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Perceived Barriers to Treatment Initiation amongst Justice-Involved Youth and Their Caregivers

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Abstract: Youth involved in the juvenile justice system are more likely to develop a substance use (SU) disorder compared to their non-justice-involved peers. Connecting at-risk youth to treatment is necessary to mitigate the continuation and escalation of SU involvement. Initiating SU treatment, however, requires coordination between the youth and their caregiver to overcome personal, family, and systematic barriers interfering with treatment. As such, there remains a need for studies examining the perceived barriers of both youth and their caregivers. The present study used a cross-sectional design to collect self-report data from 27 youth on probation and their caregivers to understand barriers to treatment initiation. Perceived barriers to treatment for both youth and caregivers was assessed using an adapted version of the Barriers to Treatment Participation Scale (Kazdin et al., 1997). Results showed the most commonly reported barrier for youth was the demands and time requirements of treatment whereas caregivers expressed concerns about treatment providers sharing information with probation officers. This study highlights the need for family-focused interventions that work with youth and caregiver(s) to ensure those in need of treatment receive appropriate services.

Keywords: juvenile justice, barriers, mental health treatment, substance use treatment

Introduction

Across the United States, roughly 17 million youth aged 14-17 are currently involved with the juvenile justice (JJ) system (Sickmund et al., 2021). Unfortunately, youth

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involved with the JJ system are 9 times more likely than their non-JJ peers to have an identified substance use (SU) disorder (Sickmund et al., 2021; SUD), and the majority of JJ-involved youth report at least some use of illegal substances including alcohol (78%), marijuana (85%), and opiates (7%) (CASA, 2004; McClelland et al., 2004; Mulvey et al., 2010; Zhang, 2003). This is problematic, as SU among youth in the IJ system is associated with further deviant behavior and recidivism (Aalsma et al., 2015; Schubert et al., 2011) as well as significant physical and mental health (MH) problems (Englund et al., 2008; Stone et al., 2012; Winters & Lee, 2008). The urgency to provide interventions efforts to this vulnerable population and their parents cannot be understated, particularly considering the increase in hospitalizations and deaths from opioid overdose (Gaither et al., 2016; Jones et al., 2018). The prevalence of SU in II-involved adolescents presents a critically important intervention opportunity (Chandler et al., 2009) since receipt of SU services can be incorporated into both formal (through court orders) and informal (supervising officer recommendations) supervision plans. While II has traditionally been the largest referrer to SU treatment services for youth (Marsden & Straw, 2000), more recent studies suggest that only 32% of JJ-involved youth with an identified SU need actually initiate treatment, and only half (51%) of the youth who initiate will engage for a minimum of 6 weeks (Dennis et al., 2019).

Targeting improvements in service engagement is important because even minimal engagement in SU treatment (e.g., 2 sessions within 30 days of initiation) is associated with lower SU at follow-up (Garnick *et al.*, 2012), and evidence suggests that families who engage in an initial brief intervention session are likely to continue (Tolou-Shams, Dauria, *et al.*, 2017). The primary barrier to engagement centers on getting youth and their families to initiate treatment. Unfortunately, JJ youth initiation rates sharply contrast with the 76% rate for the general adolescent population (Dennis *et al.*, 2019), pointing to a disparity in accessibility and/or willingness to initiate services. Potential reasons for low initiation rates include lack of coordination across JJ and behavioral health (BH) sectors (Belenko *et al.*, 2017; Kapp *et al.*, 2013) and heightened stigma and hopelessness associated with delinquency and SU (Shriver & Allen, 2008).

To better understand challenges that families encounter during treatment, the Barriers to Treatment Participation Scale (BTPS) was developed (Kazdin *et al.*, 1997). The measure was designed to evaluate parents' and therapists' perceptions of barriers to treatment, including stressors and obstacles that compete with treatment, treatment demands and issues, relevance of treatment, and relationship with therapist. For the original study of the scale, the BTPS was administered to parents of children attending outpatient therapy for aggressive and antisocial behavior. The findings indicated that in the sample of 260 caregivers, higher overall scores on the BTPS predicted higher

rates of treatment attrition, less time spent in treatment (i.e., fewer weeks), and poor treatment session attendance. However, the prevalence and frequency of specific barriers were not reported within the study. Furthermore, the children's perspective on barriers to treatment was not measured, so it is unknown if they shared similar perceptions on barriers to treatment.

