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Factors Shaping a Proactive Plan of Care for Student Mental Health

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Abstract

As students present to school with mental health needs, the role of schools has evolved to include the provision of school-based mental health services delivered across a continuum or multitiered system of supports. Within this framework of services, students can receive intensive mental health services at the Tier 3 level. School-based mental health systems must consider best practices in related fields to ensure schools are well equipped to handle intensive student mental health needs. This exploratory study used a national sample and employed a convergent QUAN+qual design to explore professional perceptions that were associated with school mental health providers' likelihood of having a proactive plan of care for students in need of mental health supports who are transitioning schools. Quantitative results suggested having sufficient Tier 3 services and sufficient resources (e.g., personnel and time) were associated with school mental health providers using a proactive plan of care. Qualitative results supported this finding and further highlighted potential barriers to school mental health providers' buy in. Additional considerations for facilitating the use of a proactive plan of care in schools and implications for practice are provided. Limitations and future directions are discussed.

Keywords School-based mental health · Multitiered systems of support · Proactive plan of care · Mental health action plan · Care coordination

Introduction

Each year in the United States, approximately 17% of youth deal with at least one mental health (MH) disorder; however, 49% do not receive any treatment (Whitney & Peterson, 2019). For the adolescents between the ages of 12 and 17 who do receive MH services, roughly the same percentage stated that they receive MH services while at school (Substance Abuse and Mental Health Services Administration [SAMHSA], 2020), representing a trend toward the

provision of school-based mental health (SBMH) services. The prevalence of SBMH services provided to students is partially the result of an effort by school staff and administrators to nurture student needs beyond academics and intentionally support MH (Iachini et al., 2016). SBMH services have been shown to contribute to positive academic outcomes and improved emotional and behavioral well-being for students (Barry et al., 2013; McCance-Katz & Lynch, 2019). SBMH can eliminate accessibility barriers (e.g., transportation, time, money), allowing students to receive services who may lack the resources to do so otherwise (Guo et al., 2010). An increased focus on student MH has contributed to increases in SBMH funding (U.S. Department of Education, 2023), and with that, a need for a better understanding implementation best practices.

Multitiered Systems of Support for SBMH Services

A promising framework for implementing SBMH services is through a multitiered system of support (MTSS) which consists of offering evidence-based services to students along a continuum of three distinct tiers (Jimerson et. Al., 2015). Tier 1 is universal support provided to all students at a

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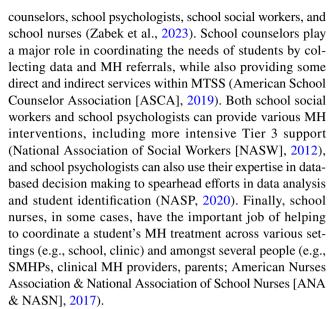
school, Tier 2 is targeted support for groups of students who are at risk for developing future problems, and Tier 3 is the provision of intensive services, characterized by individualized support for specific students (National Association of School Psychologists [NASP], 2016). Tiered interventions can be effective when delivering SBMH services despite factors that affect implementation (e.g., Richter et al., 2022). For instance, a systematic review concluded that depression interventions delivered via a tiered SBMH framework can be successful within the right context (e.g., when schools have sufficient resources and trained practitioners; Arora et al., 2019). In a survey of over 600 educators receiving Panorama Education newsletters, 56% of respondents indicated using MTSS for social-emotional learning and 35% reported MTSS in their school or district is "well established" (Panorama Education, 2023, p.7). Further, current implementation of MTSS in schools seemingly lacks high-quality Tier 1 programming and "attention to children's intersecting identities or [social determinants of health]" (Edyburn et al., 2023, p.564). Despite the push for general tiered supports as outlined in the Every Student Succeeds Act (2015), the use of MTSS for SBMH services is not yet well established (Panorama Education, 2023) nor equity- and intersectional justice-minded (Edyburn et al., 2023), and there is no legal requirement that MTSS for SBMH be implemented in each school district or within each school in a given district. Further, data from the 2019–2020 School Survey on Crime and Safety indicated only 42% of schools offered MH treatment services for students with identified MH disorders (National Center for Education Statistics, 2022). Taken together, inconsistencies in MTSS and available SBMH services can disrupt the delivery of high-quality MH care in schools.

As students transition from one school to the next (e.g., middle school to high school), their MH and school connectedness can be disrupted (Lester et al., 2013). School-based transitions can be considered critical events and have been linked to higher levels of academic and emotional risk compared to students who did not transition schools (Nygaard & Ormiston, 2022). The transition to high school has been found to be especially distressing for some youth (Felmlee et al., 2018). Without universal screening and coordinated SBMH services during an already vulnerable period, youth might fall through the cracks (e.g., Margherio et al., 2019; Nygaard et al., 2023). Therefore, additional research is warranted to clarify best practices for SBMH and care coordination for students experiencing school transitions.

Mental Health Providers' Roles within SBMH Services

To effectively implement SBMH using the MTSS framework, several key school MH providers (SMHPs) must play their part within the school system, including school counselors, school psychologists, school social workers, and school nurses (Zabek et al., 2023). School counselors play a major role in coordinating the needs of students by collecting data and MH referrals, while also providing some direct and indirect services within MTSS (American School Counselor Association [ASCA], 2019). Both school social workers and school psychologists can provide various MH interventions, including more intensive Tier 3 support (National Association of Social Workers [NASW], 2012), and school psychologists can also use their expertise in data-based decision making to spearhead efforts in data analysis and student identification (NASP, 2020). Finally, school nurses, in some cases, have the important job of helping to coordinate a student's MH treatment across various settings (e.g., school, clinic) and amongst several people (e.g., SMHPs, clinical MH providers, parents; American Nurses Association & National Association of School Nurses [ANA & NASN], 2017).

