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A Socioecological Needs Assessment of Alternative Learning Environments: Implications for Occupational and Mental Well-Being in School Settings

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Abstract

Alternative learning environments (ALEs) support students with complex behavioral, emotional, and social needs, yet only a small amount of research has examined their occupational and mental health needs using a socioecological approach. This study aimed to demonstrate the process of conducting a socioecological needs assessment in an ALE and identify needs from multiple stakeholder perspectives. A qualitative descriptive design was employed. Semi-structured interviews and focus groups were conducted with 24 stakeholders, including students, educators, counselors, administrators, and a dietitian. Data were analyzed thematically by stakeholder group. Four overarching themes emerged: *This School is a Shelter*, *We Believe in Resilience*, *We Work Well Together*, and *Every Student, Every Day*, with two additional subthemes. The findings revealed that ALEs are viewed as protective spaces that promote belonging and resilience, but they are also shaped by stigma, limited resources, and systemic barriers to participation. Students' perspectives emphasized both vulnerability and a strong desire for solidarity and belonging. The socioecological needs assessment process proved valuable for engaging diverse stakeholders and mapping barriers and facilitators across levels of the ecosystem. These findings highlight actionable directions for trauma-informed, interprofessional strategies that can strengthen occupational participation and mental health supports in ALEs.

Keywords: adolescents; alternative learning environments; mental health; needs assessment; occupational therapy; qualitative; related services; socioecological model; schools; youth

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1. Introduction

Alternative learning environments (ALEs) serve students who face significant academic, behavioral, emotional, or social challenges in traditional school settings (Ballard & Bender, 2022; Foley & Pang, 2006; Lange & Stetten, 2002; Porowski et al., 2014). While the demographic characteristics of students learning in ALEs generally reflect the surrounding community, a disproportionately high number are students with disabilities who often encounter barriers to educational participation and opportunities for social inclusion (Foley & Pang, 2006; Throckmorton, 2024). For instance, limited access to extracurricular opportunities in ALEs can restrict full participation in school life (Shamrova et al., 2024). Youth attending ALEs often have diverse educational backgrounds and needs, with varying levels of support at home (Foley & Pang, 2006). As a result, ALEs must respond to complex, layered student needs that often extend beyond the classroom and into broader social,

family, and systemic contexts. This complexity creates unique challenges for educators and service providers who must balance individualized support with structural limitations.

Students enrolled in ALE programs are at heightened risk of a range of concerns, including aggressive behaviors, suicidal ideation, inappropriate sexual behaviors, decreased physical activity, poor nutrition, and poverty (Johnson & Taliaferro, 2012). Educators and staff working to sustain ALE culture frequently report the need for additional sustainable resources and highlight the importance of relationship-based interventions that not only support students but also mitigate staff burnout (Johnson & Taliaferro, 2012). At the same time, research has identified notable strengths within ALEs, particularly the flexibility these programs provide (Miller, 2023). Flexible scheduling enables instruction to be tailored to students' academic, behavioral, and emotional needs while also supporting a range of pathways, including traditional coursework, workforce preparation, internships, hybrid learning, and both face-to-face and online instruction (Miller, 2023). These dual realities, characterized by heightened risks alongside unique strengths, demonstrate the need for research that captures the full ecological complexity of ALEs and informs targeted, holistic, systems-based approaches that emphasize robust community engagement in the implementation of sustainable interventions (UNICEF, n.d.).

Although ALEs are described using various terms across the United States and within school districts, their primary purpose remains consistent: to provide an alternative pathway for students who struggle in traditional environments (Lange & Stetten, 2002; Porowski et al., 2014). ALEs are frequently described as systems designed with specialized support; however, reports indicate that the demands placed on students and staff often exceed the available resources (Lee & Garwood, 2025). In these transitional and often vulnerable contexts, it is critical for school stakeholders to adaptively respond to the occupational needs of students, considering both internal and external factors that influence participation and success.

Although some studies have examined stakeholder perspectives, few have employed a socioecological lens that captures the interactions across multiple levels of influence (Shamrova et al., 2024). Hiratsuka and Heath (2024) demonstrated how Alaska's ALEs have implemented trauma-engaged educational practices and emphasized social–emotional learning as effective approaches to addressing the root causes of risk behaviors. Their findings highlight the importance of trauma-informed and holistic models and provide a foundation for extending this work. Building on this evidence, the present study aims to deepen the understanding of occupational and mental health needs in ALEs, informing the development of targeted, student-centered interventions.

