Unlearning school attendance and its problems: Moving from historical categories to postmodern dimensions

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School attendance and its problems have been a focus of myriad stakeholders for over a century, which has led both to important advancements in this area as well as compartmentalized categorical approaches to explain at least part of the vast ecology of these issues. Recent seismic events and changes, however, have provided a unique opportunity to unlearn calcified notions of school attendance and its problems and to consider more inclusive paradigms. This article focuses on several categorical approaches that have been historically a focus of research, health-based clinical work, and educational and social policy in this area: defining school attendance problems, demarcating school attendance problems, subtyping school attendance problems, risk and protective factors for school attendance/problems, interventions for school attendance problems, and school completion. For each area, alternative dimensional approaches are discussed that are emerging from different disciplines and that may provide additional flexibility and comprehensiveness for avenues of endeavor relevant to a postmodern era. The article concludes with a call to abandon historical, discipline-specific, categorical silos in favor of a spectrum of postmodern, multidisciplinary systemic-analytic collaborations and shared alliances to better conceptualize and manage the full ecology of school attendance and its problems.

KEYWORDS
school attendance, school absenteeism, chronic absenteeism, truancy, unlearning, categories, dimensions

Introduction

School attendance and school attendance problems have been a focus of research, health-based clinical work, and educational and social policy for over a century (e.g., Kline, 1897; Klein et al., 2022). Such extended historical focus is due in part to the fact that school attendance is associated with myriad positive effects.
in key developmental domains (e.g., academic, social) for children and adolescents and that school attendance problems (absenteeism) are associated with myriad negative effects in these and other long-term (e.g., economic and health) domains (McFarland et al., 2018; Ansari et al., 2020). Such extended historical focus is also due in part to the fact that school attendance problems have long been recognized as highly complex and seemingly intractable phenomena (e.g., Broadwin, 1932; Eaton, 1979; Lenhoff and Pogodzinski, 2018).

Professionals from many different disciplines and perspectives have thus historically addressed school attendance/problems (SA/Ps) and adopted various frameworks to conceptualize these multifaceted issues. Key disciplines and perspectives include those from criminal justice, economics, education, medicine, policy, psychology, and social work, among many others. Key frameworks include those from systemic approaches, which tend to focus on overarching contexts and structural concerns, as well as analytic approaches, which tend to focus on specific contexts and individual concerns (Kearney, 2021). An important consequence of these varied approaches, however, has been gravitation toward compartmentalized efforts to try to best conceptualize and manage at least part of the vast ecology of SA/Ps. Such compartmentalization has been manifested most clearly, historically, by the use of discrete and sometimes calcified categorical styles regarding the conceptualization and management of SA/Ps (Kearney et al., 2019a).

Categorical approaches to conceptualizing and managing phenomena are often characterized by defined groups or entities that are distinguished from one another in specific, static, and qualitatively different ways (Coghill and Sonuga-Barke, 2012). These entities are ideally represented by clearly separate features and mechanisms (Owen, 2014). Natural scientific disciplines such as zoology often rely on well-defined categorical systems. Categorical approaches can have the advantages of clearly identifying the presence or absence of a phenomenon, communicating specific features of different subtypes, providing reliable means for potential evaluative measures, and facilitating practical decision-making processes (Esterberg and Compton, 2009). Categorical approaches can struggle to account for important sources of variance, however, and may apply less well to nebulous, heterogeneous, and asymmetrical phenomena (Hudzik et al., 2007). As mentioned, categorical systems have been historically applied in sundry though limited ways to help understand at least part of the vast ecology of SA/Ps, as is described in later sections.

Numerous seismic shifts in key human and societal elements and processes in recent years provide a unique opportunity to consider new paradigms with respect to SA/Ps. Health crises and advances in technology have compelled individuals and educational entities to communicate and share information differently, and across multiple settings (Huck and Zhang, 2021). In addition, changes in the nature and timeline of child education worldwide, away from memorization and standardization and toward a more personalized skills-based approach, even into emerging adulthood, allow for greater flexibility with respect to school curricula and school completion decisions (World Economic Forum, 2020). Furthermore, a renewed and intense focus on racial equity within various educational institutions is leading to better recognition of the fact that historical and biased school-based processes such as exclusionary discipline (e.g., suspension, expulsion, and arrests) as well as broader community processes outside of school contribute to SA/Ps and that such processes can actually be specific targets for intervention (Childs and Grooms, 2018). As various stakeholders navigate and adapt to these dynamic and fluid evolutionary changes, the potential exists for exponentially expanding the synthesis of systemic and analytic approaches to SA/Ps and implementing more inclusive conceptualization and management strategies for this complex issue. In essence, a special opportunity has arisen to unlearn traditional notions surrounding school attendance and school absenteeism.

