

**Sense of Belonging at School: Defining Attributes, Determinants, and Sustaining Strategies**

Jerome St-Amand

Université du Québec en Outaouais, Canada

Stéphanie Girard

Université du Québec à Trois-Rivières, Canada

Jonathan Smith

Université du Québec en Abitibi-Témiscamingue, Canada

### **Abstract**

Building and sustaining students' sense of belonging at school has been proposed by teachers and researchers as a means of stimulating students' intent or desire to learn and of reducing student attrition. This article will present the results of an inquiry into the literature on belonging to support the perspective that is it necessary, not only to foster a strong sense of belonging, but also to place much greater emphasis on school belonging in educational programs, practices, and research. The aims of the paper are: (a) to review the theoretical literature on school belonging with an emphasis on its defining attributes and main determinants, (b) to review the measurement instruments of school belonging, and (c) to identify various strategies that may enhance school belonging. In light of the defining attributes identified, the authors propose six general recommendations for educational stakeholders wishing to build and sustain students' sense of belonging at school.

**Keywords:** students' sense of school belonging; defining attributes; determinants; sustaining strategies.

## Introduction

Researchers in psychology consider individuals to be complex beings. Individuals have, after all, a unique spirit, their own goals and ambitions. At the same time, they feel an innate need to belong to a group; to get closer to the people who are part of their environment; to have meaningful, intimate, and satisfying social relationships (Baumeister & Leary, 1995; Lavigne, Vallerand, & Crevier-Braud, 2011); to love and to be loved; to take care of others and to be taken care of (Deci & Ryan, 2000). The need to belong is in fact universal, as is the need to establish stable and loving relationships (Baumeister & Leary, 1995).

In school settings, researchers have noted that school belonging significantly and positively affects several motivational measures such as expectancy of success, valuation of school work, and self-reported effort (Goodenow, 1993a). Enhancing school belonging can also have a positive effect on academic achievement and school engagement (Allen, Kern, Vella-Brodick, & Waters, 2016; Eccles & Roser, 2009; Juvonen, 2006; Neel & Fuligni, 2013; Roeser, Midgley, & Urdan, 1996; Wehlage, Rutter, Smith, Lesko, & Fernandez, 1989). Indeed, in her literature review aiming at addressing the question, *is this experience of belongingness important in an educational setting?* Osterman (2000) pointed out other positive outcomes associated with belonging, such as participation in classroom activities and prosocial behaviors. Other researchers have noted a positive and significant relationship between school belonging and investment in extracurricular activities, reduction in school absenteeism rates (Flynn, 1997), positive social relations (Hagborg, 1994), and positive mental health (Hagerty, Williams, Coyne, & Early, 1996). Osterman (2000) has also highlighted the importance of school belonging, writing: “[F]rom a review of even these limited sources it is possible to conclude that belongingness is an extremely important concept. As a psychological phenomenon, it has far reaching impact on human motivation and behavior” (p. 359). On the other hand, a lack of school belonging is a dropout risk factor that should be seriously considered (Berkold, Geis, & Kaufman, 1998). In line with this, Christenson and Thurlow (2004) indicated that a lack of belonging could be a key indicator of a process of disengagement from school.

Despite the weighty importance that sense of school belonging has been understood to bear, researchers observe that the work done thus far has shown a distinct lack of scientific clarity and thus does not allow us to understand the concept fully so as to adopt more targeted educational practices to build and sustain it (Allen & Bowles, 2012; Allen et al., 2016). Allen and Bowles (2012) note:

Research on belonging in educational settings has been unsystematic and diluted by disparities in definition and terminology [...] One explanation for this lack of interest may be the disparity in measurements, terminology, and definitions that make empirically-driven findings and interventions difficult to translate into school practices (p. 108).

In their work, Allen and Bowles (2012) demonstrate the importance of a sense of belonging and suggest new perspectives for further research. In our view, our paper complements their argument by suggesting more avenues of research and by formulating a few recommendations for educational stakeholders. The aims of this paper are: (a) to review the theoretical literature on school belonging with an emphasis on its defining attributes and determinants, (b) to review the measurement instruments of school belonging, and (c) to identify various strategies that may enhance school belonging.