This study reports on a socioecological needs assessment conducted within an ALE where students with behavioral and emotional challenges are overrepresented. Guided by the socioecological model (SEM) (Bronfenbrenner, 1977, 1986), we examined perspectives from multiple stakeholders, including students, educators, administrators, healthcare professionals, counselors, and school-based personnel. The SEM, originally conceptualized by Urie Bronfenbrenner, offers a framework for understanding how individual development is shaped by a series of interconnected environmental systems (Bronfenbrenner, 1977, 1986). These systems, ranging from immediate personal relationships to broader societal structures, are organized at nested levels with the individual in the center (Kilanowski, 2017). The SEM emphasizes that health and behavior are influenced not only by individual characteristics but also by the community and the social, physical, and political environments within which they exist (Kilanowski, 2017). This theoretical model supports a holistic view of human development and health outcomes through the dynamic interplay between individuals and their contexts.

The SEM offers a multilayered framework for understanding how individual, interpersonal, organizational, and community factors intersect to shape behavior and outcomes (Allen et al., 2016). This perspective aligns closely with occupational therapy's focus on the dynamic interaction between person, environment, and occupation (AOTA, 2020), providing a structure for systematically examining barriers and supports that influence occupational participation. Occupational therapy, with its emphasis on participation, context, and person-centered practice, is well-positioned to contribute to interprofessional support models in ALEs (American Occupational Therapy Association (AOTA, 2020)). However, there is limited research guiding occupational therapy practitioners, educators, and researchers in understanding and addressing the occupational and mental health needs unique to ALEs. Developing sustainable and collaborative interventions requires a comprehensive understanding of the ALE ecosystem.

Because ALEs are highly variable and context-dependent, and because the perspectives of diverse stakeholders have rarely been examined together, a qualitative descriptive approach was particularly appropriate for this study. This approach allows for a rich, low-inference description of stakeholder experiences in their own words, providing a pragmatic way to summarize the "who, what, and where" of complex phenomena (Sandelowski, 2000, 2010; Stanley, 2024). Qualitative description is well-suited for exploratory and applied studies in education and health professions research, where the goal is to generate actionable, practice-relevant knowledge rather than develop or test theory. It provides the flexibility to integrate multiple perspectives, stay close to participants' accounts, and produce findings that can directly inform interprofessional collaboration, program design, and policy within ALEs.

This study aimed to demonstrate the process of conducting a socioecological needs assessment in an educational setting and to identify occupational and mental health needs from a multi-stakeholder perspective. This work documents the assessment process and emergent needs, providing a replicable model for practitioners, researchers, and educators interested in engaging with ALE settings through a systems-informed approach. At the same time, by centering stakeholder voices within a socioecological framework, it generates insights to guide the development of responsive, interprofessional interventions in ALEs.

2. Materials and Methods

This study used a qualitative descriptive approach (Sandelowski, 2000; Stanley, 2024) informed by the SEM (Allen et al., 2016; Bronfenbrenner, 1977, 1986) to conduct a multilevel needs assessment within an ALE in a public school district in the South-Central region of the United States. A qualitative descriptive design was selected to obtain rich, straightforward accounts of participants' experiences and perceptions, emphasizing description over interpretation or theory development. This approach is particularly well-suited for applied research in educational and community settings, as it allows researchers to capture stakeholders' perspectives using participants' own language and to generate findings that are directly relevant to practice, policy, and program development (Sandelowski, 2000, 2010; Stanley, 2024).

The SEM served as a guiding framework throughout the study, shaping the selection of participants, the development of data collection tools, and the organization of the findings. The SEM conceptualizes human development and behavior as occurring within nested environmental systems, ranging from individual characteristics to broader societal influences, each of which can impact mental health and participation in school-based occupations. Guided by this framework, we purposefully included diverse stakeholders, such as students, educators, school-based professionals, counselors, administrators, and a dietitian, across the ecological levels: interpersonal, organizational, community, and

systems/policy contexts. These levels provided a framework for examining how relational, institutional, and structural factors influence student mental health and participation in daily school life (Allen et al., 2016; Kilanowski, 2017). Applying the SEM in this manner supports the development of contextually grounded and actionable insights, thereby enhancing the study's replicability in other educational settings.

2.1. Setting and Context

The study took place in an ALE program serving middle and high school students who have been referred to the program due to behavioral or academic concerns. The site was selected based on high rates of student disengagement, food insecurity, disciplinary referrals, and a demonstrated need for expanded mental health and related services. The ALE was located in a school district serving approximately 12,000 residents in the South-Central region of the Southern United States.

2.2. Participants

A total of 24 participants were recruited using purposive sampling to ensure diverse representation across stakeholder groups identified through the SEM.

