Investigating School Belonging Using Socio-Ecological Systems Theory

Tara A. Poole, University of Victoria

Author's Note

Tara A. Poole https://orcid.org/0009-0004-6394-9771

I have no known conflicts of interest to disclose. I would like to acknowledge the guidance and support of my doctoral supervisor, Dr. Breanna Lawrence, whose expertise and encouragement were invaluable throughout the development of this manuscript.

Correspondence concerning this article should be addressed to Tara A. Poole at tara.a.poole@gmail.com.

Abstract

A wide body of literature has found that a strong sense of belonging and connection to school is imperative for students' academic success, in addition to their social and emotional well-being. School belonging is a complex and multifaceted phenomenon, and researchers have identified a multitude of factors that influence the development of belonging at school. Given its complexities, a holistic representation of school belonging is often left out of the research, leading to a lack of clarity on this essential educational construct. To develop a comprehensive model of school belonging, this narrative review examines the construct using Bronfenbrenner's (1993) ecological systems theory of human development. Seven electronic databases were searched from 1999 to November 2024 using 'school belonging', 'school connectedness', and 'school engagement' amongst the key search terms. Relevant peer-reviewed articles were identified and included to investigate how school belonging evolves in response to influences across Bronfenbrenner's (1993) levels of development (i.e., the individual level, the microsystem, the mesosystem, the exosystem, the macrosystem, and the chronosystem). Findings from this investigation are also used to discuss strategies for promoting belonging in schools. This narrative review makes an original contribution to the field of educational research by developing a comprehensive model of school belonging through the lens of a socio-ecological framework.

Keywords: school belonging, ecological systems theory, peer relationships, teacher-student relationships, academic achievement, psychosocial well-being



Investigating School Belonging Using Socio-Ecological Systems Theory

Students' sense of school belonging is a key construct in educational psychology, as it reflects students' perceived connection, inclusion, acceptance, and respect within their school environment (Alink et al., 2023; Goodenow, 1993). Over the past two decades, a substantial body of research has established a strong positive link between school belonging and various academic and psychosocial outcomes (Ahmadi & Ahmadi, 2020; Allen et al., 2018; Allen & Kern, 2017; Arslan, 2019). For instance, school belonging is associated with stronger academic achievement (Anderman, 2003; Fong Lam et al., 2015), higher quality social relationships (Arslan & Allen, 2021; Cemalcilar, 2010), and greater perceived well-being (Allen & Boyle, 2018; Tian et al., 2016). Furthermore, strengthening school belonging has the potential to address persistent educational challenges, such as dropout rates, low academic performance, student alienation, and school disengagement (Ibrahim & El Zaatari, 2020; Korpershoek et al., 2020; Lo Cricchio et al., 2023).

School belonging is impacted by a wide variety of factors, including individual, social, and environmental determinants that interact with one another across time (Ahmadi & Ahmadi, 2020; Allen et al., 2018; Allen & Bowles, 2012). Individual characteristics implicated in school belonging include gender, ethnicity, externalizing and internalizing behaviours, and academic skills and attitudes (Allen et al., 2018; Allen & Boyle, 2018; Gillen-O'Neel & Fuligni, 2013; Hughes et al., 2015; Shochet et al., 2011; Tian et al., 2016; Wagle et al., 2021). Interpersonal relationships with family members, educational staff, and peers also play a significant role in students' perceptions of belonging at school (Allen et al., 2023; Ibrahim & El Zaatari, 2020; Uslu & Gizir, 2017). Environmental influences, such as local neighbourhoods and the broader geographical location in which a student lives, are also implicated in levels of school belonging (Allen et al., 2023; Cemalcilar, 2010). The multifaceted nature of school belonging makes it a challenging educational concept to study. As such, this narrative review examines the construct using Bronfenbrenner's (1993) ecological systems theory. This theory offers researchers a framework for investigating individual, social, and environmental influences on educational phenomena (Hayes et al., 2022), making it an ideal model to examine the complexities of school belonging (Allen et al., 2016, 2023; Allen & Kern, 2017).

The purpose of this article is to provide a comprehensive overview of school belonging research to add clarity to the construct and to support a holistic conceptualization. This article begins by reviewing Bronfenbrenner's (1993) ecological systems theory. Next, a discussion of the implications of belonging for healthy human development is reviewed, followed by a definition of school belonging. The next sections explore influences on school belonging situated within Bronfenbrenner's (1993) model, followed by strategies to foster belonging in schools. Evidence from this review emphasizes the relevance of school belonging in promoting positive student outcomes. The primary objective of this article is to facilitate a more comprehensive understanding of school belonging to assist future educational research and practice aimed at increasing belonging in schools. This has important implications for enhancing students' academic and psychosocial outcomes (Ahmadi & Ahmadi, 2020; Allen & Kern, 2017; Arslan, 2019).

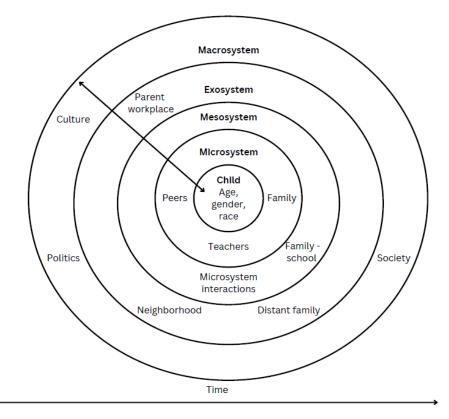
Bronfenbrenner's Ecological Systems Theory

Bronfenbrenner's (1993) ecological systems theory of development recognizes the interplay between individual, social, and environmental influences on child development. This theory is adapted from his original model, the Ecological Model of Human Development (Bronfenbrenner, 1979), as the updated theory places greater emphasis on the role a child plays in their own development (Bronfenbrenner, 1979, 1993; Rosa & Tudge, 2013). His framework also considers the effects of time, such as history, critical social and cultural events, and the historical period of one's childhood (Bronfenbrenner, 1993; Hayes et al., 2022; Rosa & Tudge, 2013). Five concentric circles are represented in the model, with the developing child in the centre and four systems of influence expanding outwards as they become increasingly distal in their effects on development (see Figure 1). The five levels of influence include the child, microsystem, mesosystem, exosystem, and macrosystem in the context of time.

In the model, personal characteristics of the child, including age, gender, race, temperament, and health status, are presented in the centre of the circle (Allen & Kern, 2017; Bronfenbrenner, 1993; Hayes et al., 2022). The microsystem is represented in the subsequent layer, capturing environmental influences that impact the daily life of the child, such as relationships with immediate family, peers, and educators (Bronfenbrenner, 1993; Hayes et al., 2022). The mesosystem is represented in the following layer, which reflects the interactions between a child's microsystems, such as school and home communication (Bronfenbrenner, 1993; El Zaatari & Maalouf, 2022). The exosystem contains influences such as parental work environments, the local neighbourhood, and extended family (Allen et al., 2016; Bronfenbrenner, 1993; Hayes et al., 2022). The final layer is the macrosystem, which captures indirect cultural and societal influences, such as political contexts and ideologies (Bronfenbrenner, 1993; Hayes et al., 2022). Finally, these systems are considered in the context of time (Bronfenbrenner, 1993; Rosa & Tudge, 2013).

Figure 1

Adapted From Bronfenbrenner's (1993) Ecological Systems Theory of Development



Bronfenbrenner's ecological models are some of the most popular theories of human development (Vélez-Agosto et al., 2017); however, academics have been critical of some components of his frameworks. Although his multidimensional system presents a comprehensive understanding of human development across the lifespan, researchers argue that the theory is deeply anthropocentric, as little consideration is given to human-nature interconnections (Elliott & Davis, 2020). In addition, Bronfenbrenner's frameworks do not emphasize the role of power and social capital in shaping development and life outcomes (Houston, 2017). Finally, some have criticized the oversimplification of human development represented in his theories, particularly regarding culture (Vélez-Agosto et al., 2017). Despite these limitations, his frameworks have been useful in the study of school belonging (e.g., Allen et al., 2016, 2023; El Zaatari & Ibrahim, 2021; El Zaatari & Maalouf, 2022).

Defining School Belonging

Researchers have long recognized that belonging is a fundamental requirement for well-being that arises out of positive, stable interpersonal relationships (Baumeister & Leary, 1995). Baumeister and Leary (1995) define belonging as frequent, positive interactions within stable, caring relationships. Mahar and colleagues (2013) further defined belonging as feeling valued and respected in reciprocal relationships shaped by shared experiences, personal characteristics, and beliefs. In contrast, a lack of belonging has been linked to poor health outcomes, maladjustment, and reduced well-being (Ainsworth et al., 1979; Ainsworth, 2014; Baumeister & Leary, 1995; Zhang et al., 2022).

The recognition that individuals are motivated to create and maintain interpersonal bonds through positive social engagement is recognized through various theoretical perspectives. Maslow (1943) proposed a motivational theory which identified five fundamental human needs represented in hierarchical levels within a pyramid. In his theory, the motivation to seek love and belonging was placed just after safety and physical needs (Kenrick et al., 2010; Maslow, 1943). In addition, Bowlby's (1969) attachment theory emphasizes the importance of early, secure relationships for healthy development, a model that continues to influence the field of psychology today (Fletcher et al., 2016; Yip et al., 2018). This research has significant implications for schools, as educational environments play a crucial role in offering social opportunities for children and youth to experience a sense of belonging.