The BTPS study revealed that families' perceived barriers to treatment influence treatment initiation and attendance. Additional research on barriers to treatment has extended the findings from this study by identifying specific barriers that affect treatment. For example, many families do not engage sufficiently in treatment due to a lack of motivation or familial acceptance of the child's SU and JJ problems (resistance, denial, lack of information; Becan et al., 2015; Oppenheim et al., 2007) and logistical barriers (e.g., cost of treatment, transportation to and from treatment, lack of knowledge/support regarding options, lack of childcare; (Fountain & Mahmoudi, 2021; Wisdom et al., 2011). Likewise, a qualitative study found that caregivers of JJ-involved youth perceive multiple barriers regarding their youth's SU treatment, with the most frequently cited concern being the cost of treatment (McBrayer et al., 2022). Other frequently reported barriers included a lack of communication with II staff, whether or not the youth had a need for treatment (i.e., perception of youth as low risk). From the adolescents' perspective, the main barriers to treatment were willingness to attend, the amount of time required by treatment, low perceived usefulness of treatment.

Furthermore, dysfunctional parent-child relationships (poor communication, poor limits/discipline, using substances together; Elkington *et al.*, 2020) can prevent families from seeking treatment. Low levels of parental monitoring and poor family functioning are commonly cited issues for IJ youth (Laird et al., 2003; Tolou-Shams et al., 2018), which could negatively affect both youth and caregivers' motivation to initiate treatment. Moreover, the recent coronavirus disease of 2019 (COVID-19) pandemic introduced new barriers to families and treatment providers alike, such as adapting to virtual platforms for treatment services; coupled with increased stress, uncertainty, and financial strain (De Witte et al., 2021; Flaskerud, 2021; Zhai, 2020). In addition to interagency and societal barriers, Family Systems Theory (Watson, 2012), posits that psychopathology does not reside in an individual alone but in their respective family unit they are a part of. Any interaction between family members has the potential to yield certain behaviors, problematic and innocuous, and all family members are influenced by and influential to other members of the family unit (Pfeiffer & In-Albon, 2022). Due to these system-level interactions, youth may share both protective and risk factors and engage in similar behaviors as the caregivers in their unit. Thus, it is imperative to identify perceived barriers of both youth and caregivers, as their perceptions and attitudes toward

treatment may ultimately influence one another. By developing an understanding of the barriers to treatment faced by families, the JJ field could address this disparity by developing effective family-focused strategies to engage JJ youth in treatment services (Tolou-Shams, Harrison, et al., 2017). Effective family-focused strategies that engage both II youth and their caregivers have the potential to lead to a change in the family unit by capitalizing upon strengths already present within the unit and by addressing any shared barriers preventing the unit from receiving treatment. In order to effectively engage youth and their families in treatment initiation and sustainment, I staff and treatment providers must develop a thorough understanding of the barriers facing II youth and their families. This could be accomplished by identifying perceived treatment barriers, addressing discrepancies between youth and caregivers' perceived treatment barriers, and connecting the family to resources specific to their unique needs. Previous studies have reported qualitative findings regarding barriers or have focused on the perceived barriers of caregivers. However, little is known about the differences between youth and caregivers' perceived barriers. The purpose of the current study was to identify barriers to treatment access among youth on probation and their caregivers through a self-report survey to allow II staff and treatment providers to prioritize alleviating the effect of or removing those barriers.

Current Study

As a part of the NIDA-funded Family Assessment, Motivation, and Linkage Intervention (FAMLI; grant number: 1R34DA049079) project, the current study collected deidentified data from youth and caregiver respondents at one juvenile justice probation department located in the southern United States. The research team enacted a data-sharing agreement with the participating juvenile justice facility so that data collected as part of standard intake procedures could be shared as secondary data. Requested data included scannable paper surveys with respondents' demographic information (e.g., assigned sex at birth, race, ethnicity), and validated self-report assessments of service utilization, attitudes towards SU treatment, and perceived barriers to initiating treatment. All participants (youth and caregivers) completed the battery of assessments within 60 days of the youth's adjudication. The measures were administered during youths' normally scheduled meeting with their supervising officer, and participants' confidentiality was protected by ensuring survey questions did not ask youth to report any personal information (e.g., name, phone, address) that could be used to identify them. State juvenile-justice-assigned client ids were used to yoke youth data with data for their corresponding caregiver. Data collection was completed between August, 2022, and February, 2023. This study was approved by the Texas Christian University Institutional Review Board.