ALE participants:

- Students: (n = 6; 3 male; 3 female). Enrolled in the ALE program and aged 13–18. All students were identified as lower to middle socioeconomic status, one identified as mixed race, one as Hispanic, and four as Caucasian.
- Staff (n = 4): Including a teacher, nurse, coach, and the program director.
- Other related professionals:
  - Counselors (n = 11): School-based mental health professionals working across the district.
  - Registered Dietitian (n = 1): Included due to concerns related to food insecurity and nutrition.
- Administration:
  - Administrators (n = 2): One at the district level and one at the ALE site.

All participants provided informed consent (and assent for minors), and the study received Institutional Review Board approval from University of Arkansas. The researchers had no prior relationship with the school or participants.

2.3. Data Collection

Data were collected on-site at the ALE through semi-structured interviews and focus groups, each lasting approximately 60–90 min. The SEM informed the development of the interview and focus group questions and guided the selection of diverse stakeholder groups across ecological levels. Interview prompts were designed to elicit perspectives on factors influencing student well-being and engagement across individual, interpersonal, organizational, community, and systems/policy contexts. For example, at the individual level, questions explored emotional, cognitive, and health-related changes observed in students transitioning between general education and ALE programs, along with intrinsic facilitators and perceived barriers to academic progression. The interpersonal level included prompts about peer relationship-building, overall student well-being, classroom structures, shared values, peer and family dynamics, support networks, and prevailing social norms. At the organizational level, participants discussed the ALE's structure, referral process, and collaboration across system levels. The community level focused on external counseling services, grant and donation protocols, the community's perception of the ALE, and vocational opportunities. Finally, the system/policy level addressed district goals, resource allocation, socioeconomic challenges, graduation pathways, and staffing

needs. Additionally, some questions were designed to understand the system for future intervention development. For example, teachers were asked about student nutritional needs and preferences related to project-based learning.

Semi-structured interviews were conducted with six students (n = 6) and a registered dietician. Students were interviewed individually to protect their privacy. These interviews focused on students' perspectives regarding their individual needs, relationships within the school, perceptions of its policies, support systems, graduation plans, and community engagement. Three focus groups were conducted with ALE Staff (n = 4), counselors (n = 11), and administrators (n = 2). Doctoral students with training in qualitative research conducted interviews and focus groups under direct faculty supervision. All sessions were transcribed in real-time by a researcher who was not conducting the interview or focus group.

2.4. Data Analysis

Transcripts were read, verified, and analyzed using thematic analysis (Braun & Clarke, 2006), a data analysis technique consistent with the most commonly used approaches in qualitative descriptive research (Doyle et al., 2020; Sandelowski, 2000, 2010). Two researchers read and organized transcripts by stakeholder groups to preserve contextual relevance. Two researchers independently conducted initial coding by inductively color-coding data line by line, allowing codes to reflect participants' language and meaning. Patterns were identified within each stakeholder group, and a preliminary codebook was collaboratively developed to capture emerging concepts across groups. The next round of analysis involved refining the codebook and defining themes, subthemes, and categories through an iterative process of discussion and review. Analysis was organized by stakeholder groups rather than SEM level, allowing themes to emerge within and across the different perspectives. To ensure trustworthiness and rigor, triangulation across stakeholder groups was employed. Peer debriefing occurred throughout the analysis process, and an audit trail was maintained. The research team met regularly throughout the analysis phase to discuss, verify, and confirm findings. Preliminary findings were shared with a subset of participants for member checking, contributing to the credibility of the interpretations. To broaden the interpretive lens and account for the research team's shared professional background, the authors invited an educator unaffiliated with the ALE and external to the research team to review the emergent themes and provide feedback on their coherence and relevance across educational contexts.

2.5. Positionality Statement

The research team self-identified as follows: GH, a Hispanic female; SR, a White female; LW, a White female; and JR, a White male. All members are occupational therapists, with SR and LW primarily engaged in clinical practice and GH and JR in academic settings. These social and professional identities informed their perspectives on education, mental health, and inclusion, and may influence how they interpret the experiences of participants. To mitigate potential bias, the authors employed reflexive practices (e.g., journaling, peer debriefing, team discussions) to examine their assumptions and ensure that participants' voices were prioritized throughout the research process. Given that all authors were occupational therapists, input from an external educator was also sought to offer an additional perspective and support a more comprehensive interpretation of the findings.

3. Results

Thematic analysis identified four overarching themes that reflected the multilayered influences on students' mental health and occupational well-being across individual, in-

terpersonal, organizational, community, and system/policy levels. Across stakeholder groups, the four major themes included: *This School Is a Shelter*, *We Believe in Resilience*, *We Work Well Together*, and *Every Student, Every Day*. Within *Every Student, Every Day*, two sub-themes emerged: *We Are Helpers* and *Everyone is Welcome Here*. Some themes, such as *This Place is a Shelter*, were evident across each level of the system, whereas *We Believe in Resilience* was primarily expressed by adults within the ecosystem. In contrast, *Every Student Every Day* and its sub-themes were most prominently voiced by students in the ALE. The last subtheme *Everyone is Welcome Here* further illustrates how policy, social stigma regarding ALE placement, previous experiences of adversity, and societal attitudes shaped the students' well-being and occupational participation needs. Together, these themes highlight the dual role of ALEs as both protective spaces and sites of stigma, revealing tensions between resilience, collaboration, and a sense of belonging.