There exists a wide range of school belonging terminology and conceptualizations within educational literature; however, most definitions reflect a student's sense of connection, inclusion, acceptance and respect within their school environment (Alink et al., 2023; Cai et al., 2023; Goodenow, 1993; Green et al., 2016). Based on her foundational work examining school belonging in adolescent populations, Goodenow (1993) defined the construct "as the extent to which students feel personally accepted, respected, included, and supported by others in the school social environment" (p. 80). This definition is popular in much of the school belonging literature (e.g., Allen et al., 2022a; Palikara et al., 2021; Wagle et al., 2021). In a study gathering the perspectives of 73 expert school belonging researchers, Alink and colleagues (2023) reported that connectedness was the most appropriate synonym for school belonging, and that key indicators of the phenomenon include inclusion, acceptance, respect, and connection. School belonging is complex and multidimensional, as it reflects the interplay between individual, social, and environmental influences that contribute to students' experiences of belonging at school (Allen et al., 2016, 2021, 2022a; Ibrahim & El Zaatari, 2020). These findings highlight the benefit of using a socio-ecological framework to examine the phenomenon.

Methods

A narrative review was conducted to synthesize research on school belonging for the purpose of developing a comprehensive model of the topic through the lens of a socio-ecological framework. Narrative reviews provide an extensive description and interpretation of published literature on a given topic, which is useful for examining the research focus in novel ways and for presenting new insights (Sukhera, 2022a, 2022b). Furthermore, the method is useful for investigating research inquiries that are broad or complex (Sukhera, 2022b), such as school belonging. Rather than a systematic synthesis, narrative reviews offer thoughtful and rigorous interpretations of bodies of knowledge, culminating in rich and meaningful summaries (Sukhera, 2022a, 2022b).

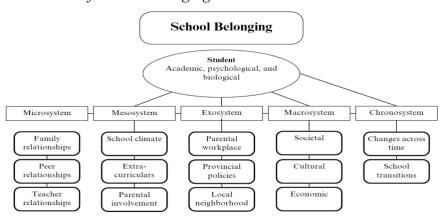
A literature search for peer-reviewed articles examining school belonging was undertaken using a combination of keywords, including *school belonging, school connectedness, school bonding, school engagement, school identification, school membership, student connection, student engagement, academic achievement, peer relationships, student-teacher relationships, parent involvement, and extra-curricular involvement.* Relevant databases were searched, including ERIC, JSTOR, EBSCOhost, Connected Papers, Semantic Scholar, Google ScholarTM, and the University of Victoria Library database. The search was limited to articles published in English, and only those that were peer-reviewed and published after 1999 were included. Relevant peer-reviewed articles were identified and examined for this narrative review.

Socio-Ecological Influences on School Belonging

Situated within Bronfenbrenner's (1993) ecological systems theory, this review first examines student-specific influences as they relate to school belonging, including academic, biological, and psychological determinants. Family, peer, and teacher-student relationships within the microsystem are discussed next, followed by parent involvement at school, enrollment in extracurricular activities, and school climate, which are reflected in a child's mesosystem. At the exosystem and macrosystem levels, broader social and political themes are explored. It is important to note that each of these factors is often measured and discussed in isolation; however, they can exert bidirectional influences on one another across multiple systems in complex and often poorly understood ways (Bronfenbrenner, 1993; Hayes et al., 2022).

Figure 2

Ecological Systems Model of School Belonging



Note. Adapted from El Zaatari and Maalouf's (2022) and Allen and colleagues' (2016) conceptual theories.

Student-Level Influences: Academic, Biological, and Psychological

Research has established a strong link between student-level factors and students' sense of school belonging (Allen et al., 2016, 2023). Academic motivation and achievement, gender, ethnicity, and psychological well-being have all been implicated in students' perceptions of school belonging (Allen et al., 2018; Faulkner et al., 2009; Gillen-O'Neel & Fuligni, 2013; Graham et al., 2022; Hughes et al., 2015). The individual factors discussed in the following section reflect bi-directional effects, as students' traits influence their environment, while their environment simultaneously exerts influence on their personal characteristics (Bronfenbrenner, 1993; Hayes et al., 2022; Rosa & Tudge, 2013).

Academic Influences

Students who highly value school (Allen et al., 2018; Anderman, 2003; Gillen-O'Neel & Fuligni, 2013), have future educational goals (Allen et al., 2018; Uwah et al., 2008), experience greater academic motivation, and demonstrate better academic achievement are more likely to have a strong sense of school belonging (Ahmadi et al., 2020; Allen et al., 2018; Anderman, 2003; Hughes et al., 2015). For example, in a meta-analytic review of 82 correlational studies, Korpershoek (2020) reported a positive correlation between school belonging and academic achievement. Other research suggests that positive future educational aspirations, better academic self-regulation, greater self-rating in academics, higher educational goals, increased motivation, and valuing academics all positively affect students' sense of school belonging (Ahmadi et al., 2020; Allen et al., 2018; Fong Lam et al., 2015; Korpershoek et al., 2020). This research highlights the key role that academic skills play in school belonging and the importance of supporting academic motivation and achievement in classrooms (Allen et al., 2022a; Šeboková et al., 2018). Educators can achieve this by providing meaningful, interesting, and scaffolded academic activities using a variety of educational approaches (Allen et al., 2018; Riley, 2019; Shochet & Orr, 2020).

Biological Influences

Evidence across elementary, middle, and high school students suggests that school belonging varies by gender, with females reporting higher levels of school belonging than males (Anderman, 2002; Hughes et al., 2015; Sali et al., 2023). A likely explanation for this finding is that females tend to experience greater academic achievement than males (Encinas-Martín & Cherian, 2023; Marcenaro–Gutierrez et al., 2018), which is positively associated with school belonging (Allen et al., 2018). Females also tend to report more positive relationships with their teachers (Aliyev & Tunc, 2015; Carvalho, 2016; Gillen-O'Neel & Fuligni, 2013), which also has positive implications for school belonging (Ahmadi et al., 2020). Given the importance of school belonging to student success (Allen & Boyle, 2018), educators need to prioritize building strong student-teacher relationships across all gender identities.

Variation across race and ethnicity has also been identified in some of the literature, although findings are inconsistent across studies, likely as a result of different measurement tools, geographical locations, and sample populations (e.g., Benner & Graham, 2009; Gillen-O'Neel & Fuligni, 2013; Hughes et al., 2015). In a longitudinal study of Latin American, Asian, and European high school students (n = 572), Gillen-O'Neel and Fuligni (2013) reported that ethnic group membership alone was not associated with school belonging, nor with fluctuations in levels of school belonging across high school. Other researchers have also found that race/ethnicity was not significantly related to school belonging (Allen et al., 2018). In contrast, some researchers have reported a difference in school belonging across ethnically diverse groups (Hughes et al., 2015;

Wang & Eccles, 2012). Researchers hypothesize that when variation in school belonging across ethnically diverse groups is identified, it may be in response to the ethnic composition of schools, rather than students' individual ethnicity (Benner & Graham, 2009; Gillen-O'Neel & Fuligni, 2013; Graham et al., 2022). In other words, students with few same-race/ethnic peers at school face additional challenges to developing a strong sense of school belonging because they may feel like they don't fit in (Graham et al., 2022; Singh et al., 2010).

Psychological Influences

A large body of research has reported that students with better mental health also experience a greater sense of school belonging (Allen & Boyle, 2018; Castro-Kemp et al., 2020; Klik et al., 2023; Vang & Nishina, 2022). For example, students who report higher rates of self-esteem (Gummadam et al., 2016; Hernández et al., 2017) and subjective well-being tend to experience a greater sense of belonging at school (Allen & Boyle, 2018; Tian et al., 2016). Furthermore, a greater propensity to experience positive emotions (positive emotional affect) and lower levels of psychological distress can also support the development of a strong sense of school belonging (Shochet et al., 2011; Wagle et al., 2021). Korpershoek and colleagues (2020) conducted a review of 82 correlational studies across six English-speaking countries and reported a small to moderate positive correlation between students' social-emotional outcomes (such as self-concept and self-efficacy) and school belonging. When students have effective social-emotional skills, such as self-efficacy and self-esteem, they are able to more easily feel connected to their school environment (Frydenberg et al., 2017).

Internalizing symptoms, such as depression and anxiety, can create significant barriers to students' ability to develop a sense of belonging at school (Arslan, 2019; Montecillo et al., 2024; Shochet et al., 2011). For example, symptoms of depression can have significant, adverse effects on student well-being, in addition to students' perceptions of school belonging (Arslan, 2019; Klik et al., 2023; Parr et al., 2020; Slaten et al., 2016). Furthermore, researchers have also found a negative association between symptoms of anxiety and school belonging (Arslan, 2019, 2022; Montecillo et al., 2024; Shochet et al., 2011). Effects of negative peer relationships, such as peer victimization, are often a major contributor to students' stress and anxiety levels, further exacerbating feelings of unbelonging (Arslan, 2022; Montecillo et al., 2024; Parker et al., 2015). This research highlights the need for educators to support school belonging by offering social-emotional learning programs that target social and emotional skills in students (Allen et al., 2022b; Frydenberg et al., 2017; Hassani et al., 2023), in addition to referring students for early mental health intervention services to improve their future mental health outcomes (McGorry & Mei, 2018).

Microsystem Influences: Relationships with Parents, Peers, and School Staff

Microsystems directly affect a child's daily life through interactions with parents, siblings, close extended family, school personnel, and peers (Bronfenbrenner, 1993; Hayes et al., 2022). Researchers examining microsystem factors typically investigate the effects of parents, peers, and school staff on school belonging with a primary focus on perceived levels of support within each of these influences (e.g., Allen et al., 2016; El Zaatari & Maalouf, 2022). This literature suggests that positive relationships with individuals inside and outside of school settings are required for a strong sense of school belonging to development (Ahmadi et al., 2020; Allen et al., 2023; Cai et al., 2023; Ibrahim & El Zaatari, 2020). There is growing awareness that learning is a social and

relational process, and that fostering positive relationships in schools is an important aspect of providing high-quality education.