Method

Measures

Background Information

Youth and caregivers' background information was collected using a modified version of the Texas Christian University Adolescent Risk Form (Institute of Behavioral Research, 2008). This brief questionnaire asks respondents to report on questions related to their demographics, such as age, sex, gender identity, and race.

Barriers to Substance Use Treatment

To measure perceived barriers to treatment or other services, youth and caregivers completed the Barriers to Treatment Participation Scale (BTPS; Kazdin et al., 1997). The original measure contains four subscales: Stressors and Obstacles that Compete with Treatment (e.g., "My child is involved in other activities (sports, clubs, music lessons) that would make it hard to come to a session;"20 items), Treatment Demands and Issues (e.g., "Treatment will be more work than I think;" 10 items), Perceived Relevance of Treatment (e.g., "Treatment will not focus on my child's life and problems;" 8 items), and Relationship with Treatment (e.g., "The atmosphere at the clinic will make appointments uncomfortable;" 6 items). While originally intended for use with caregivers of youth with treatment needs, applicable items were adapted to measure youths' perspectives of barriers to treatment as well. As such, items applicable to only the caregiver were not administered to the youth and were removed for dyadic analyses, resulting in a total of 23 items. Instructions for the measure asked youth and caregivers to complete the section below, keeping in mind the services you/your child on probation have been encouraged to receive. The BTPS was presented on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree) and was scored by taking the sum of all responses. The maximum scores, or the number of barriers per subscale, in the adapted measure are: Stressors and Obstacles that Compete with Treatment (8 barriers, maximum score of 40), Treatment Demands and Issues (5 items, maximum score of 25), Perceived Relevance of Treatment (8 items, maximum score of 40), and Relationship with Treatment (2 items, maximum score of 10).

Substance Use Severity

Substance use severity was assessed using the well-validated Texas Christian University Drug Screen-5 (TCU DS-5; Institute of Behavioral Research, 2020). The TCU DS-5 is a screener of substance use severity that was created based on the diagnostic criteria for substance use disorders. Respondents answer Yes/No to items like, "Did you have

a strong desire or urge to use drugs" and "Did you use drugs that put you or others in physical danger". Scores for the TCU DS-5 were computed for the first 13 items by taking the sum of all responses. Total scores were then used to quantify youths' SU severity into None, Mild, Moderate, or Severe.

Participants

This study received secondary de-identified data from 31 youth and 34 caregivers. Due to the focus of this paper, data was only retained for youth and caregivers who both completed the assessment. Therefore, the following sample and analysis reflect 27 youth and their caregivers; thus, a total of 54 participants. As illustrated in Table 1, youth were mostly male (n = 18, 66.7%), white (n = 12, 52.2%) or black (n = 7, 30.4%), and non-Hispanic or Latino (n = 17, 65.4%). Regarding gender identity, the majority of

Table 1: Youth Demographics

	N	%
Sex		
Male	18	66.7
Female	9	33.3
Gender Identity		
Male	17	63.0
Female	7	25.9
Non-Binary	3	11.1
Ethnicity		
Non-Hispanic	17	63.0
Hispanic	9	33.3
Unknown	1	3.7
Race		
Asian	1	3.7
Black	7	5.9
White	12	44.4
More than one	3	11.1
Unknown	4	14.8
Age Range		
11-13	6	22.2
14-16	18	66.6
17-19	3	11.1
Years of School		
8 th	8	29.6
9 th	8	29.6
10 th	7	25.9
11 th	4	14.8

youth self-identified as male (n = 17, 63%); while 7 identified as female (25.9%) and 3 identified as non-binary (11.1%). The average age of youth respondents was 14.93 years and ranged from 11-19 years of age (SD = 1.73).

When asked which substance caused the most serious problems for them over the past year, the majority of youth responded "none" (n = 18, 69.2%) while marijuana was the next most frequent answer (n = 4, 15.4%; see Table 2).