This School is a Shelter

This theme reflects how participants conceptualized the ALE as a space that prioritizes protecting students' individual needs to foster student well-being. Across interviews, the ALE was described as a place where students could experience physiological, emotional, and academic safety. ALE staff, other related professionals, and administrators emphasized that the ALE provided safe and secure shelter for students. One related professional shared that a student had said, *"This is my safe place."* Another one shared the importance of addressing student food insecurity, stating, *"They need to be fed. I think there's a lot of food insecurity in the kids' homes."* Fatigue was also mentioned as a concern, with an ALE staff member sharing, *"I've always tried to figure out why they're sleeping in class. You never know what happened the night before."*

Beyond physiological needs, participants emphasized their responsibility to meet the students' basic needs, which are conducive to psychological safety. One related professional mentioned, *"We have a clothing closet. . .they routinely come in, and some are embarrassed and inappropriately dressed."* Interpersonal relationships and fostering motivation were also important to promote student safety within the ecosystem. For example, an ALE staff member shared, *"We have to get to know them before we get on to them."* Students preferred the ALE setting over the traditional environment. One student shared, *"I don't wanna be home on days off,"* and another shared their reason for liking it: *"It's easier to focus in here."*

The commitment to protect students extended to administrators. One administrator explained the importance of staffing decisions, *"Students feel safe and comfortable; this is a safe person for me. They feel that connection."* They also discussed the extent of their efforts to protect students from the influence of the community's perception of the ALE, *"Changing the name to a new school name has helped. It's more non-traditional. The perception change is good for the program. I think we've seen the change in the students as well."* Adult participants described a range of challenges that they protected the students from. One administrator summarized, *"Common needs in the students at the ALE: Food, clothing, post high school plan, pregnant students. A lot of issues we have in society go back to the family core. It's been weakened over the past few generations. Some of the family core is there physically- but might not be mentally or emotionally."* Altogether, this theme underscores the emphasis placed on protecting students, which is reflected in the students' stated preference for the ALE environment due to its academic flexibility and social opportunities, which enhance their mental well-being and academic progress.

We Believe in Resilience

This theme reflects a strong belief among adults that students possess the resilience to overcome adversity and achieve success. For example, a member of the ALE staff stated, *"We go by what the state says, yes, we require less credits, but they graduate despite everything*

going on at home." Codes such as "empowerment" and "voice" revealed that the adults in the ecosystem valued the inherent capacity of each student to succeed in life and desired to facilitate students' personal connections to the community. A related professional shared, *"They can go out into the world and make healthy connections and understand where their healthy boundaries are. . . .it's ok to say no. It doesn't have to be your story; you can get out of a cycle. I want to give them the tools to get out of it {poverty}, abuse, whatever it is. Persevere. Stay persistent."* Another one shared their perception of the long-lasting impact of empowering one student, *"Every time you have a positive impact on a child, that triples and trickles down."*

Among the challenges shared, access to external resources was a prominent concern. An ALE staff member acknowledged, *"We have the dream team, but we need community and district support. . .We have had to call security over for crisis situations. We need a therapist on staff at all times here that any student could talk to."* Administrators' beliefs echoed those of other participants: *"The ALE students deserve everything that other students receive."* Adding, *"The ultimate goal is to see them go back to regular school, but a lot of them go from struggling to thriving while at the ALE. They don't want to go back to regular school, and we don't want to push them out."* In contrast, students' narratives revealed uncertainty and self-doubt, suggesting a gap between how resilience is envisioned for them and how they experience it in daily life. One student shared, *"I do not feel confident in anything I do. I just do it anyway."* Thus, revealing that despite the shared belief in resilience, the ecosystem required additional support to reduce staff overwhelm and positively influence students' self-concept.

We Work Well Together

Collaboration was widely recognized as a cornerstone of student success in the ALE. Initial codes such as "togetherness," "shared work," and "shared goals" emerged, illustrating the collective efforts of the participants. Across stakeholder groups, adult participants emphasized the importance of teamwork, describing how the system adapts to meet students' needs. An ALE staff member explained, "*When they come here, it's usually because they feel like they're in a hopeless situation. This place gives them hope to catch up/graduate with peers. We have the ability to adjust/adapt to whatever needs to happen to make these kids successful*."