One potential avenue for this unlearning process is greater consideration of dimensional approaches with respect to SA/Ps. In contrast to categorical approaches, dimensional approaches to conceptualizing and managing phenomena are often characterized by components on continua (Kotov et al., 2017). These components are typically general, fluid, and quantitatively different from one another (De Boeck et al., 2005). Social scientific disciplines such as sociology often rely on dimensional systems. Dimensional approaches can have the advantages of introducing flexibility to the notion of presence or absence of a phenomenon, communicating a fuller range of essential information, providing valid means to generate evaluative profiles, and allowing greater stakeholder input into decision-making processes (Narrow and Kuhl, 2011). Dimensional approaches can have drawbacks, however, that could include an excessive number of components on a given spectrum or lack of consensus regarding the components across different theoretical perspectives (Widakowich et al., 2012). Still, the malleability of dimensional approaches may be appealing for an unlearning process regarding SA/Ps, phenomena that differ tremendously in scope and nature across jurisdictions and geographical regions (Kearney et al., 2019b).

Dimensional systems may be a particularly useful mechanism for unlearning, conceptualizing, and managing SA/Ps in a postmodern era that will continue to be marked by the seismic and rapid changes noted earlier. The purpose of this article is to outline and critique various historical categorical approaches to conceptualizing and managing SA/Ps and to provide alternative dimensional approaches that are emerging from different disciplines and that can be used to better inform categorical approaches. Categorical approaches include those more narrow (e.g., subtypes) as well as those more broad (e.g., school completion) in nature. Areas of emphasis include defining school attendance problems, demarcating school
attainment problems, subtyping school attendance problems, risk and protective factors for school attendance/problems, interventions for school attendance problems, and school completion. The article concludes with a call to abandon historical, discipline-specific, categorical silos in favor of a spectrum of postmodern, multidisciplinary systemic-analytic collaborations, and shared alliances.

Defining school attendance problems

Historical categories

Perhaps the most fundamental historical categorical distinction with respect to SA/Ps is definition via a student’s physical presence or absence in a particular physical school building on a particular day (Gentle-Genitty et al., 2020). This dichotomous metric is itself commonly used to differentiate categories such as non-problematic versus problematic absenteeism and to differentiate categories such as problematic absenteeism versus chronic absenteeism (see also next section). This metric is also commonly used in many countries to inform educational policy, early warning systems, and school-based interventions with respect to non-attendance, and is commonly used by researchers with respect to investigations of risk factors, developmental trajectories, and clinical interventions regarding school absenteeism (e.g., Karlberg et al., 2022). Physical presence or absence in a school building as a metric has several advantages such as feasibility, practicality, comparability across settings, amenability to a centralized data collection system, and applicability for assessment/evaluation and treatment/intervention purposes (Moodley et al., 2020).

Researchers and other stakeholders, however, recognize important limitations of this traditional definitional metric. School attendance data suffer from problems of reliability, construct validity, and integrity (Kearney and Childs, 2022). The data often differ across informant sources, ignore the many multifaceted aspects of school non-attendance, and are easily subject to corruption from caregivers and schools (Keppens et al., 2019; Gentle-Genitty et al., 2020). Overreliance on presence/absence from school also neglects the fact that many students worldwide now receive education in hybrid, home-based, and virtual formats where attendance is difficult to track (e.g., Childs et al., 2022; Havik and Ingul, 2022). In addition, presence/absence from school has been used historically by many educational and other entities for punitive purposes, particularly for minoritized students, by excluding from school those with other challenges (e.g., behavioral, academic; Mireles-Ríos et al., 2020), by applying legal and other sanctions for absenteeism disproportionately to vulnerable populations (Conry and Richards, 2018), and by penalizing students who are late to school or who miss school for reasons outside of their control (Chang, 2018). Presence/absence from school is also commonly framed as part of a deficit narrative that places substantial burden and blame on families to remediate school attendance problems even in cases where the problems are beyond their control (Martin et al., 2020; Kearney et al., 2022).

