRUG COURTS

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VALUE STATEMENT

This study identified what drug court participants reported as their major extrinsic and intrinsic barriers and facilitators to recovery, as well as their strengths and supports in recovery. Major findings include differences between rural and urban settings and the need for wraparound care, including housing and employment assistance, which have implications for drug court team members and treatment professionals. This study is the first published report of drug court participants' perspectives; findings illustrate the role that rural health disparities, including untreated psychological illness and a lack of transportation, play in the recovery process.

ABSTRACT

Although research exists on the many benefits and successes of drug court, few published studies describe the experience from a drug court participant's perspective. The focus of this study was to determine what drug court participants reported as their primary barriers and supports to recovery and how the drug court experience could better support recovery in both rural and urban settings. Phase-Up and Graduation forms covering 27 months were collected from the records of a rural drug court and a neighboring urban drug court. A total of 58 forms from a rural drug court and 68 from an urban drug court were collected and de-identified. Using a mixed-methods approach that incorporated a Consensual Qualitative Research process, coders identified 1340 references to the 10 domain themes among the 126 forms. This study identified what drug court participants reported as their major extrinsic and intrinsic barriers and facilitators to recovery. Major findings include the need for wraparound care, including housing and employment assistance. Findings illustrate the role that health disparities, including untreated psychological illness and a lack of transportation, play in the recovery process.

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INTRODUCTION
Drug courts were established in 1989 to channel certain substance-using offenders towards treatment rather than standard sentences of incarceration and probation (Sevigny, Pollack, & Reuter, 2013). Since 1989, extensive research has sought to understand the costs and efficacy of these courts. Years of drug court program results have demonstrated decreased rates of crime and substance use among participants, at much lower costs than traditional law enforcement methods (National Association of Drug Court Professionals [NADCP], 2018a). While the NADCP has developed best practice standards for adult drug courts (NADCP, 2018a), drug courts are generally localized courts that tailor programming to the region and participants they serve, making it challenging to study courts across jurisdictions.

Although published research addresses the benefits of drug court and the key components that make drug court successful (Carey, Mackin, & Finigan, 2012; Gutierrez & Bourgon, 2012; Downey & Roman, 2010; Marlowe, 2012), few published studies describe the drug court experience from a participant's perspective. Highlighting the experiences of drug court from the perspective of the participants allows for a more thorough evaluation and deeper contextualization of its effectiveness (Boyd, Murray, SNAP, & MacPherson, 2017; Boyd & NAOMI Patients Association, 2013; Morse et al., 2014).

BARRIERS TO RECOVERY
A report by Lucenko, Henzel, Black, Mayfield, and Felver (2014) assessed the efficacy of Recovery Support Services (RSS) when provided to drug court participants. The goal of RSS was to assist participants with basic needs such as food and clothing, as well as finding work, training, and transportation. These were all considered "major barriers to success" (p. 2). The report found that participants who did not specifically receive aid from RSS spent more days in treatment, were less likely to be employed in the year following drug court, and had higher rates of arrest. Focus groups conducted with female drug court participants identified criminal justice involvement as a barrier to healthcare, employment, and housing (Morse, Silverstein, Thomas, Bedell, & Cerulli, 2015).

The NADCP and the Drug Court Standards Committee, in their published report "Defining Drug Courts: The Key Components" (1997), asserted the fundamental need to address co-occurring issues, such as mental and physical health, homelessness, unemployment, and a lack of education in the drug court treatment process. They also identified insufficient job preparation, family issues, domestic violence, and past trauma as barriers to recovery. Additional research has revealed the prevalence of mental health issues among drug court participants. In Adult Drug Court Best Practice Standards: Volume II Text Revision (NADCP, 2018b), the NADCP states, "Approximately two-thirds of drug court participants report serious mental health symptoms and roughly one-quarter have a diagnosed Axis I psychiatric disorder, most commonly major depression, bipolar disorder, PTSD, or other anxiety

disorder" (p.12). Evidence suggests that providing medical or dental treatment can improve outcomes for some drug court participants. One study concluded that providing healthcare to participants can lead to 50% greater reductions in recidivism and providing dental care can lead to a 59% reduction in recidivism compared with programs that do not offer these services (Carey et al., 2012).

Although relationships within drug court can have benefits for participants, a qualitative study of Pennsylvania Drug Court participants conducted by Kuehn and Ridener (2016) identified the negative impact that social relationships can also have within the program. Negative social relationships often lead to stress among participants, creating drama in the program. They also noted that communication with other participants who are not dedicated to recovery or the program can slow the recovery process. Another barrier identified was ineffective treatment providers and programs, which is reflected by sentiments from participants in the study: "...IOP [Intensive Outpatient Treatment]. Not everyone in there stays clean. There is a lot of drug use"; "Outpatient [because] counselor couldn't control group"; "People are still getting high there. They are just there [IOP] to please people. Not to get better" (pp.2257–8).

Kuehn and Ridener also identified other drug court weaknesses, such as program requirements that limit the participants' ability to work and find a job. Some notable thoughts from participants included that the requirements for reporting to court and probation interfered with work schedules and job requirements, while also making it difficult to maintain full time work. The authors noted this as an "understandable" frustration, asserting the importance of employment for drug court participants' success and recovery. (Kuehn & Ridener, 2016, p.2258). Previous drug court research predicts worse outcomes for drug courts in which a significant portion of the population is lacking in education achievement and significant work histories (NADCP, 2018b). Furthermore, research has shown that drug courts that do not require participants to have a job or enroll in an educational program are less cost-effective than those that do not (Carey et al., 2012).

SUPPORTS IN RECOVERY

Incentives and sanctions have been recognized as meaningful components of a drug court (Wolfe et al., 2004). Wolfe and colleagues (2004) identified the desire to avoid conviction and/or incarceration as a major motivating factor of drug court. The use of sanctions along with incentives is helpful in holding participants accountable for their behaviors and decisions. The drug court graduation ceremony is a strong incentive for participants due to public recognition of the participant's success in overcoming the challenges of addiction.

Drug court itself can also act as a support by individualizing interventions to address the complex constellation of causes underlying substance use disorders and in so doing provides "wraparound" care (NADCP and Drug Court Standards Committee, 1997). The NADCP and Drug Court Standards Committee (1997) approaches participants with the idea of providing holistic treatment, which can include mental health services and primary care (NADCP and Drug Court Standards Committee, 1997). As part of these services, participants begin engaging in cognitive-behavioral therapies when they are medically stable to help establish communication, reduce conflict, and retrain patterns of behavior and associations with individuals and situations that might serve as triggers (NADCP, 2015). Seeing to criminogenic needs through interventions such as teaching participants decision-making skills has reportedly produced positive results (NADCP, 2018b).