Interpersonal relationships and adaptability were vital to the ecosystem's success and students' well-being. An ALE staff member described the students' loyalty toward them, *"The kids have your back as far as the staff goes. They respect us even to the point of almost getting into a fight. They're loyal."* On the other hand, students expressed loyalty toward their peers: "*We are all in this together."* A related professional described collaboration with teachers in the traditional middle school environment, and administration, *"The assistant principals and the counselors take every role that teachers don't. . .elementary does the social emotional learning. When the principal is out, we are the one that they call. . .grief, anxiety, divorce, depression. . .short term."* Relationships between the ALE staff and the community played a vital role in meeting the students' needs. One staff member shared, "*Community is great at supporting us, if we reach out to someone they (the students) are gonna get what they need."*

Nonetheless, organizational perspectives varied regarding collaboration across stakeholders in the ecosystem. While internal collaboration (among those considered peers) was strong, external collaboration (across stakeholder groups) was uneven. One related professional shared feeling understood by their peers, *"They understand that I am stretched thin."* Meanwhile, an ALE staff member recognized, "We *need more help here."* At the organizational level, challenges managing operational needs, student, and teacher well-being were noticeable: *"Something we struggle with. . .still. The ALE placement and the administration become disengaged. How can we form that relationship due to the constant disconnect? It has always existed. We want them (traditional school educators) to always be worried about them. There needs to be more of a bridge in that gap (between the main campus and the ALE). We struggle with administration being busy."* Another administrator echoed the multi-faceted influences

creating this dichotomy: *"We are constantly putting out fires; your job is to run a district and meshing together. Whether it is small or big, we solve problems all day. You show up thinking you are going to do x,y,z, and we don't because two new tasks are more important. We're growing. . .funding is never enough to meet more students' needs, more staffing, and more classrooms."* Notably, this theme highlighted the systemic challenges in working effectively across ecosystem levels that affect stakeholders' well-being.

Every Student, Every Day

This theme reflects a shared commitment to ensuring that ALE students are supported, respected, and given opportunities for success on par with peers in traditional school settings. Initial codes like " transparency" (prominent among ALE staff), and the presence or absence of "stigma," and "support" (revealed in perceptions of stakeholders outside the ALE) depicted their motivation to care for "Every Student, Every Day." This theme and subthemes encapsulate how prevalent stigma, historical paradigms, and perspectives regarding the ALE shaped the students' opportunities for success. This influenced the adults' desire to facilitate the students' success and perceptions in the community. Students in the ALE valued support, mutual respect, and transparency from both peers and teachers. Two sub-themes illustrate how this commitment unfolded in practice: *We are Helpers*, highlighting peer and professional support networks, and *Everyone is Welcome Here*, emphasizing efforts to challenge stigma and foster inclusion within and beyond the ALE.

We are Helpers

This subtheme highlights the reciprocity of needing and receiving help. To this end, adults valued being transparent with students about their own needs. An ALE staff member shared, *"They know a lot about us. We want to show the kids what it's really like. . .. They have shown more respect in me sharing my challenges."* Related professionals emphasized the importance of helping the students find their path after graduation: *"Taking them from survival mode to thriving mode. Want to put them on the right path, not just about the diploma where they can thrive and get engaged."* Students described relying on peers for food, academic, and social support, with one noting, *"I am glad that we could help, you should not be embarrassed (to ask for help)."* However, they also shared instances of feeling disrespected outside the ALE setting, expressing dislike, *"(I) very much value respect and loyalty (among) family and teachers (here)."* At the organizational level, one administrator shared the approach to helping students: *"We have a career-tech emphasis. We went for years with the mindset to push to college. It's now about pushing them towards a career. . .welding, nursing, dental hygiene. It helps them find a path."* They also emphasized how staffing priorities foster students' well-being and the challenges experienced with staffing, *"Personality and mindset is what makes the right person for the ALE. We want to put the right staff there, but we need staff that wants to be there."* This subtheme encapsulates the shared value of recognizing and helping meet ALE students' needs among all participants and the challenges encountered.