Postmodern dimensions

A dimensional perspective of SA/Ps in a postmodern era would increase focus on (1) broader and more flexible definitions of SA/Ps as well as (2) a continuum of school attendance problems based on degree of severity. With respect to definition, for example, Patrick and Chambers (2020) redefined SA/Ps as time on task, participation or evidence of student work, and competency-based attainment with demonstrations of knowledge and skill-building. Kearney (2021) redefined SA/Ps as involvement in teaching and learning practices that augments or subverts the prospect of school completion. With respect to a continuum of school attendance problems based on degree of severity, key components could include not only full-day absences but also premature departures from a school campus, partial attendance, skipped classes, tardiness, morning misbehaviors designed to miss school, school-based distress that interferes with social and academic performance, and other school attendance problems (Kearney, 2019). Related spectra can include collecting attendance data at multiple points during the day (and year) and reconfiguring definitions of attendance, especially for virtual learning, with respect to log-ins, number of hours per day, student-teacher interactions, completed assignments and timelines, and measures of achievement, competency, and mastery of skills and knowledge (National Forum on Education Statistics, 2021).

These reconceptualizations move away from an historical emphasis on physical location and toward dimensions of school engagement such as behavioral, cognitive, and emotional investment in academic achievement that could be informed by impairment (next section; Estévez et al., 2021). These reconceptualizations also allow for greater emphasis on a spectrum of personalized instructional formats and techniques that are part of many new educational experiences outside of a physical building. This spectrum can include its own blend of dimensions with respect to (1) in person; hybrid/lab-based; virtual learning; (2) synchronous and asynchronous learning; (3) service/experiential-based and community-based learning; and (4) educational advances related to new learning paradigms that could include, for example, artificial intelligence or augmented reality (Maas and Hughes, 2020). In addition, dimensional reconceptualizations for defining SA/Ps allow school personnel, health-based practitioners, researchers, and other stakeholders to leverage opportunities to glean valuable nuanced information about patterns of student non-attendance on an individual and grander scale (Mahoney, 2015;
Demarcating school attendance problems

Historical categories

Another fundamental historical categorical distinction with respect to SA/Ps involves the use of demarcations, often based on frequency of physical school absence, to define or differentiate levels of absenteeism. Most relevant to this section is use of a cutoff (e.g., percentage of days absent) to demarcate a qualitative difference between (1) non-problematic and initially problematic absenteeism as well as (2) initially problematic absenteeism and chronic absenteeism. Those from an analytic perspective often emphasize the former distinction, especially when deciding whether a particular case of absenteeism has become clinically significant and in need of treatment (Maynard et al., 2018). Researchers from an analytic perspective of SA/Ps often utilize school attendance (physical presence/absence) as a primary outcome variable as well (Heyne et al., 2020). Those from a systemic perspective often emphasize the latter distinction, most commonly defining chronic absenteeism as 10% of school days missed (U.S. Department of Education Office of Civil Rights, 2016). In addition, various jurisdictions use specific numbers of days missed from school to delineate illicit truancy and thus some administrative or legal sanction or other response (Conry and Richards, 2018). Many educational agencies utilize this cutoff as well to meet requirements for accountability expectations (Jordan and Miller, 2017).

Problems with demarcations based on frequency of physical school absence intersect, of course, with the reliability, construct validity, and integrity problems noted earlier with respect to school attendance data. More specific to demarcations is the fact that little if any empirical data support a particular cutoff (Kirksey, 2019). In fact, little consensus is evident across analytic and systemic research studies with respect to what constitutes a clear distinction to determine problematic absenteeism and to determine chronic absenteeism. Machine learning approaches for large data sets instead reveal a wide range of demographic, family, academic, symptom, and other variables predictive of different levels of absenteeism severity (e.g., Skedgell and Kearney, 2018; Fornander and Kearney, 2019; Bacon and Kearney, 2020). In addition, cutoffs tend to minimize key differences between student groups and ignore more subtle differences; a dominant student group at a school may be largely present (e.g., 95%) whereas a minoritized group may be less present (e.g., 70%), but the overall school attendance rate (90%) could be considered non-problematic and not in need of intervention (Gee, 2018). Other nuanced variables are minimized as well, particularly circumstances beyond a family’s control such as transportation vulnerability and lack of safe routes to and within schools, as well as situations where school absence is an adaptive choice for a student (e.g., to support a family economically) (Birioukov, 2016; Pyne et al., 2021). In related fashion, cutoffs are typically used for punitive purposes and are not generally linked to specific restorative interventions, particularly for vulnerable students who must overcome multiple daily challenges simply to maintain semi-regular attendance (Hutt, 2018). In addition, students below a particular cutoff but who are still struggling academically or otherwise may be neglected altogether. Demarcations also fail to consider the fact that many students miss school but still function well academically due to other support systems (Henderson and Fantuzzo, 2022).