Drug Type	N	%
None	17	63.0
Alcohol	2	7.4
Cannabinoids - Marijuana	2	7.4
Synthetic Opioids	1	3.7
Stimulants – Methamphetamine	1	3.7
Unknown	4	14.8

Table 2: Most Serious Drug Problems Reported by Youth

However, as indicated in previous research, youth often struggle with identifying a substance as causing serious problems in their lives (Becan *et al.*, 2015). Youth were also asked how frequently they engage in specific types of SU over the past 12 months. Of those who responded "none" when asked about which substance caused the most serious problem in their lives, 13 reported no SU, 1 reported marijuana use 1-5 times per week, 5 reported marijuana use only a few times, 1 reported synthetic marijuana use only a few times, 1 reported alcohol use 1-3 times per month, and 5 reported alcohol use only a few times. Youth scored between 0 and 11 on the TCU DS-5; specifically, 64% of youth scored 0 (n = 16), 12% scored within the mild disorder range (n = 3), 8% scored within the moderate disorder range (n = 2), and 16% scored in the severe disorder range (n = 4). Additionally, the youth reported what areas they were encouraged to get help within the past 6 months. Of the 23 youth who responded to the question, the majority reported that they were recently encouraged to receive help (see Table 3) for depression, anxiety, or other emotional needs (n = 17, 73.9%); anger (n = 12, 52.2%); SU (n = 5, 21.7%); and sexual health (n = 2, 8.7%).

Encouraged to Receive Help with	N	%
Help with Depression and Mental Health	17	63.0
Help with Substance Use	5	18.5
Help with Sexual Health	2	7.4
Help with Anger	12	44.4

Table 3: Youths' Issues They were Encouraged to Receive Help with

As shown in Table 4, Caregivers were most commonly female (n = 20, 74.1%), white (n = 16, 59.3%) or black (n = 7, 25.9%), and non-Hispanic or Latino (n = 21, 77.8%). Of the 27 caregivers retained for analyses, 2 participants spoke only Spanish and completed a translated version of the assessment.

Table 4: Caregiver Demographics

	0 01	
	N	%
Sex		
Male	7	25.9
Female	20	74.1
Ethnicity		
Non-Hispanic	21	77.8
Hispanic	6	22.2
Race		
Asian	1	3.7
Black	7	25.9
White	16	59.3
More than one	1	3.7
Other	2	7.4
Age Range		
30-39	9	33.3
40-49	14	51.8
50-59	2	7.4
60-69	1	3.7
70+	1	3.7
Years of School		
7-9	2	7.4
12 or GED	9	33.3
Technical school	1	3.7
Some college	2	7.4
Bachelor's degree	8	29.6
Graduate degree	3	11.1
Unknown	2	7.4

The average age of caregivers was 43.48 years and varied from 30-73 years of age (SD = 9.28). More than half the caregivers in this study reported having full-time employment (n = 18, 66.7%), receiving at least a high-school diploma or higher (n = 23, 92%), and living with the child on probation (n = 20, 81.8%). Caregivers reported between 0 and 6 total children living in their household, with an average of 1.82 (SD = 1.50). Of the caregivers, 23.1% reported receiving treatment in the past 12 months for a mental health problem, while 22.2% reported receiving treatment for an alcohol

use problem, and 18.5% sought treatment for an illicit drug use problem in the last 12 months.

Results

SPSS version 25.0 (IBM Corp, 2017) was used to score and generate descriptive statistics for the youth and caregivers' data. A paired-samples t-test was then conducted to compare perceived barriers to treatment between youth and caregivers, as represented by their scores on the subscales derived from BTPS.

Results showed significant differences between youths' and caregivers' scores on three of the four subscales: Stressors and Obstacles that Compete with Treatment (t(21) = 2.16, p = .04), Perceived Relevance of Treatment $(t(22) = 4.58, p \le .001)$, and Treatment Demands and Issues $(t(23) = 4.34, p \le .001)$; see Table 5). Specifically, youth perceived a greater number of stressors competing with treatment, a greater number of issues with the relevance of treatment, and a greater number of treatment demands and issues as compared to their caregivers. However, the difference between caregivers' and youths' perceived relationship with treatment was non-significant (t(21) = 1.40, p > .05).