Parental Influences

According to Bronfenbrenner's (1993) theory, the family is the first microsystem to which a child belongs, and familial contexts play a significant role in child development, in addition to students' sense of school belonging (Allen & Boyle, 2018; Law et al., 2013). Common family-related determinants of school belonging include parents' educational aspirations and level of academic support for their child, parental emotional support, and the quality of parent-child relationships (Ahmadi & Ahmadi, 2020; Ahmadi et al., 2020; Allen et al., 2018; Uslu & Gizir, 2017; Wang & Eccles, 2012).

Researchers have found that increased parental emotional support, in addition to greater involvement in a child's life, is a strong positive predictor of school belonging (Ahmadi et al., 2020; Allen et al., 2023; Garcia-Reid et al., 2005). This is because parents who can offer academic support, prioritize educational values, and believe in their child's competence as a learner are actively fostering a positive connection to the school (Allen et al., 2023). Furthermore, positive parent-child relationships derived from healthy emotional connections with primary caregivers have a positive effect on children's prosocial behaviours and mental health (Allen & Boyle, 2018; Zilberstein, 2014). This has important implications for school belonging, as researchers have reported a positive association between children's social-emotional and behavioural skills and their sense of school belonging (Korpershoek et al., 2020). Adding further support for this conclusion, in a study conducted by Nunes and colleagues (2013) of 289 children and 205 caregivers in Brazil, the authors reported that poor parental attachment and rejection predicted internalizing and externalizing behaviours in children. Similarly, Belskey and colleagues (2006) conducted a longitudinal study of over 1,000 U.S. children and found that healthier patterns of parental attachment were associated with lower teacher ratings of internalizing and externalizing behaviour problems in early elementary students. This also has implications for school belonging, as students with higher rates of externalizing and internalizing behaviours tend to experience lower levels of school belonging (Arslan, 2019). Parents can do much to foster positive academic and psychosocial outcomes at school by providing academic and emotional support to their children.

Peer Influences

Within a school setting, peers constitute an important determinant of a student's educational experience, influencing students' school and classroom engagement, academic motivation, and social and emotional adjustment (Cemalcilar, 2010; Kiefer et al., 2015; Uslu & Gizir, 2017; Wang & Eccles, 2012). A variety of influences related to peer relationships have been implicated in perceptions of school belonging, including the quality of students' peer relationships, such as trust and closeness with peers (Allen et al., 2018), level of academic peer support (Kiefer et al., 2015), effects of mental health on peer interactions (Arslan, 2022; Arslan & Allen, 2021), and peer victimization (Chen et al., 2023; Espelage et al., 2013; Lo Cricchio et al., 2023). Regardless of the particular constructs under inquiry, robust evidence suggests that positive peer relationships are a strong positive predictor of school belonging (Cemalcilar, 2010; Kiefer et al., 2015; Slaten et al., 2016; Uslu & Gizir, 2017).

Teacher-Student Relationships

Supportive teacher-student relationships can have a positive impact on students' sense of school belonging (Ahmadi & Ahmadi, 2020; Allen et al., 2023; Cai et al., 2022). Teachers can build high-quality relationships with students by emphasizing care, respect, appreciation, trust, empathy, and cooperation (Allen et al., 2023; Cai et al., 2023; Ibrahim & El Zaatari, 2020; Wang & Eccles, 2012). Furthermore, teachers who offer academic and emotional support, treat students fairly, and are encouraging do much to support belonging in their classrooms (Ahmadi & Ahmadi, 2020; Wang & Eccles, 2012). In a study of 815 adolescent participants by Uslu and Gizir (2017), the authors reported that the quality of teacher—student relationships was a strong predictor of school belonging, accounting for 44.7% of the variance. Their model explained a further 2.4% of the variance, capturing the effects of parent involvement and peer relationships. Conversely, teacher—student power imbalances, characterized by a lack of care or respect towards students, have been widely shown to negatively impact students' school belonging (Ahmadi et al., 2020; Allen et al., 2023; Ibrahim & El Zaatari, 2022). The importance of positive and supportive relationships for healthy student functioning, both within school and beyond, is well documented (Allen et al., 2016, 2023; El Zaatari & Maalouf, 2022; Hayes et al., 2022).

Mesosystem Influences: School Climate, Extracurriculars, and Parental Involvement

The mesosystem represents the interactions and communications between a child's microsystems (Bronfenbrenner, 1993; El Zaatari & Maalouf, 2022; Hayes et al., 2022). In the context of school belonging, the mesosystem typically includes a school's climate, extracurricular participation, and level of parent involvement at school (Allen et al., 2016, 2023; Hayes et al., 2022).

School Climate

School climate is typically defined as a school's norms, values, and expectations, and extensive research has identified a strong positive association between school climate and school belonging (Encina & Berger, 2021; Klik et al., 2023; Long et al., 2021; Vang & Nishina, 2022). For example, in a study of 657 U.S. adolescent participants, Vang & Nishina (2021) reported that increased positive interethnic school climate (i.e., peer acceptance of cultural and ethnic differences, staff support for cross-ethnic peer interactions, and school celebrations of cultural holidays) was associated with higher levels of school belonging. Furthermore, in a study of 799 Turkish middle school students, Cemalcilar (2010) found that a school's social-contextual climate, including perceptions of school social relationships and satisfaction with the school environment, was predictive of school belonging.

In a 3-year longitudinal study of 6,537 Grade 7 to 10 Australian students, Klik and colleagues (2023) also found that school belonging was positively associated with school climate (i.e., school academic emphasis, student–student relations, staff–student relations, and shared values and approach). The authors stated that a more positive perception of school climate was also associated with lower depressive symptoms in students, indicating that shared school values, school relationships, and school academic emphasis impact student mental health. Schools can support belonging by creating a positive climate that prioritizes connection through its policies, leadership, and norms; this includes ensuring a physically and emotionally safe environment, implementing fair and consistent disciplinary practices, and upholding high academic standards (Allen et al., 2018; Riley, 2019; Shochet & Orr, 2020).

Extracurricular Involvement

Students' sense of school belonging has been positively linked to increased participation in school activities, such as extracurricular programs (Allen et al., 2016, 2018; Encina & Berger, 2021). Opportunities to engage in extracurricular pursuits, such as clubs or sports teams, foster social connection and peer relationships, positively impacting school belonging (Allen et al., 2016). In a study of 38,286 seventh to 12th-grade students across 754 schools, Encina and Berger (2021) found a positive association between school belonging and students' school engagement and extracurricular involvement. The authors reported that a supportive school climate, which fosters strong educator-student relationships, increases extracurricular participation among students. This study also highlighted how students' sense of school belonging translates into specific behaviours (i.e., school participation) if schools offer ample opportunities for active engagement within the school community. As such, educators can play a direct role in creating school belonging by providing a variety of extracurricular activities that are likely to interest a broad range of students (Allen et al., 2016, 2018).

Parental Educational Involvement

A comprehensive body of literature has reported that increased family and community involvement at school has a positive effect on school belonging (Ahmadi et al., 2020; Allen & Kern, 2017; El Zaatari & Ibrahim, 2021; El Zaatari & Maalouf, 2022). Parents who provide educational support and hold positive views of their children as learners, in addition to being actively involved in their child's education, positively impact school belonging (Allen et al., 2023). Parental involvement at school helps instill positive values of school and learning, which supports children's school attendance and positive school-related behaviours (Ahmadi et al., 2020; Wang & Eccles, 2012). Schools can do much to support parental involvement, such as hosting family events, school fundraisers, maintaining parent communication, and providing opportunities for parents to connect with teachers through parent-led conferences or meet-the-teacher night (Allen et al., 2016; Hayes et al., 2022). Mesosystem influences differ across grades and individual students, as forces within a student's mesosystem do not remain stable over time (Allen & Boyle, 2018; Hughes et al., 2015; Niehaus et al., 2012). In sum, the mesosystem exerts both positive and negative effects on a student's education, influencing perceptions and experiences of school belonging across their formal years of schooling.

Exosystem Influences: Parental Workplace, Educational Policies, and Neighbourhood

A child's exosystem represents the environments and contexts with which a child is not actively involved, but nevertheless is indirectly influenced by (Bronfenbrenner, 1993; Haynes et al., 2022). Exosystem influences implicated in school belonging include parental workplaces, provincial policies and legislation, and the local neighbourhood (El Zaatari & Ibrahim, 2021; El Zaatari & Maalouf, 2022; Hayes et al., 2022). Most studies on school belonging have primarily focused on student-level, microsystem, and mesosystem effects, limiting our understanding of how broader aspects within the exosystem and macrosystem influence a child's education (Allen et al. 2016, 2018).

Parental Workplace

Literature discussing the influence of the exosystem on school belonging has suggested that parental workplaces may be a factor (Allen & Kern, 2017). Stressors within the parents' workplace can negatively influence the quality of parents' interactions with their children, in addition to

parents' capacity for involvement within the school (Hayes et al., 2022; Peters et al., 2008). Given the importance of parental relationships to school belonging, this may be one pathway through which parental workplaces influence students' experiences of belonging at school. In addition, parent-teacher meetings and school activities scheduled during typical working hours can create challenges for employed parents to become involved in the school, resulting in either lost income or fewer opportunities for school-parent engagement (Scorgie, 2015). There is also evidence to suggest a positive association between higher parental education levels and children's sense of school belonging (Marksteiner & Kuger, 2016; Pittman & Richmond, 2007; Ruedas-Gracia et al., 2020), likely due to the positive impact higher education has on employment opportunities.