Everyone is Welcome Here

This subtheme captures the tension between feelings of belonging within the ALE and the stigma associated with it outside. Participants described the ALE as a space where meaningful relationships could emerge, while acknowledging the perceptions of the broader community. One participant reflected on their shift in perspective after joining the ALE staff, *"Before I was in general education and working with decently wealthy people. I didn't see these people in my bubble. I didn't see these kids with horrible home lives. This (working here) is good for me."* Another ALE staff member shared their desire to provide a support network for the students noting, *"parents and kids feel better about showing up (with the new school name),"* pointing to their role in welcoming the students. Administrators expressed

challenges encountered with community outreach. One stated, *"I'm not sure that 20 people in the community know about the ALE space,"* while another added, *"I think it is important for the community to have knowledge (of the ALE). The volunteer hours (the students complete in the community) are a part of . . . letting (the ALE) be a part of the community."* This reveals tension between internal belonging and ongoing efforts to integrate the students into the broader community. While the adults sought to promote welcoming experiences within the community, students expressed feelings of vulnerability and shame when accessing available resources, such as the food pantry. A student shared, *"I cannot go home with food where people can see me. That's embarrassing."* Another student shared the weight of stigma from his community, *"Last year, I didn't have a steady home and got involved with the wrong crowd. I am glad we moved. This year, I will do better in school."* Summarily, although belonging was a strength in the ALE, external influences from the community presented a potential barrier.

4. Discussion

Informed by the SEM, our findings revealed insights into the multilevel influences exerted on the mental health and well-being of students attending an ALE. ALE staff and other related professionals reported commonalities in students' barriers to meaningful academic and vocational participation at the interpersonal level. These included challenges attaining academic proficiency, experiencing household or food insecurity, and limited consistency in accessing community mental health supports. These findings reaffirm the SEM's utility in understanding how nested social structures shape well-being but also extend it by demonstrating the fluid boundaries between interpersonal, organizational, and policy influences within ALE contexts. Likewise, at the organizational level, stakeholders identified the same environmental and policy factors that influence student success. Moreover, these inhibiting factors to meaningful participation were clearly reflected in the students' intrapersonal reports of poor self-concept and agency. This contrast between adult stakeholders' perceptions of students as "resilient" and the students' expressed lack of self-efficacy suggests a conceptual gap in how resilience is understood and operationalized within the ALE context. Adults viewed resilience as persistence through hardship, whereas students emphasized the immediate needs and self-doubt, indicating that resilience narratives may inadvertently obscure ongoing structural inequities.

While adult participants acknowledged the presence of stigma as a barrier, an important facilitator of success for the students was the multilevel desire expressed in the ecosystem to protect them from inhibiting environmental, societal, and policy influences. These findings were reflected in themes such as *This School is a Shelter*, *We Believe in Resilience*, and *Every Student*, *Every Day.* This duality illustrates the complexity of educational ecosystems wherein environments intended to offer safety also become marked as marginalizing within broader community discourses. Importantly, at the intrapersonal level, within the *Every Student*, *Every Day* theme, students predominantly reported a robust sense of group identity in the *We Are Helpers* and *Everyone is Welcome Here* sub-themes. Although an emphasis on collaboration was shared among adult peers, it did not extend across levels of the ecosystem. This uneven distribution of collaboration suggests the persistence of hierarchical silos that may limit authentic student participation in the decision-making process. Bridging this gap may require structural mechanisms that embed students as active contributors to school improvement and wellness initiatives (Lewallen et al., 2015).

While students acknowledged their experiences of adversity, they consistently expressed a desire for solidarity and a high regard for promoting a sense of belonging. This finding aligns with self-determination theory, which posits that relatedness is a fundamental psychological need and supports adaptive motivation (Ryan & Deci, 2020). However,

belonging in isolation did not always translate into self-efficacy, indicating that relational connectedness must be paired with opportunities for mastery and agency to support sustainable well-being. These findings are consistent with previous studies identifying the burden adversity places on adolescents' social and emotional well-being (Bevilacqua et al., 2021; Meeker et al., 2021; Wang et al., 2021) and illustrate the importance of providing intentional interprofessional social and emotional support in ALE settings (Whiting et al., 2025). Moreover, these findings align with international studies that similarly emphasized the socioecological complexities shaping students' well-being in alternative education settings in the United Kingdom and Australia (Best, 2024; Paterson-Young & Denny, 2022), affirming the need for holistic, integrated, system-based approaches (UNICEF, n.d.).

One of the aims of this study was to demonstrate the process of conducting a socioecological needs assessment in an educational setting. Findings demonstrate that such an assessment can be a valuable process for professionals working in ALEs and replicated in other school settings. This study contributes to the methodological literature by showing that an ecological assessment can reveal not only structural needs but also relational dynamics, such as the tension between safety and stigma. The process began by identifying relevant stakeholder groups across ecological levels and intentionally recruiting their participation to capture diverse perspectives. Semi-structured interviews and focus groups, informed by the SEM, provided a structured mechanism to elicit experiences from students, teachers, counselors, administrators, and related professionals. Thematic analysis of these narratives enabled the research team to map needs, barriers, and strengths within their ecological context and compare them across stakeholder groups, creating a layered picture of student well-being within the ALE. While effective in surfacing multilevel themes, this approach may underrepresent power asymmetries between adult and student voices or overlook temporal changes in stakeholder perceptions.