Furthermore, a qualitative study among a group of Pennsylvania Drug Court participants by Kuehn and Ridener (2016) demonstrated the importance of structure, accountability, and the need to focus on achievements and successes rather than punishments and failure (Kuehn & Ridener, 2016). Participants also credited the value of drug court team members as contributing to their personal wellbeing in the program (Kuehn & Ridener, 2016).

Relationships with team members were important to the participants in overcoming their substance abuse disorders, as was the creation of new friendships and distancing themselves from old and potentially harmful relationships. One participant from the study stated, "My friends today are sober people and are supporting me." When discussing social support, the majority of the participants identified friends as those in recovery who they had met through drug court, Narcotics Anonymous (NA), Alcoholics Anonymous (AA), or other treatment programs (Kuehn & Ridener, 2016). A study by Gossop, Stewart, and Marsden (2007) also showed the significance of AA and NA meetings in abstinence-based recovery, where they found that those who frequently attended meetings were more likely to be abstinent from alcohol and opiates.

Another notable support is the incorporation of cultural-specific practices into addiction treatment for Indigenous populations. A study by Rowan et al. (2014) sought to explore the specifics of melded cultural practices to substance use recovery services and the outcomes of these contributions. Sweat lodges were the most frequently noted cultural practice in this study, but Rowan et al. also identified 16 other pertinent practices. Results from applications of cultural interventions in this study showed reported benefits in physical wellness and spiritual health, concluding that these interventions are broadly helpful for wellbeing when incorporated in substance use treatment for indigenous people. This is pertinent to our study, as a prominent Tribal Nation had a considerable influence on our rural drug court participants.

RURAL AND URBAN DIFFERENCES

Taking into consideration rural and urban differences is crucial when assessing drug courts. Drug courts are localized courts and are unique to the area they serve, which presents a challenge when studying courts across jurisdictions. While the general guidelines for drug courts are transferable, the methods, structures, and procedures can vary greatly depending on the region (King & Pasquarella, 2009). Only a paucity of research has explored differences between rural and urban drug courts, one study finding that rural drug courts tend to have lower funding and a smaller range of adjunct services than drug courts in urban settings (Bouffard & Smith, 2005). However, there are currently no studies investigating how differences in these two drug court settings affect the participants' subjective experiences. Although there is a lack of research comparing rural and urban drug courts, published studies have focused on

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more general rural/urban differences in substance use and treatment. A study conducted by Warner and Leukefeld (2001) found critical distinctions regarding substance use among rural and urban populations of incarcerated drug arrestees. Pertinent findings include fewer rural participants having attended substance use treatment despite having higher rates of long-term drug use compared to urban participants (Warner & Leukefeld, 2001). Another study found that rural veterans had higher rates of intravenous drug use and outpatient admissions, whereas urban veterans had more inpatient admissions. The authors suggest this is likely due to a lack of inpatient beds in the rural environment, indicating differing access to resources between rural and urban settings (Turvey, Lund, & Jones, 2019). This is a particularly relevant finding given that substance-abusing mothers in rural communities have lower completion rates of outpatient treatment (Shaw et al., 2015).

Pullen and Oser (2014) examined barriers to providing substance use treatment for rural and urban populations from the viewpoints of counselors. Meeting housing needs was a unique challenge presented by rural counselors, along with additional challenges that included getting their clients access to basic dental and medical services. Pullen and Oser grouped these under a larger theme of "Lack of Interagency Collaboration" (p. 9), which was identified as a problem by both rural and urban participants. In addition, while results showed that a lack of funding was a barrier for both groups, urban counselors expressed that it was an issue due to the heterogeneity and large numbers of their populations, while rural participants felt their insufficient funding translated to inadequate facilities. Urban counselors expressed sentiments that spoke to the strain of providing treatment to many clients with insufficient resources for large caseloads. Transportation was also a barrier expressed by both groups, but study results showed that rural areas have more significant challenges around transportation. The authors concluded that their data showed unique rural challenges due to "community and cultural factors" (p. 14) and environments where counselors are faced with fewer resources and less favorable environments to support recovery.

RESEARCH GAPS

The goal of this participant-focused study of barriers and supports is to provide data pertinent to supplement existing evidence-based practices regarding services and supports for drug court participants. This kind of study will provide a nuanced and detailed understanding of the drug court experience from the participants, in their own words. The differences in localized drug court policies have been a challenge to conducting drug court research. Local differences can be crucial to understanding the different needs, supports, and barriers for a geographic location (King & Pasquarella, 2009).

While extensive research demonstrates drug court effectiveness and decreased rates of criminal recidivism (Marlowe, 2011), there is a lack of research examining barriers and supports in recovery from the participant perspective. In addition, there is a lack of research focused on barriers and supports for drug court participants that span a broad scope of recovery, and not just that of drug court processes. Assessments of barriers and supports from the perspective of the drug court participant would provide valuable data for improving systems and lead to increased rates of success; while evaluating the differences between rural and urban participants would help to understand their specific needs and highlight the areas of necessary expansion and improvement in the drug court system.

As one study has suggested, rural treatment is specifically challenged by cultural and community components through an assessment of rural and urban substance abuse counselors (Pullen & Oser, 2014). There is a lack of

research focused on whether these, as well as urban challenges, are noted and addressed in a drug court system. Being able to adapt programs to address these needs for both rural and urban populations would produce better outcomes and success rates for participants in both settings. Furthermore, there is a need to assess rural and urban populations within a single drug court system to understand the unique challenges that are presented to each demographic and further understand if these needs are being met by the drug court system.

Our study involved the quantitative and qualitative analysis of Phase-Up and Graduation forms for two neighboring drug courts, one serving a predominantly rural population and the other serving a predominantly urban population. The focus of this study was to determine what drug court participants believed to be their primary supports in recovery and most significant barriers to recovery. A secondary aim was to assess the differences in barriers and supports between rural and urban areas to determine how the drug court experience can better support recovery in the two studied geographic regions.

METHODS

THEORETICAL MODEL

The current study utilized the Socioecological Model (SEM) in order to identify influential agents (behavioral or structural aspects) of drug court that contribute to health advocacy efforts. SEM is a framework for understanding behavior through often complex and interactional personal and environmental factors; it is used to help identify influential behavioral or structural agents in health advocacy within an organization. A UNICEF document (n.d.) states, "There are five nested, hierarchical levels of the SEM: Individual, interpersonal, community, organizational, and policy/enabling environment." Interventions can be taken at all levels of this model—supporting the individual in their interactions with others, their community, the systems surrounding them—to affect public health change/prevention. UNICEF further notes that "the most effective approach to public health prevention and control uses a combination of interventions at all levels of the model" (UNICEF, n.d., p. 1). SEM is pertinent to this study as we assess supports and barriers for those in recovery through the lens of geographical demographics, as well as other personal, and environmental factors. Much of the data from the current study fall under the guided segmentation of themes denoted by SEM levels.