Educational Policies

School belonging can be influenced by local and provincial educational policies, legislation, regulations, and initiatives, as well as how these influences are interpreted and implemented across schools and school boards (Allen et al., 2016; Saab, 2009). For example, educational reforms aimed at improving academic outcomes through increased emphasis on exams can lead to an examoriented approach to learning, resulting in changes in teaching strategies and practices, curriculum, and student evaluation systems (El Zaatari & Ibrahim, 2021). Such changes can negatively influence students' perceptions of school climate, in addition to their sense of psychological well-being and school belonging (El Zaatari & Ibrahim, 2021; Högberg & Lindgren, 2023). This association may partially be due to the overemphasis on academic success, which can exacerbate feelings of unbelonging among students who struggle academically (Högberg & Lindgren, 2023).

Furthermore, inclusion policies that support the education of students with disabilities in mainstream classrooms can have positive effects on students' academic, social, and affective outcomes; these effects are bolstered by teachers who are positive, flexible, receptive, and knowledgeable about their students' disabilities (Alesech & Nayar, 2021; Prince & Hadwin, 2013; Pesonen, 2016). Policymakers have a valuable opportunity to strengthen school belonging by making it a priority in educational initiatives, recognizing its positive influence on students' academic success and psychosocial well-being (Allen et al., 2016; Cemalcilar, 2010; El Zaatari & Maalouf, 2022).

Local Neighborhood

Many influences within the local neighbourhood can affect a child's educational experiences, and consequently, their sense of school belonging (Allen et al., 2018). Differences across rural and urban environments, along with levels of community violence, may play a key role in school belonging (Allen et al., 2018; Ludwig & Warren, 2009; Maurizi et al., 2013). In a systematic review of 51 studies conducted in the U.S. and Australia (n = 67,378), Allen and colleagues (2018) identified 10 themes influencing school belonging: academic motivation, emotional stability, personal characteristics, parent support, peer support, teacher support, gender, race and ethnicity, extracurricular activities, and environmental/school safety. Within all these themes except gender, geographical differences had a moderating effect. In general, schools in rural neighbourhoods had higher effect sizes between associations to school belonging (r = 0.51) compared to urban schools (r = 0.25). The authors of this paper hypothesized that smaller class sizes, fewer disciplinary actions, higher homogeneity, greater involvement in extracurricular activities, and increased opportunities for student-teacher interactions in rural schools compared to urban schools may explain this result.

Evidence in support of the negative effects of increased neighbourhood violence on school belonging is primarily indirect. For example, a two-year ethnographic study of one New York middle school conducted by Mateu-Gelabert and Lune (2003) examined the interrelationship between neighbourhood and school violence. The authors reported that for study participants, school and neighbourhood violence were bidirectional, with conflict originating from and flowing to both schools and neighbourhoods. Organizational structures in schools (such as classroom divisions) and neighbourhoods (such as rival drug affiliations) generated conflict and violence, in addition to bilingual and monolingual differences across groups and individuals. This has implications for school belonging, as lower instances of violence and higher levels of perceived physical, emotional, and psychological safety within schools are associated with increased levels of school belonging (Allen et al., 2018; Allen & Kern 2017; Cemalcilar, 2010). Other researchers have found a strong association between heightened exposure to community violence and lower school identification, conceptualized as a student's sense of school belonging and valuing of school (Ludwig & Warren, 2009). In conclusion, less is currently known about the impact of exosystem factors on school belonging; more research is needed to develop a thorough understanding of how these more distal influences affect students' perceptions of belonging across their education (Allen et al., 2016, 2018; Maurizi et al., 2013).

Macrosystem Influences: Country of Residence

A child's macrosystem represents the cultural and societal influences on development, such as sociocultural values and beliefs, and their impact on more proximal systems (Bronfenbrenner, 1995; Hayes et al., 2022). Children are not directly connected to the macrosystem; instead, distal social and cultural influences, such as shifts in political ideology, profoundly influence their lives (Allen et al., 2023; Bronfenbrenner, 1993). Within school belonging literature, the macrosystem is thought to impact school belonging through its effects related to a country's economy, social norms (such as gender roles), and social hierarchical structures (El Zaatari & Maalouf, 2022); however, little direct research has explored these theories (Allen et al. 2016, 2018; Allen & Kern, 2017).

Examining data across 52 countries, Allen and colleagues (2023) compared students' sense of school belonging in 309,785 adolescent participants. Their findings indicated that 92.86% of the variance in school belonging was explained by differences among students, while 2.48% was explained by variation between schools within the same country, and an additional 4.66% of the variance in school belonging was explained by differences between countries. In other words, student-level factors play a much greater role in predicting school belonging than more distal factors, but a country's economic development, legislation, policies, and government views nevertheless impact belonging at school (Allen et al., 2023). Given the dearth of literature in this area, future research is necessary to understand the indirect pathways that factors within students' countries of residence have on their sense of school belonging.

Chronosystem

The chronosystem reflects changes over time that impact each system within the ecological model, including individual changes and transitions, historical events, and the specific period in which a child is developing (Bronfenbrenner, 1993; Rosa & Tudge, 2013). Much research has found that school belonging is not a stable construct, but fluctuates throughout a student's education in response to changes within a child's individual, social, and environmental context (Allen & Boyle, 2018; Hughes et al., 2015; Niehaus et al., 2012).

School Transitions

Within the chronosystem, school transitions appear to play an important role in school belonging (Allen & Boyle, 2018; Hughes et al., 2015; Niehaus et al., 2012); consequently, school transitions have been a particular focus in school belonging research. Transitions, such as from preschool to elementary school, involve the chronosystem. These transitions also involve the microsystem and mesosystem, as they deal with temporality, new relationships, and school-related determinants, such as school climate (Hayes et al., 2022). Transitions are often accompanied by a range of changes, including a loss of peer groups, building new relationships, adjustment to new environmental spaces, and disruptions to learning, which can result in social and emotional changes that impact school belonging in complex ways (Allen & Boyle, 2018; Hayes et al., 2022). Transition times can also offer new developmental, social, and academic opportunities for students (Allen & Boyle, 2018; Hayes et al., 2022).

In particular, a successful transition to kindergarten is important to build a child's positive attitudes towards future learning, academic self-efficacy, and sense of school belonging (Dockett & Perry, 2005; Joerdens, 2014; McMahon & Wernsman, 2009; Wagle et al., 2021). Students who experience a positive start to school are more likely to view school as important and hold positive views of their ability to succeed, which can lead to improved school outcomes later in life (ETC, 2011; Peters, 2010). Consequently, early childhood educators should view fostering belonging among early learners as a top curricular priority (Johansson & Puroila, 2021).

Students entering middle school often experience a drop in school belonging, likely due to the increased stressors and reduced perceptions of school support and teacher connection after this transition (Hughes et al., 2015; Niehaus et al., 2012). Wylie and Hodgena (2012) examined a large New Zealand dataset from the Competent Learners Study to investigate changes in school engagement (effort and enjoyment of learning and quality of relationships with teachers) across the ages of 10 to 16. The authors reported a decline between early adolescence (age 12) and midadolescence (age 14), likely due to marked changes in activities outside of school, friendships, and values during early adolescence. Similar declining rates of school belonging have also been identified in students transitioning to high school (Benner & Graham, 2009; Wang & Eccles, 2012). For example, Benner and Graham (2009) followed 1,979 U.S. students from seventh to tenth grade and found that students transitioning to high school were lonelier and more anxious upon entry to high school and that the increased anxiety levels were maintained across time. Other research also suggests that school belonging and school liking steadily decline in adolescence (Wang & Eccles, 2012), likely due to increased academic demands and high levels of schoolrelated stress (Lo Cricchio et al., 2023). Major influences across each ecological system interact in complex and interconnected ways in the context of time to impact students' sense of school belonging.

Promoting Belonging in Schools

In response to the growing recognition of the importance of school belonging for a broad range of positive student outcomes, researchers have begun to investigate how belonging can be fostered in schools (e.g., Allen et al., 2016; Allen & Kern, 2020). Strategies to facilitate school belonging include targeting students' social-emotional skills (Allen et al., 2022b; Frydenberg et al., 2017; Hassani et al., 2023; Pollak et al., 2023) and devoting time and resources to building positive student-teacher relationships (Allen et al., 2022b; Riley, 2019; Shochet & Orr, 2020). In addition,

fostering positive student relationships and interactions can support students' sense of belonging at school (Keyes, 2019; Leadbeater et al., 2023; Shochet & Orr, 2020).

School belonging is intrinsically tied to students' social and emotional well-being (Allen & Boyle, 2018; Castro-Kemp et al., 2020). As a consequence, initiatives geared towards promoting belonging in schools often focus on improving students' social and emotional health (e.g., Allen et al., 2022b; Allen & Kern, 2020; Pollak et al., 2023). Social Emotional Learning programs may address a broad range of capacities, including self-awareness, building a positive identity, emotion regulation skills, and social skills (Cervantes & Gutierrez, 2019; Frydenberg et al., 2017; Hassani et al., 2023; Ross & Tolan, 2017). Integrating psychoeducational social-emotional learning programs into the curriculum can help students develop the skills required for a strong sense of school belonging to occur (Allen et al., 2022b; Frydenberg et al., 2017; Hassani et al., 2023).

Students also need to feel supported and connected to the educators who work with them (Allen et al., 2022b; Riley, 2019; Shochet & Orr, 2020). They need to know that their teachers know them, care about them, and like them, regardless of their performance at school (Allen & Kern, 2020; Riley, 2019). Some researchers have even found that student-teacher relationships have a stronger influence on school belonging than peers or parents (Allen et al., 2018; Allen & Kern, 2020; Keyes, 2019). Consequently, improving the quality of teacher-student relationships is an essential component of enhancing school belonging (Keyes, 2019; Leadbeater et al., 2023; Shochet & Orr, 2020). Teachers can build nurturing relationships with their students by demonstrating care and respect through responsive communication, getting to know their students well, recognizing and believing in their students' strengths and abilities, and being encouraging and friendly (Allen et al., 2018; Allen & Kern, 2020; Keyes, 2019; Shochet & Orr, 2020). Educational policy makers and leaders would do much to support school belonging by ensuring that teachers are allocated sufficient time and opportunity to build strong relationships with their students (Allen et al., 2018; Allen & Kern, 2020).