Postmodern dimensions

A dimensional perspective of SA/Ps in a postmodern era would focus on a more well-informed approach for a given case of school absenteeism that considers relevant contextual factors. One avenue to pursue in this regard involves degree of functional impairment. Functional impairment refers to “ways in which symptoms interfere with and reduce adequate performance of important and desired aspects of a child’s life” (Rapee et al., 2012, p. 455). School attendance problems (“symptoms” in this case) can cause different levels of impairment for students that may be unrelated to absenteeism severity. Kearney (2022) outlined recommendations for functional impairment guidelines for this population that emphasized school, social, and family domains of functioning. With respect to the school domain, impairment from school attendance problems can depend on the timing of absences (potentially more impairing earlier in a school year, during critical evaluation periods, or during a particular grade), interference in academic competence (potentially more impairing if grades or academic skills are significantly affected), and administrative or legal action that impedes future attendance (potentially more impairing if a school delays academic/transportation assistance or uses exclusionary discipline for absenteeism). With respect to the social domain, impairment from school attendance problems can depend on interference with social competence (potentially more impairing if communication or emotional regulation skills erode), interference with interpersonal relationships (potentially more impairing if peer or teacher avoidance occurs), and enhanced risk of harm to others (potentially more impairing if greater antisocial or risky behavior occurs). With respect to the family domain, impairment from school attendance problems can depend on interference with daily functioning (potentially more impairing if transportation and daily routines are
disrupted), significant maladaptive changes in family dynamics (potentially more impairing if greater conflict occurs), and substantial cost to family members (potentially more impairing if caregivers must miss work or pay for child care or sanctions).

Researchers have generally linked variables such as timing of absences, family environment (e.g., conflict), and exclusionary discipline to greater impairment for students with school attendance problems (Olson, 2014; Mallett, 2016; Forndater and Kearney, 2019). More specifically, González and colleagues (González et al., 2019b) found that various aspects of functioning (school performance, peer relationships, family relationships) were inversely related to different kinds of school attendance problems. In addition, González and colleagues (González et al., 2019a) examined different profiles of students, finding that students with fewer school attendance problems scored higher in school performance, peer relationships, family relationships, and house duties/self-care than students with greater school attendance problems.

A key advantage of utilizing dimensions of impairment is that assumptions regarding the cause of impairment are minimized or eschewed altogether, thus helping to negate a deficit narrative by considering the possibility that, in many cases, external forces contribute substantially to school absenteeism (Childs and Scanlon, 2022). In addition, use of dimensions of impairment requires a greater focus on attendance rather than on absenteeism as well as better recognition of the fact that many students who face considerable challenges getting to school are resilient and still function well (Gentle-Genitty et al., 2020). The practice of punishing children for attending school may thus be unlearned in a postmodern era.

### Subtyping school attendance problems

#### Historical categories

A related fundamental historical categorical distinction with respect to SA/Ps involves subtypes of school attendance problems generated from both systemic and analytic perspectives. A common goal of developing subtypes is to explicate different causes of, or reasons for, school attendance problems, ideally for appropriate intervention responses. From a systemic perspective, broad categories of school absence have been proposed with respect to disciplinary action, family activity, family emergency/bereavement, illness, legal/judicial requirement, non-instructional activity, religious observation, skipping school, student employment, unavailable transportation, and unknown reasons (National Forum on Educational Statistics, 2018). Another commonly used category of school absence involves excused/unexcused absences. This dichotomy (also sometimes noted as involuntary/voluntary, authorized/unauthorized, or unavoidable/avoidable) generally refers to (a) “legitimate” instances of school non-attendance (e.g., illness, weather, parent consent) not necessarily under child/family member control and (b) “illegitimate” instances of school non-attendance (e.g., unlawful, willful absences) that are not administratively excused (Birioukov, 2016; Rocque et al., 2017; Lee et al., 2020). Note that substantial variation exists in how this dichotomy is defined.

From an analytic perspective, numerous distinctions for SA/Ps based on clinical subtypes and psychiatric diagnoses have been developed historically (e.g., Coolidge et al., 1957; Finning et al., 2022). Common clinical subtypes for this population include school refusal (neurotic or anxiety-based absenteeism), truancy (delinquent-based absenteeism), school withdrawal (caregiver-instigated absenteeism), and school exclusion (school-instigated absenteeism), among many others (e.g., Havik et al., 2015). Common psychiatric diagnoses used to categorize different types of school attendance problems include phobic (fearfulness), mood (depression), anxiety (especially generalized, separation, social), and disruptive behavior (conduct, oppositional defiant) disorders, sometimes whether comorbid with one another or not (Bernstein and Garfinkel, 1986; Atkinson et al., 1989; Last and Strauss, 1990). Difficulties attending school remain ensconced as a core symptom of separation anxiety and conduct disorders in current psychiatric taxonomies (World Health Organization, 2019; American Psychiatric Association, 2022). Analytic categorical distinctions for SA/Ps are often supposedly marked by the presence of a key feature (e.g., anxiety, certain kind of comorbidity), the absence of a key feature (e.g., antisocial behavior), or a forced choice option (e.g., identified instigator of a school attendance problem) that makes each one, ostensibly, a unique entity amenable to a personalized treatment strategy (e.g., Berg et al., 1969; Heyne et al., 2019).