DRUG COURT PARTICIPANT PROGRESSION

As participants progress through the drug court program, they "phase up" to various levels and gain privileges including fewer court visits, later curfews, more freedoms, and less supervision. Each drug court participant fills out a Phase-Up form when they would like to move to the next level of drug court and a Graduation form when they are ready to graduate. The Phase-Up forms consist of a combination of questions and check boxes for the requirements of the next level. Phase-Up forms also ask the participant to thoughtfully answer a series of questions that relate to their treatment and recovery journey. Completing these forms affords drug court participants opportunities to reflect upon their goals, to articulate what they are doing to maintain their sobriety, and to communicate their needs to the drug court team. The drug court team then determines whether the participant has demonstrated that he or she is prepared to move to the next phase or to graduate.

DATA AND SAMPLE

Phase-Up and Graduation forms were collected from the records of drug court coordinators for 27-month periods:

from February 2015 through May 2017 for the rural drug court, and from April 2015 through July 2017 for the urban drug court. A total of 58 Phase-Up and Graduation forms from the rural drug court and 68 Phase-Up and Graduation forms from the urban drug court were collected. All data were de-identified prior to this study, which was determined to be "not human subjects research" by the University of Minnesota Institutional Review Board. Phase-Up and Graduation forms had a set of defined questions, but participants had the ability to enter their own text and could free-write outside of the predefined questions as needed. These forms used in the two neighboring courts studied were very similar but not identical; while questions still focused on treatment and recovery, some of the questions had been adapted slightly for each court. Drug court participants were given the discretion to provide answers that were as detailed or as succinct as they preferred.

DATA ANALYSIS

Data were analyzed using a mixed methods approach. The Fisher Exact Test was employed for quantitative comparisons between rural and urban drug court participants, while a consensual qualitative research (CQR) approach was used for qualitative evaluation of the data. An alpha level of 0.05 was selected as the a priori criterion to indicate statistical significance. The CQR method is unique in that it involves multiple researchers coming to consensus on codes in a systematic way (Hill et al., 2005). Qualitative data were gathered in an open-ended manner, studying relatively small samples of each Phase Up and Graduation form individually with intention and detail, as is characteristic of CQR methods. This method is inductive, where conclusions are drawn from the data without challenging a pre-existing theory. A small team of researchers was used to analyze and determine conclusions based on the data, which were then examined for missed information (Hill et al., 2005).

Using the principles of CQR, five coders reached consensus among domains and categories based on the research question and study aims. The coding process was overseen by a faculty member and drug court team member with prior experience in CQR who served as an auditor; coders included an attorney who had previously worked on a participating drug court team, three coders who were professional students with an interest in drug court, and one coder who was an undergraduate student with experience in drug court. The coders did not have previous experience with Consensual Qualitative Research but studied the method before initiation of the research project.

The CQR process started with holistic coding in the first round of Phase-Up and Graduation form evaluation to identify themes in sections of text. Initial domain themes were independently identified for segments of raw data using a holistic coding process. Larger segments of data such as those included in essays, were coded as a whole instead of coding line by line to address the research questions (Dey, 1993). These research questions were: (1) what are participants' primary supports in, and barriers to, recovery? and (2) how can the drug court experience better support recovery in both rural and urban settings?

Domain names were cross-analyzed and used as the first iteration list for the next step in code mapping (Saldana, 2013). Descriptions of domain themes were created and coding subdivisions were identified for the second round of coding to better accommodate the different writing styles of drug court participants. In second-cycle coding, themes became more descriptive and codes were identified in a line-by-line fashion. This descriptive coding process allowed for the organization of domains around the study aims. During the second team meeting, consensus was reached; the coders discussed what codes could be combined, noting that some domains were not well represented in the

final table. The five coders discussed how the research domains might fit into the SEM. The coders identified 1362 references to the 10 domain themes after review of 126 forms, some of which included essays.

RESULTS

Because each form was de-identified before analysis to ensure anonymity, an exact demographic breakdown of study participants is not possible. Approximately half of the participants in each court were female and half male as identified by their Phase-Up forms. In the rural drug court, about half of the participants identified as Native American and the other half as Caucasian, while approximately 10% of the participants in the urban drug court identified as Native American with the other 90% identifying as Caucasian. Self-reported barriers to recovery were separated into extrinsic and intrinsic barrier domains, and the self-reported supports in recovery were separated into domains that categorized the type of support mentioned. Table 1 presents the coding of Phase-Up forms and Graduation forms, which is organized by the "mentions" of domains discussed and number of references to each domain ("frequency"). Table 1 also includes a theme description and breakdown of references to the theme in the rural versus urban drug courts using heat mapping to aid in visualization. Many reflections discussed multiple themes, and heat mapping was used to assist in visual comparison of domains and differences between the rural and urban drug court. There were 665 identified barriers and supports for the rural drug court and 675 identified for the urban drug court.

BARRIERS TO RECOVERY

Participants in both drug courts reported that they struggled to find housing to support their basic needs. Participants in both of the sites studied reported that additional support from the drug court team in obtaining housing would have been helpful to them.

In addition, participants in the two drug courts studied reported having significant struggles obtaining employment, given their criminal history and their limited work history. Financial debt was the most commonly mentioned extrinsic barrier for both groups. It was mentioned 13 times (22.4% of forms) in rural drug court forms and 10 times (14.7% of forms) in urban drug court forms ($p = 0.36$).

In some cases, participants reported that health concerns and conditions served as barriers to them in their recovery. The topic of mental health was frequently mentioned in participant Phase-Up and Graduation forms, both as a barrier to recovery and as an area where participants reported that they were focusing and investing their time and energy. Mentions of mental health difficulties such as social anxiety, stress, inability to deal with emotions, tendency to isolate, self-doubt, grief, shame, and/or fear of talking about addiction/ recovery occurred 26 times in the rural drug court forms (44.8%) and 22 times (32.3%) in the urban drug court forms ($p = 0.20$).