Positive peer relationships built on kindness and mutual respect enable students to feel included and involved in their school environment, cultivating a sense of school belonging (Allen et al., 2022a; Riley, 2019; Shochet & Orr, 2020). School initiatives that build peer relationships and improve the quality of peer interactions are an important component of promoting belonging in schools (Allen & Kern, 2020; El Zaatari & Ibrahim, 2021; Hassani et al., 2023). Methods for enhancing peer relationships include prevention and intervention programs that target mental selfconcepts, well-being, social-emotional skills, and anti-bullying strategies (Cervantes & Gutierrez, 2019; Hassani et al., 2023; Pollak et al., 2023). In particular, students benefit from explicit social skills instruction targeted at building empathy for others, social problem-solving skills, social perspective-taking, effective interpersonal communication, conflict resolution skills, and other healthy relationship behaviours (Allen et al., 2022b; Cervantes & Gutierrez, 2019; Hassani et al., 2023). Educators can also promote peer relationships by increasing peer interactions through classroom meetings, group work, collaborative games, and facilitating extracurricular involvement (Cervantes & Gutierrez, 2019; El Zaatari & Ibrahim, 2021; Mary, 2014; Shochet & Orr, 2020). Assisting students in developing positive friendships that support the development of prosocial behaviours can bolster students' sense of belonging at school (Allen & Kern, 2017).

Teachers can also foster school belonging by creating a positive and inclusive classroom environment through group work, collaborative activities, and engaging lessons that build on students' strengths and interests (Keyes, 2019; Mary, 2014). Furthermore, encouraging cultural awareness by facilitating respectful discussions on racial and ethnic differences can help students

feel a sense of belonging (Shochet & Orr, 2020). Effective classroom management that is supportive rather than punitive also has positive effects on school belonging (Keyes, 2019). Additionally, building strong relationships with families and involving the community in learning activities can further reinforce students' sense of connection to school (Allen et al., 2016, 2018; Riley, 2019). The benefits of a strong sense of school belonging are evident, given its positive impact on students' academic achievement, mental health, and social well-being (Ahmadi & Ahmadi, 2020; Arslan, 2019; Tian et al., 2016). Consequently, it is imperative that educators have a strong understanding of how to increase belonging at school.

Limitations and Future Directions

This narrative review has several limitations due to the methodological design and the broader literature on school belonging. First, unlike other types of reviews, narrative reviews do not follow a fully replicable or exhaustive search protocol, which may result in the omission of relevant studies and limit the ability of others to critically appraise or reproduce the findings. Second, the literature on school belonging is marked by inconsistent terminology and conceptual definitions, complicating the identification and inclusion of all studies that relate to the research topic. Third, the existing body of research on school belonging is predominantly quantitative, correlational, and situated in U.S. contexts with adolescent participants. This narrow demographic and methodological focus limits the applicability of findings to diverse socio-economic and cultural settings, especially among younger children or students in underrepresented regions. In addition, the lack of causal or explanatory research further limits our understanding of the mechanisms that explain the associations between school belonging and its various correlates.

Although school belonging has received a substantial amount of attention within educational research, some gaps in the literature have prevented the development of a holistic understanding of the construct. For example, there is a lack of literature on school belonging that is sensitive to developmental influences, despite the psychosocial and physiological changes that occur in students across their development (Balasundaram & Avulakunta, 2024; Dyussenbayev, 2017). Many studies neglect to consider how school belonging varies depending on the developmental stage of participants and the school context in which they exist (i.e., elementary, middle, secondary, and post-secondary) (Slaten et al., 2016). For example, Goodenow's (1993) definition of school belonging is widely used across the literature, even in the context of young children, even though it originated out of research with adolescent participants (e.g., Doumas & Midgett, 2019; Palikara et al., 2021; Wagle et al., 2021). Further research examining the extent to which common conceptualizations are applicable across child and adolescent development would be beneficial.

School belonging literature is also predominantly based on quantitative measures, limiting our understanding of nuanced variations of the construct across students (Bouchard & Berg, 2017). In particular, there is a dearth of literature in early elementary populations that captures young students' voices and perspectives (Erwin et al., 2024). The lack of qualitative investigations, particularly in early elementary students, presents a significant gap in the literature. Future qualitative research is needed to better understand the unique variations, perceptions, and experiences of school belonging in students.

Despite a wide body of literature identifying the importance of school belonging to student success (Ahmadi et al., 2020; Allen et al., 2016), globally, there exists little research within early elementary populations (i.e., kindergarten to Grade 2). As a consequence, our current

understanding of school belonging is developed predominantly out of research with adolescent participants (Palikara et al., 2021). This has left a large gap in knowledge of what factors contribute to early elementary students' sense of school belonging and how best to support belonging in this population. Future research on school belonging with early elementary students is greatly needed, given that a sense of school belonging is fundamental for young children's social and emotional health (Castro-Kemp et al., 2020; Palikara et al., 2021).

Finally, our understanding of the impact of distal influences within the exo and macro systems on school belonging is currently limited due to the indirect nature of these determinants and the lack of research in this area (Allen et al., 2016, 2018). The dearth of research may be due to the challenges in studying contexts that have indirect effects on students' sense of school belonging, the significant research requirements to compare similarities and differences across diverse communities to generate theories, or the complexities of the pathways between these influences and school belonging. Nevertheless, future research examining what exosystem and macrosystem factors influence school belonging would support a more comprehensive understanding of this important educational construct.

Conclusion

School belonging is the outcome of proximal and distal bidirectional influences reflected in each of Bronfenbrenner's (1993) ecological systems. Students' biological, academic, and psychological traits all play a key role in school belonging (Allen et al., 2018; Allen et al., 2023; El Zaatari & Maalouf, 2022; Tian et al., 2016). A child's microsystem also affects perceptions of belonging at school, including the quality of relationships with parents, peers, and teachers (Allen et al., 2016; Allen et al., 2023; El Zaatari & Maalouf, 2022). Mesosystem influences, such as school climate, engagement in extracurricular activities, and parent involvement at school, also impact students' sense of school belonging (Allen et al., 2016; Allen et al., 2023; Hayes et al., 2022). Some evidence suggests that the exosystem may influence school belonging through its effects related to parental workplaces, provincial educational policies and legislation, and local neighbourhood contexts (El Zaatari & Ibrahim, 2021; El Zaatari & Maalouf, 2022; Hayes et al., 2022). Distal influences within a child's macrosystem thought to impact school belonging include a country's sociocultural values, educational agendas, and social and cultural norms (Allen et al., 2023), although more empirical evidence is needed to confirm this.

One of the key challenges in drawing conclusions about school belonging lies in the fact that existing conceptualizations are largely based on quantitative research with adolescent participants in U.S. contexts. To develop a more nuanced and comprehensive understanding of this educational phenomenon, future research using a broader range of participants across diverse age groups, cultural and ethnic backgrounds, and global settings is required. To cultivate a sense of belonging in schools, educators and policymakers should nurture positive interpersonal school relationships, prioritize social-emotional curriculum, and create a school climate that students perceive as safe, inclusive, and supportive (Allen et al., 2018; Allen & Kern, 2020; Riley, 2019; Shochet & Orr, 2020). Educational leaders and policymakers would do much to support student achievement and social-emotional well-being by implementing educational reforms that support belonging in schools.

References

- Ahmadi, F., & Ahmadi, S. (2020). School-related predictors of students' life satisfaction: The mediating role of school belongingness. *Contemporary School Psychology*, *24*(2), 196-205. https://doi.org/10.1007/s40688-019-00262-z
- Ahmadi, S., Hassani, M., & Ahmadi, F. (2020). Student- and school-level factors related to school belongingness among high school students. *International Journal of Adolescence and Youth*, 25(1), 741-752. https://doi.org/10.1080/02673843.2020.1730200
- Ainsworth, M. D. S., Blehar, M.C., Waters, E., & Wall, S. (1979). *Patterns of attachment: A psychological study of the strange situation*. Lawrence Erlbaum.
- Ainsworth, M. D. S. (2014). *Patterns of attachment: A psychological study of the strange situation*. Psychology Press. https://doi.org/10.4324/9781315802428
- Alesech, J., & Nayar, S. (2021). Teacher strategies for promoting acceptance and belonging in the classroom: A New Zealand study. *International Journal of Inclusive Education*, 25(10), 1140-1156. https://doi.org/10.1080/13603116.2019.1600054
- Alink, K., Denessen, E., Veerman, G.-J., & Severiens, S. (2023). Exploring the concept of school belonging: A study with expert ratings. *Cogent Education*, 10(2), 1-11. https://doi.org/10.1080/2331186X.2023.2235979
- Aliyev, R., & Tunc, E. (2015). The investigation of primary school students' perception of quality of school life and sense of belonging by different variables. *Revista de Cercetare i Interven*] *Ie Social*, 48, 164-182.
- Allen, K.-A., & Bowles, T. (2012). Belonging as a guiding principle in the education of adolescents. *Australian Journal of Educational & Developmental Psychology*, *12*, 108-119. https://files.eric.ed.gov/fulltext/EJ1002251.pdf
- Allen, K.-A., & Boyle, C. (2018). *Pathways to belonging: Contemporary research in school belonging*. Brill. http://ebookcentral.proquest.com/lib/uvic/detail.action?docID=5570600
- Allen, K. -A., Gallo Cordoba, B., Ryan, T., Arslan, G., Slaten, C. D., Ferguson, J. K., Bozoglan, B., Abdollahi, A., & Vella-Brodrick, D. (2023). Examining predictors of school belonging using a socio-ecological perspective. *Journal of Child and Family Studies*, 32(9), 2804-2819. https://doi.org/10.1007/s10826-022-02305-1
- Allen, K.-A., Gray, D. L., Baumeister, R. F., & Leary, M. R. (2022a). The need to belong: A deep dive into the origins, implications, and future of a foundational construct. *Educational Psychology Review*, 34(2), 1133-1156. https://doi.org/10.1007/s10648-021-09633-6
- Allen, K.-A., Jamshidi, N., Berger, E., Reupert, A., Wurf, G., & May, F. (2022b). Impact of school-based interventions for building school belonging in adolescence: A systematic review. *Educational Psychology Review*, *34*(1), 229-257. https://doi.org/10.1007/s10648-021-09621-w
- Allen, K.-A., & Kern, M. L. (2017). School belonging in adolescents: Theory, research and practice. Springer. https://doi.org/10.1007/978-981-10-5996-4
- Allen, K.-A., Kern, M. L., Rozek, C., McInerney, D., & Slavich, G. (2021). Belonging: A review