Systemic, clinical, and psychiatric subtypes for school attendance problems generally lack strong psychometric support with respect to reliability and validity and/or cover only limited percentages of SA/P cases (Kearney, 2001, 2021). This is primarily due to the heterogeneous nature of school attendance problems that are typically characterized by considerable fluidity, comorbidity, and opacity (Chen et al., 2016). Linking various categorical subtypes to differential, prescriptive, empirically-supported interventions or treatments remains an elusive task as well (Elliot and Place, 2019). In addition, categorical subtypes are not uniformly used across disciplines and can be confusing (e.g., school “refusal” as anxiety rather than oppositional based) for lay persons, school personnel, and other stakeholders (Mauro and Machell, 2019; Brault et al., 2022). Subtypes for school attendance problems can also generate pernicious and stigmatizing labels for students and their families. Martin et al. (2020) found that school officials often pejoratively viewed vulnerable absentee students as truant rather than pursue a more accurate mental health-based conceptualization and remediation process. This applies to
the use of the term “unexcused absences” as well, which can erroneously and disparagingly signal deviance and which is not always indicative of student achievement problems (Donat et al., 2018; Klein et al., 2022). Unexcused absences also tend to be disproportionately and unfairly assigned to vulnerable student groups (McNeely et al., 2021). Traditional categories of school attendance problems also convey little nuanced information and often fail to provide information about the complex root causes of school absenteeism in a given community (Patnode et al., 2018; Childs and Lofton, 2021).

Postmodern dimensions

A dimensional perspective of SA/Ps in a postmodern era would focus on empirically-based and nuanced profiles to better inform categories and allow for more localized and complete information that can be used optimally for targeted intervention purposes. At a systemic level, such profiles could be used for a root cause analysis of school absenteeism problems, particularly in communities with high levels of chronic absenteeism (Lenhoff et al., 2020). Algorithm-based modeling, for example, has been used to pinpoint a profile of factors (e.g., residential movement) closely related to chronic absenteeism in a given community to identify targets for immediate intervention (e.g., more timely school reassignments) (Deitrick et al., 2015). Others have utilized large-scale data analytic strategies to identify profiles of community-specific, absenteeism-related factors such as food insecurity, exclusionary discipline, and use of emergency medical services that can translate into interventions such as school-based meals, arrest and court diversion, and universal screening for mental health and substance use problems (Baldwin et al., 2015; Chu and Ready, 2018; Coughenour et al., 2021). Profiles more specific to certain schools, classrooms, and student groups can be generated as well. Ideally, these types of analyses would also allow for more stable early warning systems that are valid for particular student groups in a given community and thus lead to more immediate and targeted intervention as needed (Newman et al., 2019). Information to be fed into these derived profiles could be dimensional in nature as well, including continua components within existing categories (e.g., illness severity). Such information will also require a focus on disaggregated data from multiple agencies and systems to assess for individual variation and clarify underlying causes and disparities regarding school absenteeism (Dougherty and Childs, 2019; Teasley and Homer, 2020).

At an analytic level, dimensional clinical profiles may be useful for informing broad categories. González and colleagues have been a leader in this approach, having investigated numerous clinical profiles of school attendance problems based on social and school anxiety, self-efficacy, self-esteem, and negative affect, among other variables (e.g., González et al., 2019b, 2020, 2021). In addition, Kearney and colleagues have developed functional-based clinical profiles of school attendance problems based on the relative strength of maintaining factors related to negative and positive reinforcement (e.g., Kearney, 2007, 2019). González and Kearney have combined these approaches as well, identifying profiles of clinical symptoms linked to different functional conditions (e.g., González et al., 2018). These profiles have the advantage of providing detailed information for clinicians and others that address this population via efficient assessment and prescriptive treatment practices (Maynard et al., 2018). In addition, the data analytic strategies used in these studies (e.g., latent class analysis, structural equation modeling) allow for similar examination of clinical data across different geographical regions to identify culture-specific profiles (e.g., Diaz-Herrero et al., 2018). Such clinical profiles can also reduce the negative effects of labeling, though care must be taken to fully consider possible broader contextual variables (e.g., transportation vulnerability) so as not to assign unwarranted blame and burden on students and their families with a particular school attendance problem. Clinical profiles must not contribute unfairly to a deficit narrative in this regard (Kearney and Childs, 2021). Clinical profiles must also be considered within a dimensional spectrum of self-corrective, acute, and chronic school attendance problems; such profiles tend to be more salient and appropriate for acute (i.e., less than one calendar year) school attendance problems (Kearney and Albano, 2018).