## Literature Review

We commenced this project by generating synonyms for *school belonging* in order to make an exhaustive literature search and to obtain relevant documents. A thesaurus was used to identify English and French synonyms which included *membership*, *belonging*, *school membership*, *school connectedness*, *youth connectedness*, *sense of school belonging*, *identification to school*, *sentiment d'appartenance*, *appartenance*, and *climat d'appartenance*. These keywords were employed in general (e.g., Google, Google Scholar) and specialized (e.g., PsycInfo, Eric, Francis) search engines. As for the year of publication of the identified documents, the authors remained flexible in order to include older publications that are fundamental to the understanding of this concept. A first reading of these documents was undertaken to target the definitions of belonging, the measurement instruments, and the theoretical models that take belonging into account. Subsequently, another literature review was conducted among the documents identified to target more relevant publications.

### Toward an Understanding of School Belonging

As pointed out by many researchers, school belonging has been described in many different ways (Allen & Bowles, 2012; Allen et al., 2016). In recent years, numerous definitions of school belonging have been proposed, in both the field of education and other areas of research. Our literature review has yielded several definitions of *belonging* in research areas such as *health* (Anant, 1967; Hagerty, Lynch-Sauer, Patusky, Bouwsema, & Collier, 1992; Hagerty & Patusky, 1995), *psychology* (Kestenberg & Kestenberg, 1988; Maslow, 1962, 1970; Mucchielli, 1972, 1980; Smith & Berg, 1987), *management* (Richer & Vallerand, 1998), and *educational sciences* (Deci, Vallerand, Pelletier, & Ryan, 1991; Goodenow, 1993a; Janosz, Georges, & Parent, 1998; Langevin, 1999; Wehlage et al., 1989; Williams & Downing, 1998). A careful examination of these definitions has helped us identify a few interesting perspectives on school belonging as well as three definitional attributes we believe are critical when defining this concept.

First, belonging is a major factor that contributes positively to an individual's psychological development. Mucchielli (1980, p. 99) suggested that membership is not just about being in or out of a group; it involves the development of a personal identification and a social identity. The impact of belonging on a person's psychological development is also reflected in the definition provided by Kestenberg and Kestenberg (1988, p. 536): "Belonging encompasses many spheres of interest. It is a component of identity and object relationships. It manifests itself of familiar space and objects to whom the space belongs." For his part, Maslow (1962, 1970) noted that membership is an essential need which must be satisfied in order to self-actualize as individuals. Maslow (1970) described self-actualization in these terms:

It may be loosely described as the full use and exploitation of talents, capacities, potentialities, and other factors. Such people seem to be fulfilling themselves and to be doing the best they are capable of doing, reminding us of Nietzsche's exhortation "become what thou art." They are people who have developed or are developing to the full stature of which they are capable (p. 150).

Second, a sense of belonging is a basic need that leads people to build social bonds and to affiliate with members of a group (Hagerty et al., 1996). As suggested by Anant (1967), the quest for group affiliation is based on the assumption that the individual will, as a result, build strong social bonds with others to the point of considering the group as an important element

of his/her life: “Belongingness was defined as personal involvement (in a social system) to the extent that the person feels himself to be an indispensable and integral part of the system” (Anant, 1967, p. 391). Langevin (1999, p. 116) stressed the importance of a reciprocal relationship between students and adults of the institution; these social relationships exist in both the formal and informal aspects of school life. According to Deci and his colleagues (1991), these positive social relationships must be safe and satisfactory. Furthermore, Williams and Downing (1998, p. 103) suggested that friendships are important components of belonging:

Students thought that being a part of the class meant that they had a place in the classroom, felt welcomed, wanted, and respected by their classmates and teachers. Being familiar with their classmates and having friends who understood them made the student feel as if he or she belonged to a group and/or to a class as a whole.

Finally, four defining attributes emerged from the definitions identified, namely positive emotions, positive social relations, involvement, and harmonization. According to Walker and Avant (2011), defining attributes are key characteristics that help to differentiate one concept from another related concept and clarify its meaning.