- of conceptual issues, an integrative framework, and directions for future research. *Australian Journal of Psychology*, 73(1), 87-102.
- Allen, K.-A., Kern, M. L., Vella-Brodrick, D., Hattie, J., & Waters, L. (2018). What schools need to know about fostering school belonging: A meta-analysis. *Educational Psychology Review*, 30(1), 1-34. https://doi.org/10.1007/s10648-016-9389-8
- Allen, K.-A., & Kern, P. (2020). Boosting school belonging: Practical strategies to help adolescents feel like they belong at school. Routledge.
- Allen, K.-A., Vella-Brodrick, D., & Waters, L. (2016). Fostering school belonging in secondary schools using a socio-ecological framework. *The Educational and Developmental Psychologist*, 33(1), 97-121. https://doi.org/10.1017/edp.2016.5
- Anderman, E. M. (2002). School effects on psychological outcomes during adolescence. *Journal of Educational Psychology*, 94(4), 795-809. https://doi.org/10.1037/0022-0663.94.4.795
- Anderman, L. H. (2003). Academic and social perceptions as predictors of change in middle school students' sense of school belonging. *The Journal of Experimental Education*, 72(1), 5-22. https://doi.org/10.1080/00220970309600877
- Arslan, G. (2019). School belonging in adolescents: Exploring the associations with school achievement and internalising and externalising problems. *Educational and Child Psychology*, *36*(4), 22–33. https://doi.org/10.53841/bpsecp.2019.36.4.22
- Arslan, G. (2022). School bullying and youth internalizing and externalizing behaviors: Do school belonging and school achievement matter? *International Journal of Mental Health and Addiction*, 20(4), 2460–2477. https://doi.org/10.1007/s11469-021-00526-x
- Arslan, G., & Allen, K.-A. (2021). School victimization, school belongingness, psychological well-being, and emotional problems in adolescents. *Child Indicators Research*, *14*(4), 1501-1517. https://doi.org/10.1007/s12187-021-09813-4
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*(3), 497-529. https://doi.org/10.1037/0033-2909.117.3.497
- Balasundaram, P., & Avulakunta, I. D. (2024). *Human growth and development*. StatPearls Publishing. https://www.ncbi.nlm.nih.gov/books/NBK567767/
- Belsky, J., Booth-LaForce, C. L., Bradley, R., Brownell, C. A., Burchinal, M., Campbell, S. B., ... & Weinraub, M. (2006). Infant-mother attachment classification: Risk and protection in relation to changing maternal caregiving quality. *Developmental Psychology*, 42(1), 38-58. https://doi.org/10.1037/0012-1649.42.1.38
- Benner, A. D., & Graham, S. (2009). The transition to high school as a developmental process among multiethnic urban youth. *Child Development*, 80(2), 356-376. https://doi.org/10.1111/j.1467-8624.2009.01265.x
- Bouchard, K. L., & Berg, D. H. (2017). Students' school belonging: Juxtaposing the perspectives of teachers and students in the late elementary school years (Grades 4–8). *School*

- Community Journal, 27(1), 107-136.
- https://www.proquest.com/docview/1917344978/fulltextPDF/73CBDB9F44854C64PQ/1?accountid=14846&sourcetype=Scholarly%20Journals
- Bowlby, J. (1969). *Attachment and loss* (Vol. 1). Basic Books. https://pep-web.org/browse/IPL/volumes/79?openNotificationModal=false
- Bronfenbrenner, U. (1993). The ecology of cognitive development: Research models and fugitive findings. In R. H. Wozniak & K. Fischer (Eds.), *Development in context: Acting and thinking in specific environments* (pp. 3-44). Routledge.
- Cai, Y., Yang, Y., Ge, Q., & Weng, H. (2023). The interplay between teacher empathy, students' sense of school belonging, and learning achievement. *European Journal of Psychology of Education*, 38(3), 1167-1183. https://doi.org/10.1007/s10212-022-00637-6
- Carvalho, R. G. G. (2016). Gender differences in academic achievement: The mediating role of personality. *Personality and Individual Differences*, *94*, 54-58. https://doi.org/10.1016/j.paid.2016.01.011
- Castro-Kemp, S., Palikara, O., Gaona, C., Eirinaki, V., & Furlong, M. J. (2020). The role of psychological sense of school membership and postcode as predictors of profiles of socio-emotional health in primary school children in England. *School Mental Health*, 12(2), 284-295. https://doi.org/10.1007/s12310-019-09349-7
- Cemalcilar, Z. (2010). Schools as socialisation contexts: Understanding the impact of school climate factors on students' sense of school belonging. *Applied Psychology*, *59*(2), 243-272. https://doi.org/10.1111/j.1464-0597.2009.00389.x
- Cervantes, D. J., & Gutierrez, A. S. (2019). Stories from the field: Fostering positive peer relationships. U.S. Department of Education. https://files.eric.ed.gov/fulltext/ED601208.pdf
- Chen, I.-H., Gamble, J. H., & Lin, C.-Y. (2023). Peer victimization's impact on adolescent school belonging, truancy, and life satisfaction: A cross-cohort international comparison. *Current Psychology*, 42(2), 1402-1419. https://doi.org/10.1007/s12144-021-01536-7
- Dockett, S., & Perry, B. (2005). Researching with children: Insights from the Starting School Research Project. *Early Child Development and Care*, 175(6), 507-521. https://doi.org/10.1080/03004430500131312
- Doumas, D. M., & Midgett, A. (2019). The effects of students' perceptions of teachers' antibullying behavior on bullying victimization: Is sense of school belonging a mediator? *Journal of Applied School Psychology*, 35(1), 37-51. https://doi.org/10.1080/15377903.2018.1479911
- Dyussenbayev, A. (2017). Age periods of human life. *Advances in Social Sciences Research Journal*, 4(6), 258-263. https://doi.org/10.14738/assrj.46.2924
- Educational Transitions and Change (ETC) Research Group. (2011). *Transition to school:**Position statement. Research Institute for Professional Practice, Learning and Education,
 Charles Sturt University.

 https://artsed.csu.edu.au/education/transitions/resources/Position-Statement.pdf
- Elliott, S., & Davis, J. M. (2020). Challenging taken-for-granted ideas in early childhood

- education: A critique of Bronfenbrenner's ecological systems theory in the age of post-humanism. In A. Cutter-Mackenzie-Knowles, K. Malone, & E. Barratt Hacking (Eds.), *Research handbook on childhood nature* (pp. 1119-1154). Springer International Publishing. https://doi.org/10.1007/978-3-319-67286-1_60
- El Zaatari, W., & Maalouf, I. (2022). How the Bronfenbrenner bio-ecological system theory explains the development of students' sense of belonging to school? *SAGE Open*, *12*(4), 215824402211340. https://doi.org/10.1177/21582440221134089
- Encina, Y., & Berger, C. (2021). Civic behavior and sense of belonging at school: The moderating role of school climate. *Child Indicators Research*, *14*(4), 1453-1477. https://doi.org/10.1007/s12187-021-09809-0
- Encinas-Martín, M., & Cherian, M. (2023). *Gender, education and skills: The persistence of gender gaps in education and skills*. OECD Publishing. https://doi.org/10.1787/34680dd5-en.
- Erwin, E. J., Valentine, M., & Toumazou, M. (2024). The study of belonging in early childhood education: Complexities and possibilities. *International Journal of Early Years Education*, 32(1), 6-20. https://doi.org/10.1080/09669760.2022.2128307
- Espelage, D. L., Hong, J. S., Rao, M. A., & Low, S. (2013). Associations between peer victimization and academic performance. *Theory into Practice*, *52*(4), 233-240. https://doi.org/10.1080/00405841.2013.829724
- Faulkner, G. E. J., Adlaf, E. M., Irving, H. M., Allison, K. R., & Dwyer, J. (2009). School disconnectedness: Identifying adolescents at risk in Ontario, Canada. *Journal of School Health*, 79(7), 312-318. https://doi.org/10.1111/j.1746-1561.2009.00415.x
- Fletcher, H. K., Flood, A., & Hare, D. J. (Eds.). (2016). Attachment in intellectual and developmental disability: A clinician's guide to practice and research (1st ed.). Wiley Blackwell. https://doi.org/10.1002/9781118938119
- Fong Lam, U., Chen, W.-W., Zhang, J., & Liang, T. (2015). It feels good to learn where I belong: School belonging, academic emotions, and academic achievement in adolescents. *School Psychology International*, *36*(4), 393-409. https://doi.org/10.1177/0143034315589649
- Frydenberg, E., Martin, A. J., & Collie, R. J. (Eds.). (2017). *Social and emotional learning in Australia and the Asia-Pacific*. Springer Singapore. https://doi.org/10.1007/978-981-10-3394-0
- Garcia-Reid, P., Reid, R. J., & Peterson, N. A. (2005). School engagement among Latino youth in an urban middle school context: Valuing the role of social support. *Education and Urban Society*, 37(3), 257-275. https://doi.org/10.1177/0013124505275534
- Gillen-O'Neel, C., & Fuligni, A. (2013). A longitudinal study of school belonging and academic motivation across high school. *Child Development*, 84(2), 678-692. https://doi.org/10.1111/j.1467-8624.2012.01862.x
- Goodenow, C. (1993). Classroom belonging among early adolescent students: Relationships to motivation and achievement. *The Journal of Early Adolescence*, *13*(1), 21-43. https://doi.org/10.1177/0272431693013001002