Risk and protective factors for school attendance/problems

Historical categories

Researchers from systemic and analytic perspectives have long investigated risk factors for school attendance problems as well as factors that may protect against such problems. Risk and protective factors have been historically examined in categorical and circumscribed fashion, often with a separate focus on child, parent, family, peer, school, community/neighborhood, or macroeconomic and other broader factors (Gubbels et al., 2019). Examples of risk factors: developmental disorder, poor health, substance use (child-based); ineffective caregiving style, low school involvement, psychopathology (parent-based); conflict, residential movement, stressful transitions (family-based); low social support; proximity to deviant peers, victimization (peer-based); exclusionary discipline, lack of safety and academic support, poor climate (school-based); lack of access to care, school closures, neighborhood violence (community-based); education deprivation, migration, structural economic inequalities and racism (broader-based) see Kearney (2016); Gottfried and Hutt (2019). Conversely, protective factors can include those at student (e.g., academic engagement), parent (e.g., involvement in education), and societal levels (e.g., systemic support from schools and communities).
norms), school (e.g., positive student-teacher relationships), and community (e.g., participation in service programs) levels (Zaff et al., 2017).

Stakeholders from various perspectives tend to concentrate on one set (category) of risk (and versus protective) factors for school attendance problems (Kearney, 2021; Singer et al., 2021). A consequence of this approach is a bifurcated view of SA/Ps that tend to be narrowed to categories of either (1) broad, systemic factors, especially for geographical areas with very high school absenteeism rates, with a corresponding de-emphasis on proximal variables such as parental involvement, or (2) granular, analytic factors, especially for individual cases of school attendance problems, with a corresponding de-emphasis on distal variables such as structural economic inequalities. The plethora of disciplines investigating SA/Ps and the need to help explain at least part of the vast ecology of SA/Ps makes this forked approach understandable from a historical viewpoint. Unfortunately, such an approach impedes grander theories of SA/Ps that consider the entire ecology relevant to this population. As such, evaluation and intervention avenues can be restricted as well (Nation et al., 2020). In related fashion, “blame” for school attendance problems can fall disproportionately either on societal systems or on students and their families, and typically the latter (Baskerville, 2021; Grooms and Bohorquez, 2021).

Postmodern dimensions

A dimensional perspective of SA/Ps in a postmodern era moves beyond siloed approaches and focuses on spectra of risk and protective factors that could include linkages of (1) upstream and downstream factors as part of developmental cascade models and/or (2) various ecological levels examined concurrently as part of proximal-distal models. Developmental cascade models involve spectra of upstream risk and protective factors linked to downstream risk and protective factors that may lead to (or prevent) a particular outcome (Hentges et al., 2019). A sample risk cascade for SA/Ps may include early upstream factors (e.g., poverty, lack of access to preschool or psychoeducational assessment services) intersecting with later downstream factors (e.g., residential relocation, lack of home- and school-based supports, peer victimization) that create the stage for possible academic, social, and behavioral problems and/or school disengagement that can elevate risk for school attendance problems. Protective variables in this cascade (e.g., early intervention, tutoring) could help blunt the possibility of later school attendance problems. In similar fashion, ecological models along the classic Bronfenbrenner approach involve a spectrum of relationships involving microsystem (immediate, proximal), mesosystem (interconnections among microsystems), exosystem (interconnections among social systems), macrosystem (geographical, cultural, and community contexts), and chronosystem (transitions over time) influences that simultaneously impact a particular phenomenon (Hertler et al., 2018). A sample ecological model of SA/Ps could involve concurrent considerations of caregiver responses to a child's behavior and school attendance problems (microsystem), parent-school official interactions to address these issues (mesosystem), school climate, safety, and educational policies (exosystem), structural economic inequalities, transportation challenges, and racism (macrosystem), and changes in these systems as a child moves into middle and high school (chronosystem). Protective variables in this model (e.g., mentoring, housing support) could occur at each level of influence as well. In these approaches, any discussion of SA/Ps thus requires an examination of both systemic and analytic variables.