Participants from rural and urban settings frequently mentioned other "old habits," including unhealthy activities, habits, and triggers (people and places), as intrinsic barriers to recovery. This also included struggles to stay busy, avoid boredom, and bolster motivation. This was mentioned 18 times (31%) by the rural population and 19 times (27.9%) by the urban population ($p = 0.84$). In addition, participants consistently reported that "old ways of thinking" were barriers to recovery that needed to be overcome for their success. In a Phase 3 essay, a participant stated: "...I do have addict thinking patterns, it is much more beneficial to check down the ways to approach every

situation for me to ensure that I get it right. If I react on my first emotion, I usually approach stuff wrong." Results from both rural and urban settings reported that substance-using peers also served as a barrier to recovery. Interpersonal interactions could be dangerous and detrimental to recovery when family and friends of an individual were not supportive of their newly chemical-free lifestyle. Participants in both rural and urban settings reported having to cut off relationships with family and friends in order to move forward with their recovery. In addition, some participants reported struggles with public and community organizations that express negative attitudes toward people in recovery, which resulted in such organizations serving as a barrier to recovery rather than a support.

SUPPORTS IN RECOVERY

When participants were asked to list or describe goals through the Phase-Up forms we evaluated, both populations often mentioned domains of "Career," which included getting a job or promotion, a better job, more responsibility at work, or more hours. This also included the mention of creating a resume. For the rural drug court, this theme was mentioned 23 times (39.7% of forms), while for the urban drug court, it was mentioned 31 times (45.6% of forms) ($p = 0.59$). One participant wrote in his or her graduation essay that "I can definitely see myself being promoted or at least given a great amount of responsibility at my job, which will result in a pay raise which will make me feel less stressed and overall more happy…."

In addition, "Independence" was noted several times as a goal for participants in both counties. This included mentions of independence from probation, drugs, court, and of independence by means of getting a driver's license, catching up on child support, or having a vacation. This theme was isolated 12 times (20.7%) for the rural drug court forms and 14 times (20.5%) for the urban drug court forms ($p = 1.00$).

Regarding investments in health and well-being as a support, frequently mentioned domains for both groups included physical and mental health. "Physical health" included exercising, going to the gym, having healthier patterns of eating and sleeping, and in general, "feeling healthy." This was mentioned 22 times (37.9%) for the rural drug court and 23 times (33.8%) for the urban drug court ($p = 0.71$). In addition, "mental health" was identified as a theme of well-being investments for participants of both counties. This domain included mental health education, management, therapy, and doctor visits, as well as relying on others for help and expressing thoughts and feelings with them. Other scopes included medication, relaxation, change-thinking, and dialectical behavior therapy. Mentions of investing in mental health were counted 24 times (41.4%) for the rural drug court and 15 times (22.0%) for the urban drug court ($p = 0.022$).

Coinciding with reports of mental health investments and therapy, drug courts in this study provided participants with cognitive skills programming, which most participants reported as a support in their recovery. In addition, participants at both sites reported that one of their most significant "lessons learned" in the drug court process was the importance of honesty. Each drug court maintains that honesty and truthfulness are essential to recovery and success in the program.

Leisure activities, both hobbies and distractions, were reported to be strong supports in recovery by both rural and urban respondents. This domain included activities such as shopping, fishing, playing golf, bowling, playing music, writing, and more. Activities such as these were mentioned, in the context of support, 18 times (31%) by the rural

drug court, and 32 (47.0%) times by the urban drug court (p = 0.72). In addition, occupational tasks (yardwork, housework, farming, school), were noted as supports and mentioned 22 times (38%) for the rural drug court and 31 times (46%) for the urban drug court (p = 0.47).

The importance of strong interpersonal connections, including social support from family, friends, and the recovery community, was confirmed by rural and urban participants alike. Denoted as "support network" by our table of domains, both meetings and friends and family were mentioned frequently as supports. Meetings were mentioned almost equally for both counties, represented 42 times (72.4%) for the rural drug court and 45 times (66.2%) for the urban drug court (p = 0.33). Family and friends were noted as a strength 24 times for the rural drug court and 23 times for the urban drug court. Furthermore, a "sober network" (drug court graduates, mentor students, other recovery support persons) was mentioned 18 times (31%) by the rural drug court and 32 times (47.0%) by the urban drug court (p = 0.72). One participant stated, "I love my job and the people in my sober network, all my friends from NA/AA because they know everything about what makes me 'me.'"

Table 1. Barriers and Supports for Drug Court Participants

			Frequency of Mentions	
DOMAIN	**THEME**	**THEME DESCRIPTION**	**Rural Drug Court (n=58)**	**Urban Drug Court (n=68)**
1. Extrinsic Barriers to Recovery	Career	Unemployment, inability to work, work schedule, work challenges	5	3
	Housing	Lack of housing, forced relocation	5	2
	Financial	Debt	13	10
	Legal	Family courts, other states, other charges, felony status	4	1
	Support	Difficulty finding a sponsor, rebuilding trust, needing assistance from others, parents	7*	0
2. Intrinsic Barriers to Recovery	Physical Health	Health concerns	3	4
	Boundaries	Getting beyond desire to please people, learning to say no	3	0
	Old Habits	Correcting old habits/harmful thinking, avoiding triggers (places, people), struggles to stay busy and avoid boredom, lack of motivation	18	19
	Mental Health	Social anxiety, stress, inability to deal with emotions, tendency to isolate, self-doubt, grief, shame, fear of talking about addiction/recovery story	26	22

3. Goals	Education	Start school, continue school, diploma	8	28*
	Housing	House	5	14
	Career	Get job, get promotion, get better job, more responsibility at work, more hours, create resume	23	31
	Family	Spend more time with family, get custody of children, have more kids, be better parent, catch up on child support, finish pregnancy, get engaged	8	4
	Health	Improve physical health, get treated for disease, improve mental health, exercise more, quit smoking	4	7
	Relationships	Reconnecting mending relationships with family, friends, other support	8	9
	Independence	From probation, from drugs, from court, get driver's license, catch up on child support, vacation	12	14
	Finance	Pay off debt, apply for disability, consolidating student loans, file bankruptcy	4	19*
	Sobriety	Short term and long term, contact sponsor, finding sober friends	12	10
	Other	Get organized, structure/routine, time management, get hunting rights, positivity, singing in band, setting and achieving goals	14	18
4. Investing in Health and Wellbeing	Medical	Hep C, MAT (suboxone, vivitrol)	1	7
	Physical Health	Exercising, going to gym, eating healthy, sleep, feeling healthy	22	23
	Mental Health	Education, management, therapist, doctor, venting/complaining to others, relying on others for help, depression, anger, meditation/relaxation, dialectical behavior therapy, changing thinking	24*	15
	Self-care	Self-care	2	8
5. Spirituality	Church	Attending church	10	6
	Prayer	Utilizing prayers	5*	0
	Higher Power	Higher Power	13*	4
	Meetings	Spiritual meetings, bible study	5	1
	Reconnecting	With spirituality, negotiating, insufficient	2	4
	Cultural Traditions	Access to Native American traditions, sweat lodges, Native American community, smudging, pow-wows, Native American Prayer for self and others, Tribal Community Center, spiritual advisor, ceremonies (moon, renaming, general), traditional medicine, sobriety feasts/picnics, talking circle	35*	5