More intensive Tier 3 interventions, such as individual counseling or therapy, may require a licensed MH practitioner, such as a school psychologist, to effectively provide the service (Arora et al., 2019). However, this presents a problem for school districts that may not have enough SMHPs to adequately serve all their students (Whitaker et al., 2019; Zabek et al., 2023). As such, schools are beginning to look toward their community to help them meet student needs by forming partnerships with local community MH agencies. For instance, in a study conducted by Cummings et al. (2022), approximately 86% of MH clinic administrators surveyed reported that their clinic had partnered with at least one school in order to deliver SBMH services to students while 87% stated that the partnership had been "very or extremely helpful" in "reducing gaps in MH treatment" (p. 1091). Overall, school-community partnerships, professional development for SMHPs, and the training of new MH professionals can help lessen the impact of national shortages on SBMH (Eklund et al., 2020).

Another essential element to SMHPs' roles within MTSS is engagement with care coordination. Care coordination within schools can be defined as the process of facilitating the treatment of a student across various settings by communicating and working with others involved in the student's care. Through this process, services provided within a student's treatment plan can be integrated together to ensure successful and efficient delivery (McDonald et al., 2007). Although care coordination has been tied to improved quality of care and mental and behavioral health outcomes in youth across medical and outpatient settings (e.g., Toomey et al., 2011), few studies to date have examined MH care coordination practices in schools. In a systematic review of school-based care coordination programs, parents and students highlighted the benefits of care coordination activities on school attendance, mental health, and various health

related outcomes (Francis et al., 2021). As more intensive MH treatments are being provided at school within the SBMH MTSS framework, care coordination becomes incredibly important, especially considering the number of individuals potentially involved in a student's MH care treatment (e.g., school psychologist, nurse, social worker, counselor, community MH provider, and parents). SMHPs from the same study sample utilized in this study largely endorsed MH care coordination as important but perceived school/district personnel to view it as less important (Nygaard et al., 2023). Although SMHPs reported engaging in broad care coordination, communication, transition facilitation, and information sharing practices, they described MH care coordination practices as "patchwork" (see Nygaard et al., in press).

Person-Centered Care Planning in SBMH Services

The school's role in providing MH services to students is expanding; therefore, the conceptualization of MH care in schools should expand with it. For schools to be well equipped in handling the intensive MH needs of students, it is important to consider research and efforts in other settings that do the same. In MH treatment outside of schools, providers often use person-centered care planning, which has been defined as:

> an ongoing process of collaboration between an individual and his or her care team members, which results in the cocreation of an action plan to assist the person in achieving his or her unique goals (Miller et al., 2017, p. 254).

Person-centered care planning involves coordinated and individualized care and has been shown to lead to positive outcomes among patients, including increased participant involvement and engagement with the plan (Stanhope et al., 2013; Tondora et al., 2014). Outside of schools, person-centered care planning has been effective in helping to treat patients with intensive MH needs (Stanhope et al., 2015). However, to implement person-centered care planning within schools, SBMH administrators may need to integrate this idea with care coordination. SBMH services can vary from school to school and students naturally transition grade levels and schools (e.g., elementary to middle school). With that progression likely comes a transition in SMHPs and school-based personnel that are involved in the student's care, contributing to the need to examine best practices for coordinating person-centered care planning and SBMH services.

One activity in the Agency for Healthcare Research and Quality Care Coordination Measures Atlas that guides health care coordination practice, is to create a *proactive plan of care* (McDonald et al., 2014). A term commonly seen within care coordination literature, the idea of a proactive plan of care is for the patient, their family, and their health care team to work together to create and maintain a plan that attempts to outline health services and treatment needed along with the desired outcomes.

> The plan is designed to fill gaps in coordination, establish patient goals for care and, in some cases, set goals for the patient's providers. Ideally, the care plan anticipates routine needs and tracks current progress toward patient goals. (McDonald et al, 2014, p. 24)

Although not necessarily directly related to MH, the idea of a proactive plan of care is ideal for SBMH in MTSS as it allows for MH treatment to evolve as a student transitions grade levels and schools, while maintaining a cohesive ongoing plan with participants over the duration of the student's education. Therefore, the first author sought to combine the concepts of person-centered care planning and proactive plans of care for care coordination to design a SBMH care planning program, referred to as the Mental Health Action Plan (MHAP) Program.

Purpose of the Present Study

Given MTSS and SBMH service provision has yet to be well established and can vary within and across school districts (e.g., Edyburn et al., 2023; Panorama Education, 2023) as well as the need for coordinated and person-centered MH services for students (e.g., Nygaard et al., in press; Francis et al., 2021), research is warranted to clarify the use of proactive plans of care for SBMH care coordination. The purpose of the present study was to explore professional factors that may be associated with SMHPs' likelihood of having a proactive plan of care for students in need of MH supports who are transitioning schools, the first study of this kind. The professional factors of interest in the quantitative component of our study were SMHPs' perspectives about (a) sufficiency of Tier 3 services at their schools, (b) presence of resource barriers related to providing Tier 3 services at their schools, (c) presence of systemic barriers related to providing Tier 3 services at their schools, (d) the importance of coordinating care around MH services for students, (e) their preferred setting for providing students with intensive MH services, and (f) their preferred providers for intensive SBMH services. The qualitative component was added to broadly explore SMHPs' perspectives on the MHAP Program to provide further context through which to interpret the quantitative findings.