- **Defining attribute 1:** First, positive emotions are an important defining attribute of belonging. Indeed, authors have suggested that these include a feeling of attachment (Mucchielli, 1980), a feeling of intimacy (Kestenberg & Kestenberg, 1988), a feeling of usefulness and support (Mucchielli, 1980), and a sense of pride (Janosz et al., 1998).
- **Defining attribute 2:** Second, the student must maintain positive relations with his or her peers and teachers. These social relations must be accompanied by encouragement, acceptance, support, respect (Goodenow, 1993b), valorization (Goodenow, 1993b, Hagerty et al., 1992), and warmth (Williams & Downing, 1998).
- **Defining attribute 3:** Third, the individual must demonstrate energy and a willingness to get involved in a meaningful way within a group (Hagerty et al., 1992). This involvement can be in class or outside, such as active participation in extracurricular activities (Wehlage et al., 1989; Williams & Downing, 1998).
- **Defining attribute 4:** Fourth, harmonization is another defining attribute often mentioned in the definitions (Wehlage et al., 1989), including that of Maslow (1962). In his definition, Maslow mentioned that individuals must adapt and adjust by changing personal aspects to align with any situations or people that would warrant such an adaptation.

In sum, a close examination of the definitions found in the literature allows us to pinpoint these four defining attributes of belonging. In our view, this helps us to carry out a more thorough conceptual analysis specifically to delineate the main components of school belonging and their related concepts. Knowing the defining attributes could lead teachers to adopt more precise pedagogical strategies and, ultimately, help researchers to measure the concept more accurately.

## **Methodologies and Methods**

### **Measurement Instruments**

Our literature review made it possible to identify instruments, mainly of the quantitative type, that measure sense of belonging in specific groups of individuals. Such instruments have been applied to measuring belonging in given groups of individuals – e.g., a group of offenders (Negola, 1998) – as well as in educational settings, such as a school-based intervention program

(Anderson-Butcher & Conroy, 2002) and a sports team (Allen, 2006). From this search, we have chosen to focus on three quantitative research tools aimed specifically at measuring students' general sense of school belonging.

First, Carol Goodenow (1993b) developed the *Psychological Sense of School Membership* (PSSM) questionnaire at Tufts University in Boston. The PSSM has been the most frequently used instrument in recent years to measure the concept. In 2011, 40 studies had already used this tool (You, Ritchey, Furlong, Shochet, & Boman, 2011). The theoretical work of many scholars contributed to the development of the instrument (Finn, 1989; Wehlage et al., 1989). The PSSM is made up of 18 self-reported items describing various features of students' relationship with their schools, such as acceptance and inclusion (e.g., *most teachers at [name of school] are interested in me*), respect and encouragement (e.g., *people here notice when I'm good at something*), as well as peers' reactions toward a student's opinion (e.g., *other students in this school take my opinions seriously*). Some items were also developed to measure students' sense of belonging from a broader perspective that characterizes the relationship between the student and his/her school (e.g., *I feel like a real part of [name of school]*). Participants respond on a 5-point Likert scale ranging from 1 (not at all true) to 5 (completely true). The PSSM is a research instrument that is suitable for use with both teenagers and younger students, and researchers have translated it into several languages including Mandarin (Cheung, 2004), Hebrew (Sagy & Dotan, 2001), and French (Boily, 2002).

Second, Janosz and colleagues (1998) developed the *Questionnaire sur l'environnement socioéducatif* (QES), which comprises several French-language measurement scales, at least one of which measures students' school belonging. Overall, the QES is a measurement tool used to document the quality of the school environment; it also helps to study the influence of the school environment on students' success and adaptation (Janosz et al., 2007). The items essentially measure the emotional dimension of school belonging: *je suis fier d'être un élève de cette école* (I am proud to be a student of this school); *j'aime mon école* (I like my school); *je me sens vraiment à ma place dans cette école* (I really feel a sense of my place in this school); *je préférerais être dans une autre école* (I'd rather be in another school); *cette école est importante pour moi* (this school is important to me).

Third, Midgley et al. (2000) developed the *Manual for the Patterns of Adaptive Learning Scales* (PALS) in 1998 at the University of Michigan. Overall, the scales in the PALS are used to examine the relationship between factors in the learning environment and the student's motivation, emotions, and behaviors. In the validation of their theoretical model, Roeser and colleagues (1996) used a few items from the PALS to measure school belonging. The items in this scale also measure the emotional dimensions of belonging: *I feel like I belong in this school*; *I feel like I am successful in this school*; *I feel like I matter in this school*; *I do not feel I am important in this school*. Table 1 assesses the limitations and strengths of these three quantitative instruments in regard to the items composing them and the four defining attributes raised in the current study.