By systematically engaging stakeholders across ecological levels, the process highlighted how individual student needs are shaped by interpersonal relationships, organizational practices, community partnerships, and district policies. For occupational therapy practitioners and other school-based professionals, this approach offers a structured method for identifying barriers and strengths that impact participation and well-being. In occupational therapy terms, such ecological mapping parallels environmental and contextual analyses within models like the Model of Human Occupation (MOHO) and the Person-Environment-Occupation-Performance (PEOP), reinforcing the field's emphasis on context-driven intervention (Baum et al., 2015; Kielhofner & Burke, 1980). Focused on the intrapersonal level, practitioners and educators can utilize this process to help school-related personnel design individualized interventions that address students' academic, behavioral, cultural, social, and emotional needs within the context of their daily routines. Importantly, at the organizational, environmental, and policy levels, occupational therapy practitioners and other school personnel employing this same framework can guide program development, resource allocation, and advocacy efforts that address systemic barriers, such as limited access to extracurricular activities, accommodations, or insufficient mental health support, in ecosystems with a prevalence of adverse childhood experiences. This multilevel framework may also inform trauma-responsive policy reforms, targeting funding models, staffing ratios, and inclusive community outreach initiatives.

This model is especially useful in environments where factors at multiple levels must be addressed concurrently, as it encourages professionals to look beyond the individual and consider how institutional and systemic contexts contribute to student outcomes and educator and administrator well-being (Lewallen et al., 2015; Park et al., 2025; Steiner et al., 2022). Similar processes may also be applied to evaluate the effectiveness and sustainability of newly implemented programs (Hiratsuka & Heath, 2024). By embedding the SEM into

practice, clinicians may be better positioned to design contextually relevant interventions that are not only responsive to immediate student needs but also facilitate collaboration among school personnel to foster sustainable implementation of strategies within the broader ecosystem.

Multi-stakeholder perspectives identified inhibitors and facilitators relevant to academic and vocational success influencing the mental health and well-being of students attending an ALE. The students shared a robust sense of group identity, yet they lacked self-efficacy, a core finding of this needs assessment. This discrepancy suggests that while belongingness may serve as a protective factor, it is not sufficient on its own to foster self-efficacy, particularly when structural barriers remain. This may indicate that students' identities were shaped by heightened awareness of external influences operating at the environmental, policy, and organizational levels. Adverse experiences such as neglect, family instability, and substance misuse in the household linked to absenteeism influence the attainment of academic proficiency (Kearney et al., 2023; Scott et al., 2021) and may have contributed to the participants' self-concept. These findings underscore the need for teachers, administrators, peers, and other health-related personnel to provide consistent, scaffolded support to enhance cognitive and emotional competencies (Vygotsky, 1986). Other social and environmental external influences included household or food insecurity, unplanned pregnancies, adverse childhood experiences, lack of sleep, and cultural marginalization, which can influence cognition, emotion regulation, and prosocial behaviors, further impacting student self-efficacy, mental health, and school performance (Carroll et al., 2025; Duke, 2020; Scott et al., 2021; Watson et al., 2024). In practice, such experiences may diminish students' belief in their ability to succeed (Bandura, 1997), necessitating the provision of affirming feedback and realistic goal setting within the ALE (Tsang et al., 2012). Additionally, the identified need for enhanced communication and collaboration across stakeholders, as well as consistent access to community resources, highlights the urgency of creating integrated interprofessional teams. For example, the holistic focus of occupational therapists on self-awareness and self-management, combined with the emphasis of school psychologists and speech-language pathologists on effective communication and interpersonal relationships, could create system-wide programs to support the well-being needs identified in the *This School is a Shelter* theme (Whiting et al., 2025).

Key facilitators of student mental health and well-being across multilevel stakeholders included shared values of resilience, loyalty, group identity, justice, and a heightened awareness of the impact of adversity on the students' academic and vocational success. Within the ALE, students identified a mutual sense of identity with the teacher's past experiences of adversity, suggesting that lived experience may strengthen relational authenticity and credibility in these contexts. Aligned with socioecological perspectives, these dynamics highlight how interdependence can be constructed through shared experiences and values that reinforce a sense of belonging (Uchida et al., 2019), providing a foundation for student well-being. Mutual trust, bolstered by smaller teacher-student ratios, stronger relational bonds, and the inherent flexibility of ALEs (Miller, 2023), provides a solid foundation for implementing practical trauma-informed strategies across the ecosystem (Scott et al., 2021; SAMHSA, 2014). By situating these facilitators within a trauma-informed framework, our findings extend the literature by illustrating how values and shared experiences of adversity can be leveraged to strengthen safety, belonging, and self-efficacy at both interpersonal and organizational levels. Trauma-informed principles have been identified as effective in promoting safety, belonging, and self-efficacy across organizations (SAMHSA, 2014). Taken together, the results suggest that shared values and lived experiences of adversity may serve as critical facilitators of safety, belonging, and self-efficacy, thereby supporting sustainable approaches to student well-being across various ecological levels. These

findings suggest that trauma-informed strategies grounded in relational authenticity and ecological awareness may provide a scalable foundation for improving mental health and occupational participation among ALE students.