Longitudinal studies can inform cascade models of SA/Ps. Such studies have revealed patterns as children move from preschool to elementary school (e.g., lower levels of school readiness to chronic absenteeism; Ehlrich et al., 2018); from elementary school to middle school (e.g., increased school disengagement and declining grades to absenteeism; Schoenberger, 2012); and from middle school to high school (e.g., increased psychopathology to absenteeism; Wood et al., 2017). Others have examined longitudinal patterns for SA/Ps with respect to disabilities, emotional difficulties, and academic achievement, among other variables (e.g., Chen et al., 2016; Smerillo et al., 2018; Panayiotou et al., 2021). In addition, application of an ecological system model to SA/Ps has burgeoned in recent years. Such application has included student agency, health, and mobility (Stempel et al., 2017; Welsh, 2018; Kipp and Clark, 2021), school-community collaborations (Childs and Scanlon, 2022; Lenhoff and Singer, 2022), and intervention scope and fit (Sugrue et al., 2016; Melvin et al., 2019), among other areas.

Interventions for school attendance problems

Historical categories

Interventions to enhance school attendance and/or reduce school attendance problems have historically involved those directed either toward schools and their communities more generally or toward students and their families more specifically (Kearney, 2021; Eklund et al., 2022). Systemic or school-based interventions include broad strategies to improve climate, safety, health, physical/mental health support, and academic and life skills in addition to social services that can be facilitated at a school setting (Keppens and Spruyt, 2020). In addition, interventions have been crafted to address communities that surround schools with high chronic absenteeism rates, with a focus on food and housing
insecurity, transportation challenges, digital divides, and other barriers to school attendance (Montoya-Avila et al., 2018). However, as mentioned earlier, many systemic, school-based "interventions" for school attendance problems tend to be punitive and not restorative in nature (Weathers et al., 2021). Analytic or student/family-based interventions include cognitive-behavioral, contingency management, and family therapies to improve emotional and other mental disorders, caregiver responses, and problematic communication and problem-solving abilities that may be interfering with school attendance (Maynard et al., 2018). Interventions have also been crafted to address ancillary challenges that surround students and families with school attendance problems, with a focus on family-school relationships, academic assistance, psychoeducational assessment, and other targets (Smith et al., 2020).

As with risk and protective factors, researchers and other stakeholders tend to emphasize one categorical set of interventions for SA/Ps exclusive to the other set. School-based interventions, even if well-coordinated, tend to be broad-based and not always focused on individual attendance problems and unique circumstances (Gase et al., 2015). This is especially the case for already overburdened school districts (Balu and Ehrlich, 2018). In related fashion, many schools apply (or do not apply) encompassing or single-component interventions or sanctions (e.g., an automatic administrative or legal response) (Freeman and Simonsen, 2015). Conversely, student/family-based interventions, even if well-resourced, can be narrow-based and not always coordinated with school officials (Elliot and Place, 2019). This is especially the case for already overburdened clinicians (Kearney, 2019). In related fashion, lack of access to specialized care for school attendance and other child-based problems is endemic in many areas (Kohrt et al., 2018). Best practices to address school attendance problems involve synchronized efforts between family, school, and community units, but coordinated systems of care tend to be lacking especially for areas with very high chronic absenteeism rates (Allison et al., 2019).

**Postmodern dimensions**

A dimensional perspective of SA/Ps in a postmodern era would include a spectrum of interventions and/or responses to enhance overall school attendance more broadly and address a wide variety of school attendance problems more specifically. In addition, such a system would involve a coordinated set of service systems (education, medical/mental health, legal, developmental) in a given community to address complex types of school attendance problems (Kearney and Benoit, 2022). Such coordination would require integration of multiple agencies (e.g., housing, financial assistance, and school district), including information sharing for areas of high transience; community asset mapping to identify key areas of support; and multigenerational responses to school absenteeism (Minier et al., 2018; Green et al., 2019; Lenhoff and Singer, 2022). In addition, such coordination would likely require a focal point, which for SA/Ps could mean utilizing school systems as a primary conduit given that these systems already operate as a de facto support system in many areas, as long as such coordination is done in a cost-effective manner (Webber, 2018).

One potential avenue for pursuing this spectrum of interventions and responses and serving as a conduit for coordinated services and information sharing is a multi-tiered systems of support (MTSS) approach, or school-based service delivery system of assessment and intervention strategies targeted toward different levels of student need in various areas of functioning (Stoiber and Gettinger, 2016). MTSS approaches involve preventative (Tier 1), early intervention (Tier 2), and later intervention (Tier 3) strategies to address non-problematic, acute, and chronic issues, in this case to improve school attendance and to ameliorate emerging and intense school attendance problems (August et al., 2018). MTSS approaches also contain several spectra with respect to nuanced and tailored responses that are administered across various settings and providers (O’Brennan et al., 2020). MTSS approaches remain in the nascent stage with respect to SA/Ps, though recommendations for each level have been developed (Kearney and Graczyk, 2014; Chang et al., 2018). Furthermore, the approaches can be tailored across various spectra such as developmental stages, absenteeism severity, and ecological levels; linked to community assets and expertise; and implemented within already existing and culturally responsive frameworks (Kearney and Graczyk, 2020; Graczyk and Kearney, 2022).