	-	Youth	Caregiver		Caregiver		Caregiver				
Subscale	N	M (SD)	N	M (SD)	t value	df	p value				
Stressors and Obstacles that Compete with Treatment	22	12.77 (3.94)	22	8.09 (.86)	4.39	21	.000				
Treatment Relevance	21	18.90 (5.69)	21	12.90 (1.24)	4.14	20	.001				
Relationship with Treatment	21	4.81 (1.57)	21	7.48 (2.69)	-3.55	20	.002				
Treatment Demands and Issues	18	11.56 (3.73)	18	7.78 (2.76)	3.28	17	.004				

Table 5: Results of Paired-Samples T-test on the BTPS Subscales

Figure 1 illustrates the differences between the types of treatment barriers perceived by youth and caregivers.

The BTPS was then dichotomized from a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree) to a binary response option, where responses of 1, 2, and 3 were recoded into 0 (Disagree) and, 4 and 5 were recoded into 1 (Agree) to determine whether or not the item was perceived as a barrier. Youth reported from 0-12 perceived barriers to treatment, averaging 2.67 perceived barriers (SD = 3.53). The most commonly reported perceived barrier for youth participants was that treatment or other services would take time away from spending time with friends and family, while caregivers most frequently reported the belief that information shared in treatment or services

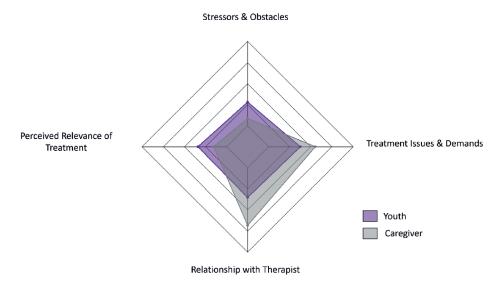


Figure 1: Radar Chart depicting Barriers reported by Youth and Caregivers

Note: Figure displays the average for youth and caregivers on each subscale of the adapted Barriers to Treatment Participation Scale. The proportions of the figure were adjusted to account for the subscales being on different units of measurement.

would be shared with the justice staff as a barrier (see Table 6 for barrier response frequencies).

Table 6: Frequency of Youth and Caregiver Responses on Items within the BTPS

Item Content	Youth		Caregiver			
	N	Yes (n)	%	N	Yes	%
					(n)	
Stressors and Obstacles that Compete with Treatment						
I do not have a way to get to treatment or other services.	23	2	8.3	29	2	6.3
Other activities (e.g., sports, clubs, music lessons) will	23	4	17.4	31	3	9.4
make it hard to go to treatment or other services.						
There is too much stress in my life to participate in	23	3	13	31		
treatment or other services.					0	0
Health problems or illness will stop me from getting	24	1	4.2	30	1	3
treatment or other services.						
I will not have time for the assigned work	24	2	8.3	29	1	3
My family will say I do not need the treatment or other	22	3	13.6	30	0	0
services.						
I am too tired after school/work to go to treatment or	24	5	20.8	29		
other services.					1	3.1

Item Content	Youth			Caregiver			
	N	Yes (n)	%	N	Yes	%	
					(n)		
My school/job schedule will get in the way of going to	23	2	8.7	30	2	6.5	
treatment or other services.							
Treatment Demands and Issues							
Treatment or other services will take time away from	24	7	29.2	31	2	6.3	
spending time with my friends and family.							
I will refuse to go to the treatment or other services.	23	0	0	28	1	3.2	
Treatment or other services will take too much time.	24	2	8.3	31	0	0	
Treatment or other services will be more work than I	24	2	8.3	30	0	0	
think.							

Perceived Relevance of Treatment						
I will not have a say in my own treatment or services.	24	1	4.2	31	1	3.2
The work assigned as part of this treatment or other service will be difficult.	24	0	0	27	0	0
Treatment or services won't be what I expect.	24	3	12.5	33	1	3
I will lose interest in coming to sessions.	24	1	4.2	33	1	3
Treatment or services will become less important as it goes on.	24	1	4.2	33	1	3
Treatment or services will not focus on my life and problems.	24	2	8.3	32	0	0
Treatment or services might "bring out" new or different problems.	24	4	16.7	33	2	6.1
My behavior will improve on its own; I don't need treatment.	24	6	25	32	1	3.1
Treatment or other services will not work.	24	3	12.5	33	0	0
Relationship with Therapist						
The atmosphere at the treatment center will be uncomfortable.	24	3	12.5	28	0	0
Information that I share in treatment or services will be shared with the justice staff.	24	3	12.5	31	5	16.1

Note: Items shown in the table reflect the adapted wording shown to the youth. Items presented to the caregivers were worded to capture their perspective on barriers to their youths' treatment.