Table 1: Comparative analysis of the main quantitative instruments for measuring the sense of belonging at school: strengths and limitations.

| Instruments and main characteristics   | Strengths   | Limitations   |
|--|---|---|
| <b>Questionnaire sur l'environnement socioéducatif (QES)</b>   |   |   |
| The <i>Questionnaire sur l'environnement socioéducatif</i> (QES) consists of many different scales used to examine the impact of the school environment on students' success and adaptation. One scale (six items) measures school belonging on a six-point Likert scale (1 = totally disagree; 6 = totally agree).  | The scales were developed in French, thus facilitating the instrument's usage for French-speaking samples; presence of items measuring defining attributes 1 and 4.                                     | There is an absence of items measuring defining attributes 2 and 3.   |
| <b>Patterns of Adaptive Learning Scale (PALS)</b>  |   |   |
| Scales derived from the PALS are mainly used to examine the relationship between the learning environment and students' motivation, affects, and behaviors. In the validation of their theoretical model, Roeser, Midgley, and Urdan (1996) used four items from the PALS to measure school belonging. A five-point Likert scale (1 = not all true; 3 = somewhat true of me; 5 = very true of me). | The PALS has been the subject of several validation studies; presence of items measuring defining attribute 1.  | There is an absence of items measuring defining attributes 2, 3, and 4.   |
| <b>Psychological Sense of School Membership (PSSM)</b>   |   |   |
| The PSSM is used exclusively to measure school belonging. It consists of 18 items on a five-point Likert scale (1 = not all true; 5 = completely true).  | The PSSM has a strong theoretical background (Finn 1989; Wehlage et al., 1989). It has been the subject of several validation studies, and items measuring defining attributes 1, 2, and 4 are present. | Attribute 3 is the least well represented within the items of the PSSM. Other themes reflecting the notion of involvement could be considered: (1) showing initiative in class; (2) participating actively in extracurricular activities (e.g., sporting activities, sociocultural events, etc.). |

Delineating the defining attributes of a concept is an important step toward understanding it fully. A clear conceptualization of a concept can help to improve substantially the way in which researchers measure it. If a measurement instrument adequately reflects the various attributes of a concept, it can facilitate interpretation of the results and comparison among studies, as well

as any scientific advances in a given field of study. Therefore, the quality of the measurement instrument and its validation are of paramount importance:

Researchers should develop instruments measuring the functioning of factors that provide data about both qualitative and quantitative characteristics. To do so, not only should the construct validity of the instruments be examined but also the validity of the measurement framework, and this should be done by making use of the Classical Test Theory and/or the Item Response Theory (IRT) (Creemers, Kyriakides, & Sammons, 2010, p. 32).

### **Theoretical Models and Key Determinants**

It should be noted that many theorists in the field of educational sciences have been interested in the study of school belonging from a theoretical viewpoint to explain phenomena such as school engagement and academic achievement (Anderman & Freeman, 2004; Beaumeister & Leary, 1995; Connell, Spencer, & Aber, 1994; Creemers & Kyriakides, 2008; Eccles & Roeser, 2009; Finn, 1989; Janosz et al., 1998; Juvonen, 2006; Newmann, Wehlage, & Lamborn, 1992; Roeser et al., 1996; Wehlage et al., 1989). In their literature review on belonging, Allan and Bowles (2012) mentioned many other relevant factors: parental involvement (Epstein, 1992), typologies of love (Lee, 1973), belonging and attachment (Bowlby, 1969, 1973; Cohen, 1982, 1985), social capital (Putnam, 2000), and self-presentation (Fiske, 2014). A thorough examination of these theoretical models is beyond the scope of this paper.

However, a close examination of the theoretical models that have been developed in the educational sciences allows us to pinpoint two important determinants of students' school belonging. First of all, it appears that positive social relations among peers contribute directly and positively to building and sustaining students' school belonging (Janosz et al., 1998; Juvonen, 2006). In a thorough literature review on that perspective, Juvonen (2006) suggested many types of social relations among peers that can be examined, such as dyadic relations, friendships, or peer acceptance. Theorists have also argued that positive social relations between teachers and students directly and positively influence students' school belonging (Janosz et al., 1998; Newman et al., 1992; Roeser et al., 1996; Wehlage et al., 1989). Juvonen (2006, p. 658) noted, "Students are presumed to comply and be motivated to learn when they feel supported and respected by their teachers." Along the same lines as Osterman (2010), Wehlage and colleagues (1989) suggested that positive social relations between students and the teacher can be considered through the lens of support and caring behaviors. These researchers suggested offering: (1) constant support for students having difficulties, (2) constant support for students in order for them to meet the standards and skills required by the school, (3) constant support so that students feel included in society, and (4) constant efforts to help students establish and maintain respectful relationships.