- Graham, S., Kogachi, K., & Morales-Chicas, J. (2022). Do I fit in: Race/ethnicity and feelings of belonging in school. *Educational Psychology Review*, *34*(4), 2015-2042. https://doi.org/10.1007/s10648-022-09709-x
- Green, M., Emery, A., Sanders, M., & Anderman, L. H. (2016). Another path to belonging: A case study of middle school students' perspectives. *The Educational and Developmental Psychologist*, *33*(1), 85-96. https://doi.org/10.1017/edp.2016.4
- Gummadam, P., Pittman, L. D., & Ioffe, M. (2016). School belonging, ethnic identity, and psychological adjustment among ethnic minority college students. *The Journal of Experimental Education*, 84(2), 289-306. https://doi.org/10.1080/00220973.2015.1048844
- Hassani, S., Jakob, K., Schwab, S., Hellmich, F., Loeper, M., & Goerel, G. (2023). Fostering students' peer relationships through the classroom-based intervention FRIEND-SHIP. *Education 3-13*, 1-16. https://doi.org/10.1080/03004279.2023.2267584
- Hayes, N., O'Toole, L., & Halpenny, A. (2022). Introducing Bronfenbrenner: A guide for practitioners and students in early years education. *Routledge*. https://doi.org/10.4324/9781003247760
- Hernández, M. M., Robins, R. W., Widaman, K. F., & Conger, R. D. (2017). Ethnic pride, self-esteem, and school belonging: A reciprocal analysis over time. *Developmental Psychology*, *53*(12), 2384-2396. https://doi.org/10.1037/dev0000434
- Högberg, B., & Lindgren, J. (2023). From a crisis of results to a crisis of wellbeing education reform and the declining sense of school belonging in Sweden. *Comparative Education*, 59(1), 18-37. https://doi.org/10.1080/03050068.2022.2140894
- Houston, S. (2017). Towards a critical ecology of child development in social work: Aligning the theories of Bronfenbrenner and Bourdieu. *Families, Relationships and Societies, 6*(1), 53-69. https://doi.org/10.1332/204674315X14281321359847
- Hughes, J. N., Im, M. H., & Allee, P. J. (2015). Effect of school belonging trajectories in grades 6–8 on achievement: Gender and ethnic differences. *Journal of School Psychology*, *53*(6), 493-507. https://doi.org/10.1016/j.jsp.2015.08.001
- Ibrahim, A., & El Zaatari, W. (2020). The teacher–student relationship and adolescents' sense of school belonging. *International Journal of Adolescence and Youth*, 25(1), 382-395. https://doi.org/10.1080/02673843.2019.1660998
- Joerdens, S. H. (2014). Belonging means you can go in': Children's perspectives and experiences of membership of kindergarten. *Australasian Journal of Early Childhood*, 39(1), 12-21. https://doi.org/10.1177/183693911403900103
- Johansson, E., & Puroila, A.-M. (2021). Research perspectives on the politics of belonging in early years education. *International Journal of Early Childhood*, *53*(1), 1-8. https://doi.org/10.1007/s13158-021-00288-6
- Kalkan, F., & Dağli, E. (2022). The relationships between school climate, school belonging and school burnout in secondary school students. *International Journal of Contemporary Educational Research*, 8(4), 59-79. https://doi.org/10.33200/ijcer.878682
- Kenrick, D. T., Griskevicius, V., Neuberg, S. L., & Schaller, M. (2010). Renovating the pyramid

- of needs: Contemporary extensions built upon ancient foundations. *Perspectives on Psychological Science*, *5*(3), 292-314. https://doi.org/10.1177/1745691610369469
- Keyes, T. S. (2019). A qualitative inquiry: Factors that promote classroom belonging and engagement among high school students. *School Community Journal*, 29(1), 171-200.
- Kiefer, S. M., Alley, K. M., & Ellerbrock, C. R. (2015). Teacher and peer support for young adolescents' motivation, engagement, and school belonging. *RMLE Online*, *38*(8), 1-18. https://doi.org/10.1080/19404476.2015.11641184
- Klik, K. A., Cárdenas, D., & Reynolds, K. J. (2023). School climate, school identification and student outcomes: A longitudinal investigation of student well-being. *British Journal of Educational Psychology*, *93*(3), 806-824. https://doi.org/10.1111/bjep.12597
- Kohl, D., Recchia, S., & Steffgen, G. (2013). Measuring school climate: An overview of measurement scales. *Educational Research*, *55*(4), 411-426. https://doi.org/10.1080/00131881.2013.844944
- Korpershoek, H., Canrinus, E. T., Fokkens-Bruinsma, M., & De Boer, H. (2020). The relationships between school belonging and students' motivational, social-emotional, behavioural, and academic outcomes in secondary education: A meta-analytic review. *Research Papers in Education*, *35*(6), 641-680. https://doi.org/10.1080/02671522.2019.1615116
- Law, P. C., Cuskelly, M., & Carroll, A. (2013). Young people's perceptions of family, peer, and school connectedness and their impact on adjustment. *Australian Journal of Guidance and Counselling*, 23(1), 115-140. https://doi.org/10.1017/jgc.2012.19
- Leadbeater, B., Walker, M., Bowen, F., Barbic, S., Crooks, C., Mathias, S., Moretti, M., Sukhawathanakul, P., Pepler, D., Angelius, K., Carr, W., Conrod, P., Pike, I., Cummingham, T., Lawlor, M. S., McGrath, P., & Lingley-Pottie, P. (2023). Disseminating evidence-based preventive interventions to promote wellness and mental health in children and youth: Opportunities, gaps, and challenges. *Canadian Journal of Community Mental Health*, 42(4), 91-136. https://doi.org/10.7870/cjcmh-2023-031
- Lo Cricchio, M. G., Zambuto, V., Palladino, B. E., Nocentini, A., Salmela-Aro, K., & Menesini, E. (2023). The association between school burnout, school connectedness, and bullying victimization: A longitudinal study. *International Journal of Behavioral Development*, 47(6), 508-520. https://doi.org/10.1177/01650254231198028
- Long, E., Zucca, C., & Sweeting, H. (2021). School climate, peer relationships, and adolescent mental health: A social ecological perspective. *Youth & Society*, *53*(8), 1400-1415. https://doi.org/10.1177/0044118X20970232
- Ludwig, K. A., & Warren, J. S. (2009). Community violence, school-related protective influences, and psychosocial outcomes in urban youth. *Psychology in the Schools*, 46(10), 1061-1073. https://doi.org/10.1002/pits.20444
- Mahar, A. L., Cobigo, V., & Stuart, H. (2013). Conceptualizing belonging. *Disability and Rehabilitation*, 35(12), 1026-1032. https://doi.org/10.3109/09638288.2012.717584
- Marcenaro–Gutierrez, O., Lopez–Agudo, L. A., & Ropero-García, M. A. (2018). Gender differences in adolescents' academic achievement. *Young*, 26(3), 250-270.

https://doi.org/10.1177/1103308817715163

- Marksteiner, T., & Kuger, S. (2016). Sense of belonging to school in 15-year-old students: The role of parental education and students' attitudes toward school. *European Journal of Psychological Assessment*, 32(1), 68-74. https://doi.org/10.1027/1015-5759/a000333
- Mary, L. (2014). Fostering positive peer relations in the primary classroom through circle time and co-operative games. *Education 3-13*, 42(2), 125-137. https://doi.org/10.1080/03004279.2012.662239
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review, 50*(4), 370-396. https://doi.org/10.1037/h0054346
- Mateu-Gelabert, P., & Lune, H. (2003). School violence: The bidirectional conflict flow between neighborhood and school. *City & Community*, 2(4), 353-369. https://doi.org/10.1046/j.1535-6841.2003.00060.x
- Maurizi, L. K., Ceballo, R., Epstein-Ngo, Q., & Cortina, K. S. (2013). Does neighborhood belonging matter? Examining school and neighborhood belonging as protective factors for Latino adolescents. *American Journal of Orthopsychiatry*, 83(2), 323-334. https://doi.org/10.1111/ajop.12017
- McGorry, P. D., & Mei, C. (2018). Early intervention in youth mental health: progress and future directions. *BMJ Mental Health*, 21(4), 182-184. https://doi.org/10.1136/ebmental-2018-300060
- McMahon, S. D., & Wernsman, J. (2009). The relation of classroom environment and school belonging to academic self-efficacy among urban fourth- and fifth-grade students. *The Elementary School Journal*, 109(3), 267-281. https://doi.org/10.1086/592307
- Montecillo, M. J., Pejoto, J. L., & Moral, R. V. (2024). Belongingness matters: A qualitative exploration of peer acceptance and rejection among high school students. *Eureka: Journal of Educational Research*, *3*(1), 93-100. https://doi.org/10.56773/ejer.v3i1.51
- Niehaus, K., Rudasill, K. M., & Rakes, C. R. (2012). A longitudinal study of school connectedness and academic outcomes across sixth grade. *Journal of School Psychology*, 50(4), 443-460. https://doi.org/10.1016/j.jsp.2012.03.002
- Nunes, S. A. N., Faraco, A. M. X., Vieira, M. L., & Rubin, K. H. (2013). Externalizing and internalizing problems: Contributions of attachment and parental practices. *Psicologia: Reflexão e Crítica, 26*, 617-625. https://doi.org/10.1590/S0102-79722013000300022
- Palikara, O., Castro-Kemp, S., Gaona, C., & Eirinaki, V. (2021). The mediating role of school belonging in the relationship between socioemotional well-being and loneliness in primary school age children. *Australian Journal of Psychology*, 73(1), 24-34. https://doi.org/10.1080/00049530.2021.1882270
- Parker, J. G., Rubin, K. H., Erath, S. A., Wojslawowicz, J. C., & Buskirk, A. A. (2015). Peer relationships, child development, and adjustment: A developmental psychopathology perspective. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology* (pp. 419-493). John Wiley & Sons, Ltd. https://doi.org/10.1002/9780470939383.ch12
- Parr, E. J., Shochet, I. M., Cockshaw, W. D., & Kelly, R. L. (2020). General belonging is a key predictor of adolescent depressive symptoms and partially mediates school belonging.