6. Leadership	Meetings	Chairing meetings (NA, AA), starting a father's support group	4	3
	Mentoring	Mentoring/helping other DC participants	5	5
	Community	Become more involved in the community	5	2
7. Hobbies and Distractions	Leisure Activities	Shopping, fishing, golf, bowling, disc golf, hunting, woodworking, crocheting,	18	32
	Social	Time with friends/family, volunteering	6	12
	Occupational	Yardwork, housework, farm work, work, school	22	31
	Sports	Basketball, swimming, biking, rollerblading, football, hockey, boxing, running, yoga	2	23*
8. Support Network	Meetings	Meetings	42	45
	Family and Friends	Family time, reconnecting	24	23
	Sober Network	Sober network, DC grads, mentor students	18	32
	Old Timers	Stories/examples for hope, “old timers”	8	6
	Sponsor	Sponsor as support	12	15
	Drug Court Team	Drug court team, probation officer, ARMHS worker, workforce center	6	5
9. Self-Awareness and Maturity	Understanding Addiction	Realization that life is unmanageable as an addict, hitting rock bottom, addiction is a disease/changes the brain, relapse is preventable	7	9
	Self-image	Positive self-image, confidence, appreciation for self	30	25
	Commitment to Recovery	Commitment to recovery, learning what works and is a priority for self, mindfulness, one day at time, recognition of high-risk situations/people, relapse prevention plan, learning how to stay sober, when to ask for help, humility	36*	26
	Accountability	Personal accountability, apologizing, importance of honesty, behaving “like an adult”, thinking differently about outcomes, realizing power of choices, understanding the gravity of the situation (life/death)	51*	43
	Redefining Relationships	Being able to ask for and receive help from others, ability to say no, patience with self and others, trying to listen more	13	6
	Changing Attitude	Identifying emotions, assertive rather than aggressive, emotional control/triggers, desire to be sincere, gracious, open-minded, hope for future	24*	10
	Skills Management	Coping skills, stress management, social/communication skills	6	15

9. Self- Awareness and Maturity	Social	Time with friends/family, volunteering	6	12
	Occupational	Yardwork, housework, farm work, work, school	22	31
	Sports	Basketball, swimming, biking, rollerblading, football, hockey, boxing, running, yoga	2	23*
10. Children	Stress and Balance	Coping/dealing with child, stressor, single parenting, work/life balance, kids activities	5	4
	Reconnecting	Getting kids back/custody	12	9
	Parenting	Protection of children from dependency, kids with mental health/addiction concerns	8	6

*Statistically greater number of mentions per Fisher Exact Test, $p \leq 0.05$.

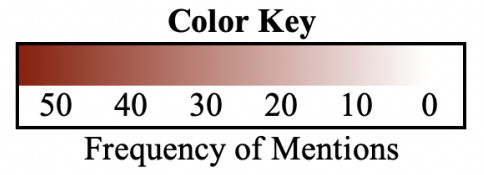

Table 2 provides examples of participant quotes organized by domain, with quotes from both the rural and urban drug courts included in the study.

Table 2. Drug Court Participant Quotes Organized by Domain

DOMAIN	QUOTE
Extrinsic Barriers to Recovery	Running into old friends is a trigger. I tell them that I am sober now and if they don't mind I would rather not talk to them anymore. – Rural County Using people are my biggest trigger, so I have removed these people completely from my life. – Urban County
Intrinsic Barriers to Recovery	I think the most important lesson I learned in Drug Court is that my thinking can be flawed and not always be what is best for me, which is why talking with someone I trust about how I'm feeling is a very helpful tool in making the right choices in life. – Rural County I believed I needed to please people for them to like or love me. This got me into a lot of trouble. I became a follower, instead of the leader I know I can be. – Urban County
Goals	I'm doing great with my goals, all of them! School, work, family, probation, sobriety, running, boxing, staying organized! – Rural County I'm working on getting my drivers license back and maintaining my house bills, which won't be a problem once I get back to my job. – Urban County

Table 2 Cont. Drug Court Participant Quotes Organized by Domain

DOMAIN	QUOTE
Investing in Health and Well-Being	To manage my stress, I'm learning to live balanced and healthy. I've completely eliminated any fast food from my life, I don't need that nasty fake food in my life. I've also learned to open up with my loved ones about my stress and anxiety, that helps me a lot to have outlets for talking. – Rural County Physically, I feel great. I've been working out at least five days a week and eating as healthy as possible. I've also been getting enough sleep and am not having as many issues with my insomnia. – Urban County
Spirituality	I usually smudge with sage or sweet grass when things get to be a little too much. I find that smudging really helps...smudge, say a little prayer, and go on with the rest of the day. – Rural County I pray to my Higher Power every morning and ask for strength every day to positive in life and to stay as strong as I am now. – Urban County
Leadership	I'm starting a fathers support group with my Uncle. – Rural County I chair 2-3 meetings a week and try to connect with as many people from the club as possible. – Urban County
Hobbies and Distractions	I have been helping my grandpa out recently because he moved, but also like going to the YMCA, beach, running, fishing, hockey. – Rural County I love to work on vehicles and fix and customize them 'cause its what makes me happy. – Urban County
Support Network	Not only did they [drug court team] see me through the darkest times of my addiction, but they loved when I couldn't love myself. – Rural County Just listening to other peoples' stories helps me to stay sober. – Urban County
Self-awareness and Maturity	That a thought is just a thought, what kind of power you put into it is what makes it positive or negative. – Rural County When I was using I was a mess. I lied to people, cheated people, stole from people, and made just about every other stereotypical action that a drug addict makes. I ruined many important relationships, I lost jobs, created huge debts, and dragged my family name through the mud. I basically ruined everything good in my life just to get high. – Urban County
Children	My son - even though he doesn't know it - keeps me on my feet and head held high every day. – Rural County My children, not only are they my motivation, but they are able to act as my strength when needed. – Urban County

A finding shared between participants in the two drug courts studied was the improved self-esteem and pride in one's accomplishments that was cited as participants progressed through the drug court program and achieved goals that they had set for themselves. Participant reports with an increase in self-esteem aligned with their reports of an increased willingness and desire to take on leadership roles in the recovery community. Leadership roles include chairing sobriety support meetings, providing support to others in the drug court, and eventually serving as a sponsor for others.