The findings from this assessment have several actionable implications for practice, research, and education across disciplines. For occupational therapy practitioners and related services, findings highlight the need to integrate trauma-informed care (Lynch et al., 2020), relationship-based strategies targeting partners in the community, and flexible programming focused on small peer groups for project-based learning to address the multi-layered needs of ALE students, enhancing identified needs in the *We Are Helpers* subtheme. More broadly, the SEM offers all school-based personnel a framework to guide team-based problem-solving and align support across roles. For example, school teams might use the SEM to develop a coordinated intervention plan for chronically absent students, addressing barriers at the individual (e.g., sleep, motivation), interpersonal (e.g., staff wellness), and community (e.g., family engagement) levels (Paterson-Young & Denny, 2022). Interprofessional collaboration among teachers and educational psychological services can draw on SEM principles to strengthen communication, identify cross-cutting needs, and implement consistent approaches to behavior, engagement, and mental health, with support from related services, such as occupational therapy practitioners and speech therapists (Bowers et al., 2024; Hallaråker et al., 2025). This collaboration may be operationalized through regular interprofessional meetings, shared goal-setting, and co-created strategies to support student participation across settings. Administrators can leverage these findings to inform resource allocation, staff training, and partnerships with external providers. Training initiatives should emphasize trauma-informed and equity-centered practices, particularly those aimed at reducing stigma associated with ALE placement and fostering inclusive school climates.

For research, this study demonstrates the value of using the SEM to explore complex educational ecosystems and calls for additional studies that evaluate interprofessional interventions within ALEs. Future research may employ longitudinal or participatory designs to track changes in student self-efficacy over time, examine the implementation fidelity of trauma-informed programs, or conduct cross-site comparisons to identify contextual differences. Finally, education and professional development for occupational therapy and other school-based personnel should highlight the unique contexts of ALEs, preparing practitioners to think at both the individual and systems levels. Collectively, these implications emphasize that advancing student well-being in ALEs necessitates a coordinated interprofessional effort.

Limitations

Several limitations should be considered when interpreting the findings of this study. First, the research was conducted at a single ALE site within one public school district in the South-Central United States, which limits the transferability of findings to other ALEs with different demographic, geographic, or structural characteristics. While efforts were made to include diverse participant perspectives, the sample size was relatively small, particularly among school-based personnel and students, and may not capture the full range of experiences within the ALE ecosystem. Although perspectives of the broader ecosystem were discussed by participants, the study did not directly include parents or community partners, whose insights may have provided important context on family engagement, resource access, and inter-organizational collaboration. Additionally, although the research team engaged in reflexive journaling and peer debriefing to enhance trustworthiness, their professional backgrounds in occupational therapy likely influenced data interpretation through the lens of their training, clinical experiences, and professional

values. However, to mitigate this concern, the authors engaged in member checking and utilized an outside educator to review the emergent themes and provide an additional perspective across the educational contexts.

Because this study relied on self-reported perceptions gathered through interviews and focus groups, responses may have been affected by social desirability bias or limited by participants' comfort in disclosing sensitive information. Finally, while the SEM provided a robust framework for examining multilevel needs, this approach may not fully capture the complex intersectionality of students' identities and experiences, particularly for those with overlapping marginalized identities. Future research should consider expanding this work across multiple sites and integrating longitudinal or mixed-method designs and observational data to fully understand how ALE systems evolve and how services can be sustained and adapted over time.

5. Conclusions

This study demonstrates that a socioecological needs assessment is a feasible and valuable approach for examining the complex ecosystem of ALEs. By engaging with multiple stakeholders, the process highlighted barriers and facilitators that shape students' occupational participation, mental health, and academic success. The findings suggest that ALEs function simultaneously as protective spaces and as settings constrained by stigma, resource limitations, and systemic inequities. Importantly, the perspectives of students revealed both vulnerability and resilience, emphasizing the need for interventions that cultivate belonging, self-efficacy, and relational trust. For occupational therapy and interprofessional teams, applying a socioecological lens provides a practical framework to design trauma-informed, contextually relevant strategies at the individual, organizational, and policy levels. Future efforts should extend this model across diverse ALE contexts, integrate longitudinal designs, and evaluate outcomes of interprofessional interventions to build sustainable, inclusive systems that promote student well-being.

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