- School Mental Health, 12(3), 626–637. https://doi.org/10.1007/s12310-020-09371-0
- Pesonen, H. (2016). Sense of belonging for students with intensive special education needs: An exploration of students' belonging and teachers' role in implementing support. [Doctoral dissertation, University of Helsinki]. http://urn.fi/URN:ISBN:978-951-51-1880-6.
- Peters, S. (2010). *Literature review: Transition from early childhood education to school*. New Zealand Ministry of Education. http://www.educationcounts.govt.nz/publications/ece/78823
- Peters, M., Seeds, K., Goldstein, A., & Coleman, N. (2008). *Parental involvement in children's education survey* (Research Brief No. RR034). London Department for Children, Schools and Families. https://dera.ioe.ac.uk/id/eprint/8605/1/DCSF-RR034.pdf
- Pittman, L. D., & Richmond, A. (2007). Academic and psychological functioning in late adolescence: The importance of school belonging. *The Journal of Experimental Education*, 75(4), 270-290. https://doi.org/10.3200/JEXE.75.4.270-292
- Pollak, I., Mitic, M., Birchwood, J., Dörfler, S., Krammer, I., Rogers, J. C., Schek, E. J., Schrank, B., Stiehl, K. A. M., & Woodcock, K. A. (2023). A systematic review of intervention programs promoting peer relationships among children and adolescents: Methods and targets used in effective programs. *Adolescent Research Review*, 8(3), 297-321. https://doi.org/10.1007/s40894-022-00195-4
- Prince, E. J., & Hadwin, J. (2013). The role of a sense of school belonging in understanding the effectiveness of inclusion of children with special educational needs. *International Journal of Inclusive Education*, 17(3), 238-262. https://doi.org/10.1080/13603116.2012.676081
- Riley, K. (2019). Agency and belonging: What transformative actions can schools take to help create a sense of place and belonging? *Educational and Child Psychology*, *36*(4), 91-104. https://doi.org/10.53841/bpsecp.2019.36.4.91
- Rosa, E. M., & Tudge, J. (2013). Urie Bronfenbrenner's theory of human development: Its evolution from ecology to bioecology. *Journal of Family Theory & Review*, 5(4), 243-258. https://doi.org/10.1111/jftr.12022
- Ross, K. M., & Tolan, P. (2018). Social and emotional learning in adolescence: Testing the CASEL model in a normative sample. *The Journal of Early Adolescence*, *38*(8), 1170-1199. https://doi.org/10.1177/0272431617725198
- Ruedas-Gracia, N., Lafromboise, T., Hussain, S. F., Malik, S. S., & Laverdure, A. (2020). Parent educational level and motivation among Native American adolescents: The mediating role of school belonging. *Journal of American Indian Education*, *59*(2), 121-145. https://doi.org/10.1353/jaie.2020.0012
- Saab, H. (2009). *The school as a setting to promote student health and wellbeing* [Doctoral dissertation, Queen's University].
- Sali, L. J., Osiesi, M. P., & Blignaut, S. (2023). Exploring learners' sense of belonging in Port Elizabeth low-income primary schools in South Africa: A narrative inquiry. *Education 3-13*, 1-14. https://doi.org/10.1080/03004279.2023.2233529
- Scorgie, K. (2015). Ambiguous belonging and the challenge of inclusion: Parent perspectives on

- school membership. *Emotional and Behavioural Difficulties*, 20(1), 35-50. https://doi.org/10.1080/13632752.2014.947098
- Šeboková, G., Uhláriková, J., & Halamová, M. (2018). Cognitive and social sources of adolescent well-being: Mediating role of school belonging. *Studia Psychologica*, 60(1), 16-29. https://doi.org/10.21909/sp.2018.01.749
- Shochet, I. M., Smith, C. L., Furlong, M. J., & Homel, R. (2011). A prospective study investigating the impact of school belonging factors on negative affect in adolescents. *Journal of Clinical Child & Adolescent Psychology*, 40(4), 586–595. https://doi.org/10.1080/15374416.2011.581616
- Shochet, I., & Orr, J. (2020). Promoting school connectedness, promoting a sense of belonging. In B. Saggers (Ed.), *Developing Positive Classroom Environments* (1st ed., pp. 167-178). Routledge. https://doi.org/10.4324/9781003115335-13
- Singh, K., Chang, M., & Dika, S. (2010). Ethnicity, self-concept, and school belonging: Effects on school engagement. *Educational Research for Policy and Practice*, *9*(3), 159-175. https://doi.org/10.1007/s10671-010-9087-0
- Slaten, C. D., Ferguson, J. K., Allen, K.-A., Brodrick, D.-V., & Waters, L. (2016). School belonging: A review of the history, current trends, and future directions. *The Educational and Developmental Psychologist*, 33(1), 1-15. https://doi.org/10.1017/edp.2016.6
- Sukhera J. (2022a). Narrative reviews in medical education: Key steps for researchers. *Journal of Graduate Medical Education*, 14(4), 418-419. https://doi.org/10.4300/JGME-D-22-00481.1
- Sukhera, J. (2022b). Narrative reviews: Flexible, rigorous, and practical. *Journal of Graduate Medical Education*, 14(4), 414-417. https://doi.org/10.4300/JGME-D-22-00480.1
- Tian, L., Zhang, L., Huebner, E. S., Zheng, X., & Liu, W. (2016). The longitudinal relationship between school belonging and subjective well-being in school among elementary school students. *Applied Research in Quality of Life*, 11(4), 1269-1285. https://doi.org/10.1007/s11482-015-9436-5
- Uslu, F., & Gizir, S. (2017). School belonging of adolescents: The role of teacher—student relationships, peer relationships and family involvement. *Educational Sciences: Theory & Practice*, 17(1), 63-82. https://doi.org/10.12738/estp.2017.1.0104
- Uwah, C. J., McMahon, H. G., & Furlow, C. F. (2008). School belonging, educational aspirations, and academic self-efficacy among African American male high school students: Implications for school counselors. *Professional School Counseling*, 11(5), 296-305. https://doi.org/10.1177/2156759X0801100503
- Vang, T. M., & Nishina, A. (2022). Fostering school belonging and students' well-being through a positive school interethnic climate in diverse high schools. *Journal of School Health*, 92(4), 387-395. https://doi.org/10.1111/josh.13141
- Vélez-Agosto, N. M., Soto-Crespo, J. G., Vizcarrondo-Oppenheimer, M., Vega-Molina, S., & García Coll, C. (2017). Bronfenbrenner's bioecological theory revision: Moving culture from the macro into the micro. *Perspectives on psychological science*, *12*(5), 900-910. https://doi.org/10.1177/1745691617704397

- Wagle, R., Dowdy, E., Nylund-Gibson, K., Sharkey, J. D., Carter, D., & Furlong, M. J. (2021). School belonging constellations considering complete mental health in primary schools. *Educational and Developmental Psychologist*, 38(2), 173-185. https://doi.org/10.1080/20590776.2021.1964071
- Wang, M.-T., & Eccles, J. S. (2012). Social support matters: Longitudinal effects of social support on three dimensions of school engagement from middle to high school. *Child Development*, 83(3), 877-895. https://doi.org/10.1111/j.1467-8624.2012.01745.x
- Wylie, C., Hodgen, E., Christenson, S. L., & Reschly, A. L. (2012). Trajectories and patterns of student engagement: Evidence from a longitudinal study. In S. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (1st ed., pp. 585-599). Springer US. https://doi.org/10.1007/978-1-4614-2018-7 28
- Yip, J., Ehrhardt, K., Black, H., & Walker, D. O. (2018). Attachment theory at work: A review and directions for future research. *Journal of Organizational Behavior*, *39*(2), 185-198. https://doi.org/10.1002/job.2204
- Zhang, X., Li, J., Xie, F., Chen, X., Xu, W., & Hudson, N. W. (2022). The relationship between adult attachment and mental health: A meta-analysis. *Journal of Personality and Social Psychology*, 123(5), 1089-1137. https://doi.org/10.1037/pspp0000437
- Zilberstein, K. (2014). The use and limitations of attachment theory in child psychotherapy. *Psychotherapy*, 51(1), 93-103. https://doi.org/10.1037/a0030930