### **Educational Strategies to Build and Sustain Students' School Belonging**

Allen and Bowles (2012) suggested effective strategies to guide teachers in building and maintaining students' school belonging. Some of these strategies were taken from the Wingspread declaration on school connections (2004) and are congruent with Osterman's (2010) position regarding the notion that school belonging can be enhanced through interpersonal support, encouragement of autonomy, and methods of instruction that shape positive social dynamics with peers. For example, having high expectations of each student, being fair and consistent in disciplinary management, making sure students adhere to school

and classroom rules, creating a trusting climate, and considering students' needs are multiple strategies to enhance students' school belonging (Wingspread, 2004). Other strategies reported by Allen and Bowles (2012) were originally proposed by the Centers for Disease Control and Prevention (2009). Many of these are part of theoretical models in the field of educational sciences that take school belonging into account. These strategies include adult support (Newman et al., 1992), a positive school climate and positive perceptions of the learning environment (Janosz et al., 1998), and positive peer relations (Juvonen, 2006).

In our view, teachers should also examine Osterman's (2010) work to gain insight into the most effective strategies in terms of intervening to develop students' sense of belonging at school. Osterman (2010) described a few studies aimed at identifying various teaching strategies and teachers' attitudes/behaviors that possibly have a positive influence on school belonging. Through a very long list of strategies, Osterman (2010) proposed two roles that teachers should adopt: (1) academic support (teacher as instructional leader) and (2) personal support (teacher as a person). Osterman (2010) used the expression *academic support (teacher as instructional leader)* to address the wide range of teaching strategies that positively influence students' school belonging. Among these educational strategies Osterman (2010) suggested giving examples, checking for understanding, engaging in problem solving, and giving students' choices. Osterman (2010) used another expression, *personal support (teacher as a person)*, to emphasize the fact that effective teaching strategies are not enough alone to develop students' school belonging. On a daily basis, teachers must show adequate interpersonal support because students perceive sound teaching partly through their teachers' caring behaviors. Among many personal support behaviors, Osterman (2010) suggested offering students guidance, knowing students' names, listening to students, using humor, and encouraging discussion.

## Discussion

Considering the significant role of students' school belonging in their engagement and academic success, this paper makes six recommendations that can be applied by teachers, school principals, school board leaders, school psychologists, or any other behavioral intervention workers. In developing these recommendations, the four defining attributes of belonging have been considered, as well as teachers' behaviors and instructional strategies.

### Recommendation 1

Given that positive emotions are a fundamental element that defines a sense of belonging, the authors recommend that school principals provide their teachers with ongoing training in active listening to decode and take greater account of their students' emotional well-being. According to Gordon and Burch (2003, p. 76):

Active listening is not a gimmick that teachers can pull out of their bag of tricks to patch up students when they have problems. It is a specific method for putting to work a set of attitudes about students, about their problems, and about the role of the teacher as a helping person.

Gordon and Burch (2003, p. 74) suggested several aspects related to active listening strategies in order for them to be effective:

- The teacher must have a deep sense of trust in students' ability ultimately to solve their own problems [...].

- The teacher must be able to genuinely accept the feelings expressed by students [...].
- The teacher must understand that feelings are often quite transitory [...].
- The teacher must want to help students with their problems and make time for it [...].
- Teachers must be “with” each student who is experiencing troubles [...].
- Teachers need to understand that students are seldom able to start out by sharing the real problem [...].
- Teachers must respect the privacy and confidential nature of whatever the student reveals about himself and his life [...].

### **Recommendation 2**

Because positive social relations, effective pedagogy and fulfilling needs – such as competence, autonomy, and relatedness – are essential elements for learning, the authors recommend that teachers adopt two distinct roles with their students. First, as Osterman (2010) suggests, they can offer personal support to the students (teacher as a person); this refers to the many ways of supporting and of building and sustaining strong social bonds, and could include demonstrating enthusiasm for teaching and learning through words and body language, disciplining proactively rather than punitively, and understanding what is going on in the students’ lives. The second role is related to academic support (teacher as an instructional leader); this precisely refers to effective teaching strategies (Osterman, 2010) and includes developing relevant lessons, providing sufficient time for completion, emphasizing mastery in learning, and avoiding making comparisons between struggling students and other more capable students.