Based on our understanding of the literature and our reasoning around desirable contextual conditions for SMHPs, we anticipated that perceptions of sufficiency of Tier 3 services (compared with insufficiency), absence of both kinds of barriers (compared with the presence of barriers), higher

levels of importance regarding care coordination at school (compared with lower levels), and preferences for providing services at school by SMHPs (compared with community-only services) would be positively associated with SMHPs having a proactive plan of care based on quantitative data analysis. However, we did not have specific expectations regarding which perception factors would be more-or-less strongly associated with SMHPs endorsing a proactive plan of care, nor how much predictive power these perceptions variables would account for altogether. Thus, the quantitative component of our study was largely exploratory in nature, seeking to understand the relationships among these variables for the purposes of informing future work related to supporting transition planning for students with MH needs. For the qualitative component, we expected SMHPs to have some hesitations regarding the use of MHAPs, but we expected interviewees to focus primarily on benefits of incorporating proactive plans of care into their school practice.

Method

The current study is part of a larger, mixed methods examination of SMHPs' perspectives on SBMH service provision. The present study employs a convergent, QUAN + qual design (Creswell & Plano Clark, 2018). Phase one of data collection involved administration of an online survey and phase two involved conducting semi-structured interviews.

Recruitment and Participants

The present study employed a voluntary response sampling procedure to recruit participants during the Fall and Winter of 2021/2022. Participation was solicited via emails to members of national, professional organizations (e.g., NASW) and through posts on various social media platforms (e.g., Reddit, Facebook, Twitter). Participants were offered the chance to win one of five $20 Amazon gift cards for completing the survey. After excluding responses that did not meet inclusion criteria or that did not complete at least ten items of the survey, 45% of responses were included, yielding a final quantitative sample size of 165 SMHPs. Participants included school social workers ($n = 55$, 34%), school psychologists ($n = 30$, 18%), school counselors ($n = 28$, 17%), and SBMH therapists/clinicians ($n = 14$, 9%). A majority of the sample identified as white ($n = 132$, 82%) and female ($n = 155$, 76%).

After completing the survey, participants had the option to consent to be contacted by email to participate in an interview for which they would receive a $15 Amazon gift card. Thirteen SMHPs participated in the interviews. Eight identified as school social workers, three identified as school

counselors, one identified as a SBMH therapist, and one identified as a school psychologist. Consistent with demographics of the field of MH providers (American Psychological Association, 2015), interviewees identified as mostly white females. See Table 1 for a complete listing of participant demographics.

Measures

Quantitative

All variables of interest were measured using single-item scales derived from a larger, 31-item survey developed by the first author for the purposes of evaluating SMHPs' attitudes and practices around MTSS and SBMH care coordination practices. The survey took approximately 10–15 min to complete. See Table 2 for endorsement rates for all primary study variables.

The primary dependent variable, *plan of care*, was measured by asking participants: "Do you have a proactive plan of care for students in need of mental health support who are transitioning to the next school?" Following the question, elaboration was provided as follows: "A proactive plan of care could be any plan developed for the student to ensure their mental health needs are met at school." Response options were categorical in nature: *yes* or *no/unsure*. Approximately 2/3 participants endorsed *yes*, they did have a proactive plan of care, whereas about 1/3 endorsed *no/unsure* (see Table 2).

SMHPs' perceptions of *sufficient Tier 3* were measured by asking: "In your opinion, does your school offer enough Tier 3 support for students in need of intensive mental health services?" Response options were categorical in nature: *yes* or *no/unsure*. Approximately 1/3 participants endorsed *yes*, whereas about 2/3 endorsed *no/unsure* (see Table 2).

SMHPs' perceptions of *resource and systemic barriers* were measured by asking: "What are barriers to providing students with Tier 3 mental health supports in your school?" Participants could check all answers that applied from five common examples (e.g., too little funding, limited time) and were also allowed to write in as many "other" barriers as they wished. Responses were recorded into categorical variables that signified whether participants reported the *presence* of resource and systemic barriers at their schools. *Resource* barriers were defined as materials, staff, and assets that facilitate SBMH service delivery (e.g., personnel, time, materials, space), whereas *systemic* barriers were defined as policies, procedures, practices, and perspectives in the school or community setting that influence SBMH service delivery (e.g., funding, stigma, being unsure which students need support, difficulty obtaining parent consent for services, leadership priorities). If participants did not explicitly endorse the *presence* of a type of barrier, then the default

Table 1 Participant demographics

Demographic/characteristic	Survey participants		Interview participants	
	n	% of total	n	% of total
MTSS for school MHS				
Yes	144	87	12	92
No	19	12	1	8
Unsure	2	1	0	
Missing	0		0	
School locale				
Rural	25	16	1	8
Town	31	19	2	16
Suburban	58	36	5	38
City	47	29	5	38
Missing	4		0	
Professional role				
School counselor	28	17	3	23
School psychologist	30	18	1	8
School social worker	55	34	8	61
Specialized teacher	5	3	0	0
Administrator/coordinator	3	2	0	0
SBMH therapist/clinician	14	9	1	8
Multiple roles	29	18	0	0
Missing	1		0	
Gender identity				
Woman	132	82	13	100
Man	24	15	0	0
Non-binary	5	3	0	0
Missing	4		0	
Race/ethnicity				
Asian, Asian American, Pacific Islander	6	4	1	8
Black (African or African American)	8	5	0	0
Latinx and/or Hispanic and/or Spanish Origin	6	4	3	23
Native American, Alaska Native, Inuit, and/or first nations	3	2	0	0
White (Caucasian)	115	76	9	69
Multiple races	8	5	0	0
Prefer not to answer	6	4	0	0
Missing	13		0	

Survey *N* = 165; interview *N* = 13. MTSS = multitiered system of supports; MHS = mental health services

code was *absence*. Over 3/4 participants endorsed the presence of resource barriers, and over 5/6 participants endorsed the presence of systemic barriers (see Table 2).