"Self-awareness and maturity" is a domain that encompasses personal and introspective support in recovery. The most frequently mentioned themes in this domain were: self-image (confidence and appreciation of self), commitment to recovery (self-prioritizing, mindfulness, learning how to ask for help and stay sober, relapse prevention plan, risk recognition), and accountability (apologizing, operating on honesty, realizing the power of choice, thinking differently about outcomes, understanding the gravity of the situation, behaving "like an adult"). Comments relating to self-image were mentioned 30 times (51.7%) for the rural drug court and 25 times (36.8%) for the urban drug court ($p = 0.11$). Following suit, prose relating to a commitment to recovery was expressed 36 times (62.1%) by participants in the rural drug court and 26 times (38.2%) by those in the urban drug court ($p = 0.012$). Finally, terms and mentions relating to accountability were isolated the most frequently, with 51 mentions (87.9%) in the rural drug court and 43 (68.2%) mentions in the urban drug court ($p = 0.002$). Exemplifying growth, maturity, and self-awareness, one participant stated, "...instead of when I'm having a problem to not just run to drugs, I can utilize my family to talk to and help me through things. I also learned how to think differently, thinking about the outcome before acting."

Finally, though not the most populous domain, reconnecting with children as a support and motivation was almost equally represented for both groups. Reuniting with children or obtaining custody was mentioned 12 times (20.7%) by the rural drug court and nine times (13.2%) by the urban drug court ($p = 0.34$). On one form, a participant noted activities involving his or her child, including "learning to be a parent," "playing with my child," and "doing things for my social worker to get my son back."

RURAL AND URBAN DIFFERENCES

This study did find reported differences between participants in the rural and urban drug courts. The lack of transportation for rural drug court participants was cited as a major barrier for participants without a driver's license or vehicle who wish to attend meetings or other social support functions, obtain and keep employment, attend required drug court functions, and keep appointments with health and mental health providers. In addition, rural drug court participants noted that a lack of support from their relationships and the general community was a notable extrinsic barrier to recovery. Participants from the rural drug court mentioned key words and phrases that encompassed themes such as difficulty finding a sponsor and rebuilding trust. This also included the difficulties of needing assistance from family members or other relationships. Themes around these issues were mentioned seven times for rural participants (12.1% of forms) versus the urban participants who did not mention difficulties finding a sponsor and rebuilding trust. This difference was found to be statistically significant ($p = 0.004$).

Though both areas mentioned career-related goals as a prominent feature in their lives, participants in the urban drug court cited career development more often, including plans to seek a promotion, obtain additional education,

or seek a job with better hours (31 mentions, or 45.6% of urban court forms, versus 23 mentions, or 40.0% of rural court forms). This difference was not statistically significant between the two groups ($p = 0.59$). Participants in the urban drug court also reported that work occupies their time more often than the rural drug court participants. Urban drug court participants identified education goals much more frequently than the rural population, with 28 references (41.1%) that referred to subjects including starting or continuing education, or obtaining a diploma compared to only eight mentions (13.8%) by rural drug court participants ($p < 0.001$). In addition to work distractions, urban participants mentioned "sports" as hobbies and distractions more frequently than did rural participants, with 23 references (40.0%) to activities such as basketball, swimming, biking, rollerblading, football, hockey, boxing, running, and yoga. Rural drug court participants mentioned these activities only twice (3.4%) ($p < 0.001$).

Participants in the rural drug court, approximately half of whom are Native American, more often reported that cultural activities were a source of healing and strength for them. Rural participants mentioned cultural traditions 35 times (60.3%) versus the urban participants who mentioned cultural traditions only five times (7.4%), which is significantly less ($p < 0.001$). Cultural traditions included sweat lodges, the Native American community, smudging, pow-wows, Native American prayers for self and others, Tribal Community Centers, having a spiritual advisor, and cultural ceremonies. In addition, there were 13 mentions of a "higher power" (22.4%) and 10 mentions of attending church (17.2%) by rural drug court participants, in contrast to urban drug court participants, where a "higher power" was mentioned only four times (5.9%) and attending church only six times (8.8%). None of these differences between rural and urban were statistically different.

Furthermore, rural participants in this study more frequently described a "changing attitude" subset of self-awareness and maturity than did urban participants. Mentions of identifying emotions, being assertive rather than aggressive, practicing emotional control and triggers, having a desire to be gracious, and having hope for the future were all reflections documented by the rural drug court that took part in this study. There were 24 mentions of "changing attitude" by rural drug court participants (41.4%) but only 10 mentions by urban participants (14.7%), a difference that was determined to be statistically significant ($p = 0.001$). More rural drug court participants offered suggestions on how the drug court experience could be improved. Although the reasons for this are unclear, this may be due to the rural drug court being a newer court, where feedback from participants was routinely sought and addressed. More rural drug court participants reported that drug court taught them when to ask for help and that this ultimately aided in their recovery.

DISCUSSION

The SEM, suggested as a way to study and design interventions addressing complex public health issues, has shown promise in studies focusing on drug court participants (Morse et al., 2015). In the current study, findings revealed that adult drug court participants in rural and urban courts experience complex systemic barriers to achieving health and recovery, in addition to individual and personal barriers. They also have uniquely identified supports, some similar and different based on urban and rural differences.

RURAL AND URBAN DIFFERENCES

This study found reported differences between participants in the rural and urban drug courts, exemplified in rural counselors reporting disadvantages with a lack of basic facilities due to insufficient funds, while urban counselors reported inadequate funding felt by a heterogenetic and high volume of clients (Pullen & Oser, 2014). Exacerbating the problem of fewer treatment and recovery facilities in rural areas, participants who live in rural areas are more geographically isolated with fewer or no public transportation options (Sung, Mahoney, & Mellow, 2011).

Rural drug court participants mentioned having extrinsic barriers to recovery more often than urban drug court in all categories (Table 1), reporting having difficulty finding a sponsor, rebuilding trust, and/or needing assistance from others or parents significantly more often than urban participants. These findings are consistent with previous research showing rural communities face a considerable lack of basic facilities and infrastructure compared to urban centers, as well as greater transportation challenges (Pullen & Oser, 2014). In regard to the social extrinsic barriers, rural participants have previously emphasized a greater impact of family relationships. While this might initially suggest an intrinsic benefit, many of these participants are coming from families of substance abuse. Thus, it may be hard for them to gain the familial support necessary when many family members are still using. Additionally, because of the importance of these family ties, rural participants may be more concerned with what their family members think, presenting a greater barrier to asking for help and larger concern for rebuilding trust. Going forward, it will be necessary to determine how to best address these extrinsic barriers and better utilize familial ties as a benefit where possible.

Rural drug court participants mentioned having extrinsic barriers to recovery more often than urban drug court in all categories (Table 1), reporting having difficulty finding a sponsor, rebuilding trust, and/or needing assistance from others or parents significantly more often than urban participants.