Discussion

While juvenile involvement in the justice system offers an ideal opportunity to identify and refer to treatment services, there are known barriers that reduce or impede the likelihood that youth will receive those additional services. This study offers a glimpse into what youth on probation and their caregivers perceive as barriers to services. In order to better understand service barriers, this study leveraged the Barriers to

Treatment Participation Scale (BTPS; Kazdin et al., 1997) and provided an adaptation and expansion of this measure. First, while the BTPS was originally designed to reflect the caregiver's perception of barriers to receiving help for their youth's oppositional, aggressive, or antisocial behaviors; this study broadens the service areas to include help with substance use and mental health services as referred through the justice setting. Second, this study adapts the BTPS from only capturing the caregiver's perspective to also including the youth's perceived barriers to starting and staying in needed services. While previous work with the BTPS assessed overall barriers to treatment, the current study utilized the measure to capture specific barriers to treatment that could be addressed during early conversations surrounding treatment initiation. Furthermore, the current study extends previous research surrounding the BTPS by administering an adapted measure to both youth and caregivers to capture the perspective of both. As suggested by the Family Systems Theory (Watson, 2012), interactions between members of the family unit can yield both positive and negative behaviors, with all family members influencing and being influenced by one another. Therefore, the caregivers and youths' perceptions of treatment can influence one another and contribute to treatment initiation and retention. As such, knowledge of each party's respective barriers could aid JJ staff and clinicians in engaging and retaining families in the treatment process.

Limitations and Future Directions

The preliminary results of this study demonstrate that youth and caregivers have unique concerns with starting services. Generally, youth expressed more concerns than their caregivers. Specifically, the barriers, as perceived by youth, were equally weighted in logistical and motivational influences. Logistically, youth felt that treatment would compete with life, such as taking time away from other activities and relationships. Motivationally, youth did not perceive treatment as necessary and that treatment would create additional problem areas that they may not be ready to deal with. Justice staff are well-positioned to respond to these challenges by helping the youth and their caregiver to find a balance in prioritizing treatment with other extracurricular activities; as well as re-emphasizing that getting help for problems has the potential to strengthen their interpersonal relationships. Caregivers were more prominently concerned with the possibility of service providers sharing information back to probation. Justice staff can also help alleviate the fear among caregivers by providing a thorough understanding of terms of confidentially between a provider and a third party. As stated previously, having knowledge of specific barriers perceived by families could allow JJ staff and clinicians to address these barriers early-on in the treatment referral process. In doing so, families may be more likely to initiate treatment and follow through with treatment recommendations. Future research should explore the utility of identifying and addressing perceived barriers early in the treatment referral process to determine if improved treatment initiation and retention outcomes are found.

There are also sizable limitations to this study. This work represents a pilot substudy for a feasibility trial to test the implementation of a family-based motivational intervention among youth on probation. Correspondingly, the resultant sample size was relatively small and therefore limits the generalizability of this study's results to other youth and caregiver dyads. It will be important for ensuing investigations to replicate and extend this study's results to gain a more thorough understanding of common barriers precluding the initiation of substance use treatment for youth on probation. We believe such information could be used to create interventions that redress systemic, family, and personal barriers to treatment receipt. The measures in this study were also restricted to perceived barriers, there are other factors that could impact service receipt such as interpersonal dynamics within the family. Lastly, because youth and caregivers' responses are more than likely correlated, the assumption of independence may be violated, thus inflating the possibility of statistical significance (Gonzalez & Griffin, 2012).

With these limitations in mind, this study demonstrates the importance of measuring barriers from both the caregiver's and youth's perspective; and offers a preliminary glimpse into specific concerns among these distinct perspectives. Correctional systems that serve youth, could benefit from administering a measure such as the BTPS early in youth disposition to probation. Identification of family-specific perceived barriers could help case managers and probation staff to specifically discuss those barriers when first mentioning a new service referral. Future work is needed to develop specific tools and techniques for probation staff to use for unique perceived logistic and motivation barriers. Ultimately, helping families to address barriers could increase the likelihood that youth will attend and fully engage in much-needed services.

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