Perceptions of the general importance of coordinating care around MH services for students were assessed by asking SMHPs, "How important is coordinating mental health services for students?", followed by the prompt, "I think coordinating mental health services for students is..." Responses options were set on a five-point scale: 1 = *not at all important*, 2 = *slightly important,* 3 = *moderately important,* 4 = *very important*, 5 = *extremely important.*

Interestingly, participant responses were strongly biased toward more positive perceptions, with only *n* = 4 (3%) marking a response option less than *very important*. Approximately 3/4 participants endorsed care coordination as *extremely important*, whereas around 1/4 endorsed it as *very important*. Given the categorical nature of our planned analyses, we collapsed the original five categories down to two: *extremely* vs. *very/less*, so the variable indicated relatively lower vs. higher perceptions within the sampled range (see Table 2).

Table 2 Endorsement rates for primary quantitative variables

Variable/response	n	% of total
Plan of care		
Yes	104	63
No/unsure	61	37
Sufficient Tier 3		
Yes	59	36
No/unsure	106	64
Resources barriers		
Presence	141	85
Absence	24	15
Systems barriers		
Presence	122	74
Absence	43	26
Coordination importance		
Extremely	125	74
Very/less	40	26
Setting preference		
School	45	27
Community	37	22
Both settings	83	50
Provider preference		
School	37	22
Community	41	25
Both providers	87	53

$N = 165$ with no missing data

SMHPs' preferences related to settings and providers were measured via two questions. The *setting* question asked: "How do you view the role of schools in providing intensive mental health services (e.g., individual therapy) to students?" Three response options followed: (a) *intensive mental health services should be provided in school*; (b) *schools should refer students to outside agencies (e.g., community mental health agencies) for intensive mental health services;* and (c) *schools should provide intensive mental health services in schools for some students and refer other students to outside agencies*. The *provider* question asked: "Who should be providing intensive mental health services (e.g., individual therapy) to students in schools?" Three responses options paralleled those from the setting question: (a) *school personnel (e.g., school counselors, school psychologists, school social workers)*; (b) *outside agencies (i.e., community mental health agencies)*; and (c) *both school personnel and outside agencies*. For each preference, around 1/2 participants endorsed the *both* option, with about 1/4 participants endorsing the *school* option and the other 1/4 endorsing *outside agencies* (see Table 2).

Qualitative

A semi-structured interview protocol was developed by the first author to gather information about SMHPs' perspectives of the current MH practices in their school/district. Three items from the interview protocol were used for this study directly following discussion of care coordination practices: (1) "If the school district had a system for developing a proactive plan of care (or MHAP) to ensure student mental health needs are met at school, what would be important to include?", (2) "Who should be involved in developing a MHAP?", (3) "What would prevent you or other district staff from buying into a MHAP for students in need of Tier 3 mental health support?" MHAP was defined for participants as a proactive plan of care to ensure student MH needs, specifically at the Tier 3 level, are met at school and coordinated across school transitions. The interview protocol was piloted with a local school psychologist and SBMH coordinator. Each interview was conducted by the first author using the Zoom platform and lasted approximately 30–75 min.

Data Analyses

Mixed Method Integration

The purposes of the present study's mixed methods analyses were convergence with both quantitative and qualitative data answering the same research question, complementarity for breadth (e.g., quantitative methods) and depth (e.g., qualitative methods), and sampling because interview participants were identified from interested survey respondents (Palinkas et al., 2011).

Quantitative

We explored associations among SMHPs' perception variables and their likelihood of having a proactive plan of care for students in need of MH supports via two phases of quantitative data analyses. In the first phase, we examined the independent associations between each of the five perception variables—(a) resource barriers, (b) systemic barriers, (c) coordination importance, (d) setting preference, and (e) provider preference—and the plan of care variable. Given all variables were categorical in nature, we calculated Kendall's *tau-b* coefficients to quantify the associations, producing results that were equivalent with j coefficients (for perception variables with only two categories) and Cramer's *V* coefficients (for perception variables with three categories). Conventional decision rules regarding statistical significance ($p < 0.05$) and effect size/magnitude (0.10–0.29 = small, 0.30–0.49 = moderate, 0.50 + = large) were employed for interpreting correlation effects.