Rural drug court participants also mentioned the lack of mental health services as an intrinsic barrier to recovery more often than urban drug court participants, although this difference was not statistically significant. This lack of significance is not wholly unsurprising, as previous research has indicated that both rural and urban substance use counselors struggle to find mental health services for their clients (Pullen & Oser, 2014).

In the "Goals" domain, urban drug court participants mentioned goals more often in most categories, with a statistically significant difference being found in goals related to education and finance. Some examples of education and finance goals in our study include filing for bankruptcy, consolidating student loans, receiving a diploma, paying off debt, and starting or continuing school. The more numerous mentions of education goals for urban participants has the potential to align with previous research showing that urban drug courts tend to have a greater range of services available to participants than rural courts (Bouffard & Smith, 2005). Transportation, noted by Pullen and Oser (2014) as a disparity in rural populations, could also be a barrier to services that could further education and

financial goals in rural settings.

In the domain focused on "Investing in Health and Wellbeing," differences between rural and urban courts were found, although none proved statistically significant. Urban participants mentioned medication-assisted treatment (MAT) more often (seven times) than rural participants (one time), which is not surprising as MAT was not readily available to rural participants during this study period.

Differences in "Spirituality" were found in the themes of prayer and cultural traditions, where rural participants, many of whom are Native American, mentioned these supports significantly more often than urban counterparts. This is consistent with the literature, which suggests that Native American cultural practices can have a healing effect for individuals who have a substance use disorder (Gone, 2011; Gone & Calf Looking, 2011). The largest gaps of urban and rural differences in this theme included utilizing prayer, mention of a "higher power," and access to Native American cultural traditions such as sweat lodges, smudging, pow-wows, and other native ceremonies. This is likely explained in part by the rich cultural traditions brought to the rural drug court team by a local Tribal Nation. The validity of these supports is bolstered by Rowan et al.'s study (2014), which sought to understand cultural-based interventions and their effects on outcomes when integrated into substance use treatment. Their results suggested that culture-based practices used in substance use treatment help to improve wellness outcomes for Indigenous populations. This supports the statements of many of our rural participants, who asserted the importance of spiritual and cultural practices in their recovery

Rural and urban participants both mentioned leadership opportunities as a component of their journey with drug court, including chairing meetings, mentoring other participants, and becoming more involved in the community, though these mentions were relatively few compared to other supports. Similarly, both rural and urban participants cited domains including "Hobbies and distractions" as well as "Support networks" as being helpful support to recovery, though "Hobbies and distractions" were more frequently cited by urban participants, as well as access to a sober network. This could be partially attributed to a general lack of services for rural populations (Bouffard & Smith, 2005) and lack of transportation for rural areas (Pullen & Oser, 2014). Hobbies included fishing, bowling, music, and reading, while support networks encompassed attending meetings, reconnecting with friends and family, having a sober network, and engaging with a sponsor and drug court team members, among others. Notably, meetings were the highest mentioned support of this group for both rural and urban participants. As a support for abstinent recovery, this is consistent with findings from the 2007 study by Gossop et al., which found that a higher likelihood of abstinence from alcohol and opiates was present in participants who frequented AA or NA meetings compared to those who did not.

In the domain "Self-awareness and maturity," significantly more mentions of a commitment to recovery, the importance of changing one's attitude, and accountability were made in the rural group compared to the urban group. Commitment to recovery included mindfulness, recognition of high-risk situations and people, humility, and having a relapse prevention plan, among other things. Items grouped under "Changing Attitude" included identifying emotions, a desire to be sincere, hope for the future, and understanding emotional control and triggers. Accountability included mentions of thinking differently about outcomes, understanding the power of choices and the gravity of substance use disorders, and the importance of honesty, among others. While respondents provide no

concrete reasoning to explain these differences in prevalence of these mentions between rural and urban respondents, it may be worthwhile to consider the co-occurrence of increased mentions of self-awareness and spirituality in rural populations.

Both groups mentioned "children" in their reflections; however, no statistically significant differences were found in the number of mentions between rural and urban respondents. While children were generally seen as a motivation for recovery, the stress that comes with parenting, reconnecting with children and financially supporting children could also be seen as a barrier, although this was not explicitly stated as such.

SUGGESTIONS FOR DRUG COURT IMPROVEMENTS

While every drug court jurisdiction presents unique needs and struggles in the area it serves, we have assessed differences between participant reported supports and barriers for two neighboring rural and urban drug courts as well as participant-mentioned areas for improvement. Supporting drug court participants in obtaining chemical-free housing was frequently mentioned by participants in both the rural and urban drug court as a priority for drug court teams, with a lack of housing cited being categorized as an extrinsic barrier (five mentions for rural participants, two mentions for urban participants) and the goal of obtaining housing being categorized as a goal (five mentions for rural participants, 14 mentions for urban participants). In addition, employment assistance and support in pursuing additional education, as components of wrap-around care, should also be a priority. Participants frequently cited having a criminal history and limited work history as barriers to employment and, consequently, barriers to recovery. Along the same lines, financial debt was cited as an extrinsic barrier to many resources that would aide participants in recovery. This debt could include money owed to family or friends, court fines, vehicle loans, home loans, educational loans, debt owed for childcare, or debt accrued in other ways. Some participants reported feeling pressure to pay off these debts by working, rather than investing a great deal of time in treatment. A closer look at impactful financial assistance by drug court teams is suggested by our research. This could include assisting drug court participants by providing them with general financial education, exploring affordable loan repayment options, and guiding them to resources that can reduce the costs associated with childcare, housing, medical and dental care, and household expenses.

Barriers involving "high-risk people" and the need to recreate a participant's social network in recovery was frequently mentioned in our study. Our study suggests that attention to assistance in establishing social networks and social supports as an alternative to "high-risk relationships" would be a beneficial investment for drug court teams. This can include support in forming new social networks and support for those forced to cut off close relationships with friends and families by introducing participants to mentors and sponsors in the community, inviting and incentivizing them to participate in chemical-free community and social events, and encouraging their attendance at AA and NA meetings in the community. Closely related are the barriers of "old habits," which can include the "people and place" triggers frequently mentioned by drug court participants in this study. Assisting participants to identify methods and activities to stay busy, avoid boredom, and bolster motivation would appear to be a good use of drug court time and resources.