**School completion**

**Historical categories**

Many educational systems worldwide focus on a well-defined point of school completion, or graduation, that often formally marks the end of primary schooling and, informally, the beginning of adulthood (Fernández-Suárez et al., 2016). For many areas, school completion involves accumulating a certain number of credits or surpassing a series of examinations or categorical benchmarks to qualify for graduation (Macdonald et al., 2019). Students that do not reach this endpoint are considered to have "dropped out" of school and often constitute their own category of study juxtaposed with "graduates" (e.g., Robison et al., 2017). Such comparisons reveal considerable peril for students who drop out of school, many of whom are at substantially increased risk for various occupational, economic, social, and psychiatric problems in adulthood compared to...
School dropout is a complicated phenomenon often marked by an accumulation of multiple and multilayered risk variables (Gubbels et al., 2019). These risk variables are often outside student or family control; school dropout rates worldwide remain elevated and particularly in areas of systemic education deprivation and low quality of education (Adelman and Székely, 2017). School dropout is also related closely to the use of exclusionary discipline and premature diversion of students into the criminal justice system (Leban and Masterson, 2022). School dropout is further amplified by poor school safety and academic support as well as the need for many students to support their families economically or otherwise (Rodriguez et al., 2022). School dropout thus tends to occur disproportionately among students of color, students with disabilities, students who are English language learners, and migrant students, among other vulnerable groups (Garcia and Weis, 2018; Free and Križ, 2022). Most students who drop out of school do not re-enroll for completion purposes (Barrat et al., 2012). A first response to this situation is to provide sufficient resources, including academic supports to meet the needs of all students, in order to achieve timely school completion. A second response may involve the postmodern dimensions discussed next.

Postmodern dimensions

A dimensional perspective of SA/Ps in a postmodern era would involve spectra related to school completion timelines as well as multiple avenues for school completion. With respect to timelines, a more flexible approach involving permissible school completion at different ages could help alleviate key disparities by compensating for some of the push and pull factors encountered by many students (McDermott et al., 2018). In addition, allowing school completion at different ages dovetails with evidence from developmental psychology that many students possess greater maturity and competence during emerging adulthood than during adolescence (Wood et al., 2018). Many students are thus better equipped psychologically and academically, and perhaps economically, to complete primary education in emerging adulthood (Hochberg and Konner, 2020).

With respect to multiple avenues, a dimensional perspective would allow students to pursue flexible and personalized methods of school completion based on individual circumstances and interests (Zhang et al., 2020). Different avenues could include vocational training, community-based learning centers, home-based and virtual programs, portfolio work, extra-year and credit recovery initiatives, and various second-chance and other pliable options (Kearney, 2016). A key consequence of this approach is that more students could achieve readiness for adulthood in a globalized economy that will increasingly require critical thinking, communication, subject-based and social/emotional competencies, collaboration, innovativeness, problem-solving, entrepreneurship, and digital skills, among other proficiencies (Yoder et al., 2020). In addition, allowing school completion via multiple avenues dovetails with researchers who view school dropout as more of a process than as a singular event (e.g., Samuel and Burger, 2020). Many students could thus be diverted from a school dropout process by maintaining an academic training program in continuous and innovative ways (Mardolkar and Kumaran, 2020).

Conclusion

Addressing school attendance and its problems will require an even higher-order set of dimensions than the ones described here in order to fully unlearn calcified historical approaches and implement more inclusive paradigms for a postmodern era. Individualized, compartmentalized, and siloed approaches must yield to a spectrum of multidisciplinary systemic-analytic collaborations and shared alliances across agencies. Such a spectrum must involve various professionals, lay persons, systems of care, and government and educational entities to better conceptualize and manage the full ecology of this population. In addition, temptations to engage in small iterative steps for short-term gain will need to be set aside in favor of broader visions of change and future goals for long-term gain. Recent seismic events have provided a rare opportunity to fundamentally realign thought in this area. We encourage stakeholders to take advantage of this open window before the winds of resistance come.

Data availability statement

The original contributions presented in this study are included in the article-supplementary material, further inquiries can be directed to the corresponding author.

Author contributions

Both authors have made a substantial, direct, and intellectual contribution to the work, and approved it for publication.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.
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