In the second phase, we examined the associations between the five perception variables and SMHPs' likelihood of having a plan of care via a binomial logistic regression model, wherein the perception variables were modeled as predictors and the plan of care variable was modeled as the dependent variable. Compared with the correlations analyses, the logistic regression model provided further information about the relationships among variables by quantifying the predictive power of the cumulative predictors (taken as set) as well as the relative predictive power of each predictor (within the set) when controlling for all other predictors. Results were evaluated both at the model level, by considering pseudo-R^2 estimates, and at the predictor level, by considering resulting odds ratios (OR) associated with each predictor. OR were interpreted as the odds that SMHPs' perceptions, when compared against a reference response, contributed to endorsing having a plan of care for students in need of MH supports. Reference responses for perception variables were set as follows: resource barriers = *presence*, systemic barriers = *presence*, coordination importance = *very/less*, setting preference = *community*, and provider preference = *community*. Conventional decision rules for statistical significance ($p < 0.05$) were employed for evaluating both model-level and predictor-level effects. OR magnitude was evaluated using guidelines by Chen et al. (2010) for a high base rate ($\geq 10\%$) condition. For OR > 1: 1.46–2.49 = small, 2.50–4.13 = moderate, 4.14 or higher = large. And for OR < 1: 0.69–0.41 = small, 0.40–0.25 = moderate, 0.24 or lower = large.

Qualitative

A reflexive thematic analysis process was used for phase two of this study to inductively examine qualitative data for patterns (Braun & Clarke, 2006, 2022). Utilizing the MAXQDA (2020) qualitative data analysis software, the first author served as the lead analyst and coded all interview transcripts, while the third author and three contributors each coded three to four transcripts in alignment with best practice recommendations (Braun & Clarke, 2022). Phases 1 and 2 of the reflexive thematic analysis process included familiarizing ourselves with the data and generating initial codes. We incorporated a critical realist perspective in data analysis such that we aimed to capture participants' contextualized truths in our analysis. In Phase 3, we merged codes to develop 19 candidate themes based on the variety of topics addressed during the interviews. Phase 4 involved checking to ensure each code fit within a theme and subtheme, and upon conferral with the team, the first author made adjustments to ensure themes were distinct (Phase 5). Finally, Phase 6 involved each researcher offering comments and combining codes and subthemes. The qualitative analysis resulted in three themes about proactive plans of care, one of which is presented in this paper. Our identities (e.g., white, middle class, and educated), experiences (e.g., personal MH struggles as a student), and perspectives (e.g., intensive MH services should be a priority in school) shaped the data collection process and our interpretation of the data. For example, the interviewer provided information and probes to further explain and garner feedback regarding MHAPs for participants who immediately rejected the idea. As graduate students and faculty in school psychology, we also brought an ecological perspective to coding by considering contextual variables that could influence responses.

Results

Quantitative

Preliminary Analyses

Preliminary analyses were conducted to investigate the associations among each of the perception variables of interest: (a) resource barriers, (b) systemic barriers, (c) coordination importance, (d) setting preference, and (e) provider preference. Kendall's *tau-b* correlation coefficients for each pair of associations are presented in Table 3 (see the top-six rows). Overall, 7/15 correlations were in the small range ($t_b = 0.12$–0.24), one was in the moderate range ($t_b = 0.36$),

Table 3 Bivariate correlations between primary quantitative variables

Practice	1	2	3	4	5	6
1. Sufficient Tier 3	–					
2. Resources barriers	0.12	–				
3. Systems barriers	0.19*	0.01	–			
4. Coordination importance	0.17*	0.05	0.05	–		
5. Setting preference	0.17*	0.06	0.04	0.24**	–	
6. Provider preference	0.15*	0.01	0.12	0.36***	0.50***	–
7. Plan of care	0.26***	0.14	0.03	0.17*	0.17*	0.20**

Correlations are Kendall's *tau-b* coefficients

*$p < .05$, ** $p < .01$, *** $p < .001$. $N = 165$ with no missing data

and one in the large range ($t_b = 0.50$). Findings showed that *sufficiency of Tier 3 services* had consistently small associations with all other perceptions variables; *resource and systemic barriers* had a strong association with each other but near-zero correlations with all other perception variables; and *coordination importance* had small-to-moderate associations with *setting and provider preferences* (see Table 3). Squaring the correlation coefficients indicated the shared variance among perception variables ranged from 0 to 25%, suggesting that each was sufficiently independent for the purposes of primary analyses.

Primary Analyses

Kendall's *tau-b* correlation coefficients for the association between each perception variable and the plan of care variable are presented in Table 3 (see the bottom row). Coefficients for 5/6 correlations were in the small range ($t_b = 0.14–0.26$), with only the *systemic barriers* coefficient in the negligible range ($t_b = 0.03$). Relatively, plan of care had the strongest association with *Tier 3 sufficiency*, followed by *provider preference*, *setting preference*, *coordination importance*, and *resource barriers*, respectively (see Table 3). Taken together, results indicated SMHPs' endorsement of the plan of care variable had a network of meaningful relationships with their endorsements for most perception variables of interest, suggesting these perceptions may affect their transition care planning and, thus, that a logistic regression model may be viable.

Model-level results for the binomial logistic regression indicated the model was statistically significant and had at least adequate global data–model fit: $\chi^2 = 23.43$, $df = 8$, $p = 0.003$; $R^2_{McF} = 0.11$, $R^2_{CS} = 0.13$, $R^2_N = 0.18$. Predictor-level results for the model are presented in Table 4. Evaluation of OR for each predictor suggested that *sufficiency of Tier 3*, *resource barriers*, *coordination importance*, and *provider preference* each had meaningful (i.e., at least small) effects, whereas *systemic barriers* and *setting preference* had negligible effects. However, only one predictor, *sufficiency of Tier 3*, was statistically significant (see Table 4). Three of the five meaningful predictors were in the expected direction, suggesting that endorsing more desirable perceptions (according to our reasoning) was associated with at least double the odds of having a proactive plan of care (OR range = 2.00–2.53). Yet, interestingly, the *coordination importance* predictor and one of the comparisons within the *provider preference* predictor (i.e., both–community) showed meaningful effects in the opposite direction, suggesting that endorsing an extremely positive attitude about care coordination and balanced provider preferences (as opposed to preferring school-only providers) was actually associated with lower odds of having a proactive plan of care (OR = 0.61 and 0.65, respectively). Consideration of the 95% confidence intervals associated with each meaningful OR indicated that all were imprecise and overlapping, suggesting the estimate for all meaningful effects were practically equivalent within the context of this analysis.