Mental health was a barrier identified by the participants in our study, including difficulty dealing with emotions and/or fear of talking about addiction and recovery. This also coincides with "old ways of thinking," which was also

cited as a barrier. Advocacy by drug court team members in support of resources specifically dedicated to cognitive behavioral therapies and additional mental health services for persons fighting addiction is one suggestion for continual drug court improvement. This is especially the case in rural and underresourced communities, where shortages of mental health practitioners and treatment facilities have created a public health crisis. Some participants also mentioned negative attitudes of the community and public organizations as a barrier to recovery, coinciding with a "fear of talking about addiction and recovery." This stigma surrounding substance use disorders is a barrier to recovery and can often lead to refusing treatment for fear of what others may think. Treating participants in an unbiased way and encouraging support for participants can help lessen their fears of stigma within the community. Inviting community members to witness and celebrate the success of drug court participants, to observe how drug court can support individuals in their recovery, allows participants to engage more fully in the community while also providing the community with education to reduce stigma.

Furthermore, rural disparities that were presented in our results illustrate gaps that drug courts can strive to address. Even basic services such as transportation, sober activities, and substance use/mental health treatment facilities are often unavailable to rural participants. Rural participants mentioned more difficulty in finding a sponsor and rebuilding trust, in addition to needing more assistance from family members and close relationships. These are all areas that rural drug courts may strive to strategically address to better support rural participants by continuously assessing where there is a lack of resources available that would prevent participants from receiving the help they need and identifying areas for improvement. While rural communities may have fewer resources, they often have the benefit of closer working relationships among the community and drug court team that can be helpful in getting a participant the support and resources they need in a timely manner. Rural drug courts may need to seek innovative solutions to address the barriers that their participants face more often than urban drug courts.

Rural participants were noted to have significantly fewer mentions of career-related goals than urban participants inferring a potential lack of career opportunities. This is a disparity to pay more attention to in further research of geographically isolated drug court participants. Making sure participants have the needed resources to help them find a career and transportation to that career can be crucial in maintaining a substance-free lifestyle. Using the strengths of relationships in rural areas—including those between team members, participants, graduates, and community supporters—is important in providing participants with career opportunities as well as social support in their recovery. There were also fewer mentions of hobbies or sports by rural participants, suggesting a void of opportunities for such activities for rural residents. However, there was hope for rural drug court participants: rural participants mentioned spiritual practices and beliefs as important supports in their life, in contrast to urban participants. Our research supports bolstering access to spiritual practices and facilitation of spiritual services as a part of the treatment approach for participants who prescribe to beliefs. Native practices as a part of this spiritual subset were noteworthy supports mentioned by rural participants and an area of suggested drug court coordination and support. Engaging local spiritual and religious leaders in drug court activities may allow participants to widen their social circles while also receiving support to pursue healing spiritual and religious practices.

Finally, our research points to differences in the request for drug court feedback between counties. The rural population was more likely to give feedback regarding the drug court process, possibly because of its newer emergence as a court system where feedback may have been more often solicited. Best practice dictates that frequent

and pertinent requests for feedback should be sought from participants across a diversity of populations and regions; the reduced number of feedback requests from the urban population in our study suggests the potential need for a more rigorous effort to obtain feedback from this group.

LIMITATIONS

Our study included two populations in a single state; results are not generalizable to other drug court settings (although our findings may still be applicable to other courts). Analysis of Phase-Up and Graduation forms from other drug courts would be useful in determining how drug court participants' perceived barriers to and supports in recovery between different geographical regions and settings. In addition, Phase-Up and Graduation forms were not identical between the counties studied. This poses a limitation in comparisons between counties, as a common document for evaluation could not be obtained. Another limitation is that the process of coding and data collection was undertaken entirely by hand; and outside of an academic setting this could be an issue due to the time commitment required. Furthermore, the responses and ideas presented in the forms changed over the timeline of 27 months. Different forms for Phase-Up and Graduation were sometimes submitted from the same county. Despite small differences, the general themes and main areas of this study (supports, barriers, rural/urban differences) were still able to be assessed in these distinct counties and at slightly different periods in time.

Drug court structures and systems are not consistent across state or national jurisdictions (King & Pasquarella, 2009). This provides limitations in that the systems used by the counties studied are not necessarily the same systems used by another county. While basic guidelines stay the same for U.S. drug courts, many processes are adapted and altered to a local basis. This creates benefits and shortcomings for the drug court program and also makes cross-jurisdiction studies difficult. Because of these differences, a control "system" is unable to be determined, when comparing data from the two counties.

In addition, because of the anonymity provided by the study, researchers were not able to tell when Phase-Up and Graduation forms were filled out by the same individual. The inability to tell when forms came from the same individual makes it impossible to tell when this trend occurred or how it influenced the data. Additionally, the "voices" of some drug court participants may be better represented in the data because they phased up more frequently and/or graduated while other drug court participants may not have. These phenomena could increase positive selection bias, where the "voices" of more "successful" drug court participants (those who phase up and graduate) may be better represented in the data than those who did not phase up or graduate. Because of this, it is possible that the frequently mentioned barriers are not as detrimental as the less frequently mentioned ones, or additional barriers that were not mentioned. Because of the relatively small number of individuals included in this study, certain themes were mentioned infrequently even though they may be known to be important to those working closely with drug court participants.

Additionally, we cannot discount the forced structure of the Phase-Up and Graduation forms or the subsequent potential that some participants may write reflections that they believe will be pleasing to the drug court Team in order to be more successful in the drug court program. However, team members observed that the participants who were doing well in the program and who had the opportunity to report this success on the forms were

generally authentic, open, and honest about their successes and struggles. As individuals progress through drug court programs, they became more honest and authentic about their own strengths and weaknesses, and this could therefore be reflected in the forms collected.

There is a notable difference in demographics between the urban and rural groups, with the rural group being 50% Native American and the urban group only 10% Native American. This is a potential confounding variable that can lead to variation between the two groups. The Phase-Up and Graduation forms for the two groups were also slightly different, which could have led to slightly different responses.

CONCLUSIONS

This study allowed for the voices of drug court participants in two neighboring counties to be heard. Using a CQR process, this study identified what drug court participants see as their major extrinsic and intrinsic barriers to recovery, as well as the strengths and supports that kept them moving forward. Furthermore, supports and barriers were assessed in the context of rural and urban populations, meeting a critical research gap. Overall, this study began to address the need for participant-perspective testimony and qualitative data in drug court literature. This analysis confirmed the need for wraparound care that includes chemical-free housing, education, employment assistance, and attention to the role that rural health disparities, including financial debt, transportation, and a lack of access to mental health resources, play in the recovery process. Recognizing the impact of relationships and how stigma or certain people can act as triggers is important in identifying barriers to recovery. On the other hand, relationships that provide a support network and accountability can support drug court participants' recovery. Also, identifying that certain areas such as the rural drug court may have additional needs for support including spirituality and cultural traditions is important to tailoring each drug court to the participants' needs. Considering that the results of this study are the first to identify supports and barriers to recovery for participants in rural and urban drug courts, these findings have the potential to inform further research and drug court development.

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