Qualitative

Through reflexive thematic analysis, the following theme developed: *SMHPs demonstrated a range of reactions to the idea of a proactive plan of care (e.g., MHAP) due to potential barriers*. Three sub-themes are discussed below.

Table 4 Fixed effects for binomial logistic regression model

Predictor/Comparison	b	SE	Z	p	OR [95% CI]	Effect size
Intercept	0.85	0.51	1.68	.092	–	–
Sufficient Tier 3						
Yes–no	0.93	0.40	2.29	.022	2.53 [1.14, 5.59]	Moderate
Resource Barriers						
Absent–present	0.86	0.56	1.54	.123	2.37 [0.79, 7.13]	Small
Systems Barriers						
Absent–present	0.07	0.41	0.18	.857	1.08 [0.48, 2.43]	Negligible
Coordination Importance						
Extremely–very/less	− 0.49	0.48	− 1.02	.308	0.61 [0.24, 1.57]	Small
Setting Preference						
School–community	− 0.24	0.62	− 0.39	.695	0.78 [0.23, 2.64]	Negligible
Both–community	− 0.33	0.54	− 0.61	.541	0.72 [0.25, 2.08]	Negligible
Provider Preference						
School–community	0.69	0.65	1.06	.290	2.00 [0.55, 7.21]	Small
Both–community	− 0.42	0.52	− 0.81	.420	0.65 [0.23, 1.83]	Small

$N = 165$ with no missing data

OR = odds ratio; 95% CI = confidence interval

The MHAP Program immediately elicited a sense of feeling overwhelmed; however, with time, multiple SMHPs identified the value of a MHAP. After presented with the concept of a proactive plan of care, P3, a school social worker in a town setting, began listing personal barriers and reported "we can't even start to build action plans because we don't have enough staff in the buildings to create teams to do that." She indicated that her current responsibilities, high caseload, and the need for crisis response for "high flyers that take up the majority of my time" would prevent her from considering implementing a proactive plan of care for students. This sentiment was shared by P8, an urban school social worker, who emphasized personal barriers to considering a MHAP. A suburban school social worker reported, "I love the idea, and I don't want to be negative, but I just I, I conceptually at this point in my career find it quite difficult" (P4). Similarly, P6 reported:

> [T]hat's just another hat that I would have to wear … and then that's just more kids on my caseload… Um not to be negative … but part of me is like– if you're needing that high level of care where these tier two interventions aren't enough … and we're not looking at Special Ed, like they're able to function well in the school setting, then that's where it's like then maybe having a mental health plan outside of school…

After time to process the idea of a MHAP, several participants who were initially overwhelmed and skeptical expanded their perspective to acknowledge personal barriers and, at the same time, to describe the value of a MHAP. For example:

> [I]f it was kind of like a mini IEP, like hearing the treatment goals and it was kept electronically … Um I think it would stress counselors out to think about the, the responsibility they already have… [but] I think it has to happen, and I think it's a genius idea now that, you know, when we put it in those terms and we put it in the database. (P4)

P4 went so far as to say, "So it's perfect … I think that there's a lot of feasibility. I think that that's the real thing. I think that can happen." Similarly, P6 reported, "I can see a lot of our transgender kids being on that, like having a mental health support plan… like that makes sense to me."

Some reactions were immediately positive (e.g., P5), and all but two (P3, P8) *SMHPs identified benefits to a MHAP.* P9, an urban school counselor, highlighted the importance of a MHAP for care coordination so students do not have to " recreate their … story every single time" for the SMHP at the next school. Similarly, P7 reported, "I like the idea of it following them … like when they go from elementary to middle school…" As a school social worker who coordinates MTSS in her building, P7 personally created an MTSS form

for behavior interventions. However, her form does not "follow them from year in and year out" and does not involve the "mental health piece;" therefore, she reported, "I feel like something like that would be very helpful" (P7). P12, a community MH provider who provides therapy for students at school, reported having a MHAP is a "phenomenal idea" because "I wish that there was a more structured plan of service for students who need mental health help within our schools." Some participants highlighted the relationship between a proactive plan of care for Tier 3 MH services and an IEP and suggested that some students do not "need that intense level of support that special education provides" (P2). An urban school psychologist reported:

> I think that there can be students who are experiencing a Tier 3 level of mental health, um, need and doesn't necessarily qualify for an IEP … And why do we need to label it… emotional disturbance? What if they're having some major depression and major anxiety and all of that stuff– and there isn't any sort of academic impact? …Those are the ones…who are falling through the cracks. (P13)

SMHPs suggested that they expect a variety of *barriers might interfere with buy in and implementation at their school/district*. In a comprehensive statement, P10 listed barriers: "number one will be any type of a cost, number two would probably be professional development… number three would be … parent understanding, and probably number four would be time." Although the rank order of greatest barriers varied by participant, a few SMHPs discussed conceptual barriers that questioned how a proactive plan of care would be different from an IEP (e.g., P10, P13) and the role of schools in providing therapeutic services to students. For instance, P6 suggested, "Then maybe they need an IEP, you know, like if it's that severe and they need…regular weekly skill building, social work meetings…"

SMHPs also described barriers to adoption and implementation that centered around limited resources. Most frequently mentioned was the lack of time (P11, P9) and limited availability of MH services due to shortages of trained SMHPs. The current high workload and provider shortages make time a limited resource for SMHPs (P8) which likely impacted their views regarding the MHAP Program: "I think so much of it is capacity" (P5). For example, P2 reported SMHP buy in would depend on "how much goes into the … paperwork piece of it." P8 reported she does not have training to provide therapy for students and suggested partnerships where "somebody can come in and provide those mental health services."

Even for those schools with a community MH provider located in their building, however, system barriers continue to impact MH care in schools, and more specifically perspectives regarding a proactive plan of care for students with

intensive MH needs. For example, P12, a SBMH therapist (community MH provider within the school), reported the first barrier to buy in for a MHAP would be "the ignorant stigma that mental health isn't real." Similarly, P1 reported "attitude" is the first barrier because "there's a fair number of administrators that don't understand the mental health needs of kids in schools and they … look strictly at the behavioral model." P10 extended this concern to parents and the need for parent permission to provide MH supports. Also, within the system, SMHPs reported confidentiality could get in the way of involving community MH providers and teachers in a proactive plan of care (P8, P13). The most frequently mentioned system barrier, however, was funding (e.g., P9, P10, P13): "First of all, who's going to pay for it" (P4). P5 reported, "We need more money and more personnel to do more things for mental health." Only one SMHP identified no barriers to the MHAP Program:

> I think something like that is needed … I just feel like we're living in a world where you can't separate mental health from academics anymore, so they go hand in hand … I don't feel like there are any barriers for me to buy into something like that, I know, like with certain staff members having that old fashioned mindset, that might be a barrier in general, but that's just the world we live in now. So that's definitely a need… (P7)

Mixed Method Integration

Although resource and systemic barriers were not statistically significantly associated with using a proactive plan of care through survey responses, interview responses suggested that these barriers might inhibit the buy in and adoption of a proactive plan of care to meet intensive student MH needs at school. Consistent with survey responses and analyses indicating Tier 3 sufficiency statistically significantly predicts having a proactive plan of care for students, interview results suggested SMHPs are overwhelmed at the thought of adding more to their workload. Without sufficient Tier 3 services already in place, we infer it would be difficult for SMHPs to implement a proactive plan of care for students.

Discussion

The current exploratory study obtained survey and interview participant perspectives on using a proactive plan of care for SBMH to understand the relationships among variables and to inform future work related to coordinating SBMH care. This study was the first, to our knowledge, to explore the use of proactive plans of care for MH care coordination within the context of schools. This study produced consistent

findings in that survey variables and interview data informed key considerations that positively contribute to the use of proactive plans of care. Ultimately, having sufficient Tier 3 services and sufficient resources (e.g., personnel and time) was associated with survey respondents using a proactive plan of care and interviewee buy in.

Key Considerations for Facilitating the Use of Proactive Plans of Care

Three quantitative variables were positively associated with SMHPs using a proactive plan of care: *Sufficiency of Tier 3, absence of resource barriers, and preferences for providing services by SMHPs*. When SMHPs reported having sufficient Tier 3 services in their school or district, they were 2.53 times more likely to endorse using a proactive plan of care. Given perceptions of sufficiency of Tier 3 services (compared with insufficiency) were statistically significantly and positively associated with SMHPs developing a proactive plan of care, our results suggest SMHPs must first view their Tier 3 services as sufficient before implementing proactive plans of care for student MH. Tier 3 SBMH services "include individual, group, or family therapy for students receiving general or special education who have identified, and often diagnosed, social, emotional, and/or behavioral needs" (National Center for School Mental Health [NCSMH], 2020). Qualitative data from this study suggest that SMHPs are overwhelmed by their current responsibilities and are often engaged in crisis response, leaving limited time for more proactive, treatment-focused Tier 3 services such as individual therapy (P3, P6). Additionally, provider shortages are pervasive; 90% of public schools do not meet the recommended SMHP to student ratios as recommended by national professional organizations (Whitaker et al., 2019). Therefore, for SMHPs to establish student treatment goals, monitor progress, and coordinate services as students transition schools via a proactive plan of care, they must already have sufficient Tier 3 services available in their school.

Similarly, results from our study indicated that the absence of resource barriers (compared with their presence) was positively associated with SMHPs having a proactive plan of care such that SMHPs were 2.37 times more likely to use a proactive plan of care when they did not endorse resource barriers (e.g., limited personnel and time). Resource barriers such as high caseloads due to provider shortages and limited time were consistently described by interviewee participants as an inhibitor to the idea of developing a proactive plan of care for students. Taking a proactive approach to supporting Tier 3 MH needs is challenging when SMHPs report a lack of resources to be able to provide such services. However, allocating resources on the front end to implement evidence-based approaches (e.g.,

cognitive behavioral therapy) can ultimately reduce crises (Kern et al., 2017). Therefore, resource mapping can be used to identify how SMHP time is allocated (Kern et al., 2017). Unsurprisingly, SMHPs who work in schools with sufficient resources and Tier 3 services likely have more capacity to use proactive plans of care.

The third key consideration for using a proactive plan of care is to have school-based personnel coordinate this work. Participant preferences for providing services by SMHPs (compared with community-only services) were positively associated with SMHPs having a proactive plan of care. Removing barriers to direct service delivery by trained SMHPs are one way to support coordinated MH care for students. When school counselors must spend their time conducting administrative tasks, for example, they have less time to deliver MH services (e.g., Blake, 2020). To address this concern, schools employ community MH providers. However, when community MH providers deliver MH services, research suggests they must be integrated into the school environment (Mellin & Weist, 2011). In a statewide SBMH program in which community MH providers were integrated into the school environment, school climate improved and discipline incidents decreased (DiGirolamo et al., 2021). However, without that integration, services can be somewhat siloed and may not be as effective (Mellin & Weist, 2011). Qualitative results from our study pointed to the need for "in reach" into schools (Kern et al., 2017, p. 209), where community providers "come in and provide those mental health services for those students" (P8), also addressing resource and system barriers. In contrast, survey results suggest that balanced provider preferences (as opposed to preferring school-only providers) were associated with lower odds of having a proactive plan of care. This may be due to a lack of community MH provider integration into the school system as noted previously or the potential for fragmentation that can occur when responsibilities for MH service delivery and outcomes are divided. This finding points to the need for coordination and collaboration between providers.

Within the patient-centered medical home model, where proactive plans of care are common for organizing the delivery of health and behavioral health care (Asarnow et al., 2017), care managers serve as a patient's point person for delivering and coordinating services across clinicians and settings (Taylor et al., 2013). A practice facilitator, however, takes a more systems-level approach and works with the primary care staff to redesign processes for quality improvement (Taylor et al., 2013). Our results highlight the need for SMHPs to serve as "practice facilitators" to oversee the systems-level approach and processes for SBMH care coordination by developing a system that uses proactive plans of care. SMHPs, and particularly school psychologists, are knowledgeable about student level needs and the

school system and have been called to lead care coordination practices (Shahidullah, 2019). We posit some combination of SMHPs and integrated community MH providers might be well-suited to serve as "care managers" who coordinate services across settings and personnel. Indeed, of the participants included in this study, school social workers and community MH providers might have the most capacity to facilitate proactive plans of care for students needing Tier 3 SBMH services due to training in wraparound services (NASW, 2012) and the ability to provide services across settings. Deciding who is to facilitate the proactive plan of care for each student and provide the direct services is an important first step to coordinating MH care, but integration is warranted before community MH providers can take on a care coordination facilitator role (DiGirolamo et al., 2021).

Although we suggest SMHPs spearhead care coordination practices, school and community MH providers must partner with building and district level educational leaders to support proactive care planning and MTSS for SBMH service delivery. Administrator support is critical in overcoming implementation barriers to facilitate SBMH success (Richter et al., 2022). Administrator support at the building level (e.g., school principals) and district level (e.g., school board leaders) is key in affecting change, setting school and district priorities, and promoting SBMH (e.g., Carlock et al., 2023; Langley et al., 2010). SMHPs from the same study sample suggested school and district priorities, although not necessarily in alignment with their own ideas of MH best practice in schools, influenced their engagement in specific care coordination practices (Nygaard et al., 2023). However, SMHPs cannot shoulder the burden of making the necessary systems-level changes alone. Therefore, we call upon administrators and state department of education employees to invite students, SMHPs, caregivers, and educators to the table in determining school climate policies. More specifically, SMHPs should be represented in determining school, district, and state policies for SBMH service provision.

Limitations and Future Directions

This study is not without its limitations. First, interview and survey results diverged regarding the use of proactive plans of care. Interviewees were introduced to the concept of proactive care planning during the interview and did not report using proactive plans of care in their practice. In contrast, quantitative data analysis examined factors that promoted the use of a proactive plan of care and thereby operated under the assumption that some SMHPs did use proactive care plans in schools. It is possible that survey participants were affected by a self-serving bias such that their response to the survey item: "Do you have a proactive plan of care…?" was not reflective of their true practice. Additionally, the current sample favored school social workers and a more balanced

sample could have allowed for comparisons based on professional title. Future research can disaggregate SMHP perspectives by school level (e.g., elementary, middle, or high school) to inform context-specific recommendations. Given the absence of systemic barriers was not significantly associated with using a proactive plan of care in this sample, it is likely the resource barriers and sufficiency of Tier 3 presented more pressing concerns for participants at this time. However, results may change over time and depending on the sociopolitical context. Future research examining school administrator's perspectives on proactive plans of care for student MH and, more specifically, the MHAP Program is warranted to guide resource allocation and to begin addressing the barriers brought forth by SMHPs. Further clarification as to how Tier 3 MH services and a proactive plan of care (or MHAP) differ from special education services and an Individualized Education Plan could further clarify school priorities.

Conclusion

This study explored professional perceptions that were associated with SMHPs' likelihood of having a proactive plan of care for students in need of MH supports who are transitioning schools. Quantitative results suggested sufficiency of Tier 3 services, absence of resource barriers, and provider preferences for delivering intensive MH services were positively associated with using a proactive plan of care. Qualitative results supported these factors and also pointed to the impact of systemic barriers and viewing MH care coordination as important on supporting the idea of a proactive plan of care in schools. Neither quantitative nor qualitative results had meaningful findings regarding setting preferences. In summary, SMHPs indicated they require sufficient Tier 3 services, adequate resources, and SMHPs over community MH providers to coordinate SBMH services using a proactive plan of care.

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