### **Recommendation 3**

Because positive social relations among peers is an element that defines a sense of belonging, the authors recommend the adoption of teaching strategies that encourage positive social relationships, such as teamwork or cooperative learning tasks (Osterman, 2000). In the authors’ view, attention must be paid to make sure that each student has a chance to play a role in a team and feel accepted by their peers.

### **Recommendation 4**

Because many theorists have suggested that positive social relations contribute to building and sustaining school belonging (Eccles & Roeser, 2009; Janosz et al., 1998; Juvonen, 2006; Newman et al., 1992; Roeser et al., 1996; Wehlage et al., 1989), the authors recommend the implementation of social competence programs quite early on in the students’ school career. In reviewing the work of other scholars, Kalvin, Bierman, and Erath (2015, p. 1) suggested:

To effectively promote positive peer relations, preschool programs need to target the social-emotional skills that are “competence correlates” – skills that are associated with peer acceptance and protect against peer rejection. During the preschool years, these skills include: 1) cooperative play skills (taking turns, sharing toys, collaborating in pretend play and responding positively to peers); 2) language and communication skills (conversing with peers, suggesting and elaborating joint play themes, asking questions and responding to requests for clarification, inviting others to play); 3) emotional understanding and regulation (identifying the feelings of self and other, regulating affect when excited or upset, inhibiting emotional outbursts and coping with everyday frustrations); and 4) aggression control and social problem-solving skills (inhibiting reactive aggression, managing conflicts

verbally, generating alternative solutions to social problems and negotiating with peers).

### **Recommendation 5**

Because many authors define school belonging using the concept of harmonization (similarity with members of the group) (Wehlage et al., 1989), the authors recommend educational activities in which students can develop common interests with their peers within the classroom. For instance, teams consisting of three to four students could create a website based on the teams' interests early in the school year so that many projects could revolve around it (e.g., members share a team blog).

### **Recommendation 6**

Because students' participation in extracurricular activities positively influences school belonging (Finn, 1989), the authors recommend engaging students in many extracurricular activities related to various interests, such as sports, arts, technology, culture, etc. In doing so, it will be possible to provide opportunities for students to develop common interests with students outside of their classroom.

## **Conclusion**

Enhancing students' school belonging is of paramount importance for students' academic success and engagement, and must therefore be taken into account in educational programs, practice, and research. This paper, aligned with that of Allen and Bowles (2012) and Allen et al. (2016), allows us to present well-supported arguments in favor of more research on this pivotal concept. On a final note, researchers and teachers should be aware of the complexity of the concept. In the authors' view, more research could be carried out (1) to delineate the defining attributes of belonging, and (2) to address the conceptual overlap among related concepts associated with school belonging. Such work would facilitate the clarification of many concepts in education while refining the interpretation of results when examining school belonging and its related concepts. By clarifying school belonging and its related concepts, the authors believe it will greatly benefit practice and research.

## References

- Allen, J. B. (2006). The perceived belonging in sport scale: Examining validity. *Psychology of Sport and Exercise*, 7(4), 387–405. <https://doi.org/10.1016/j.psychsport.2005.09.004>
- Allen, K., Kern, M. L., Vella-Brodrick, D., Hattie, J., & Waters, L. (2016). What schools need to know about fostering school belonging: A meta-analysis. *Educational Psychology Review*, 1–34. <https://doi.org/10.1007/s10648-016-9389-8>
- Allen, K. A., & Bowles, B. (2012). Belonging as a guiding principle in the education of adolescents. *Australian Journal of Educational & Developmental Psychology*, 12, 108–119.
- Anant, S. S. (1967). Belongingness and mental health: Some research findings. *Acta Psychologica*, 26(4), 391–396. [https://doi.org/10.1016/0001-6918\(67\)90035-2](https://doi.org/10.1016/0001-6918(67)90035-2)
- Anderman, L. H., & Freeman, T. M. (2004). Students' sense of belonging in school. In P.R. Pintrich & M. L. Maehr (Eds.), *Motivating students, improving schools: The legacy of Carol Midgley*, Vol. 13 (pp. 27–63). Oxford, UK: Elsevier. [https://doi.org/10.1016/S0749-7423\(03\)13002-6](https://doi.org/10.1016/S0749-7423(03)13002-6)
- Anderson-Butcher, D., & Conroy, D. E. (2002). Factorial and criterion validity of scores of a measure of belonging in youth development programs. *Educational and Psychological Measurement*, 62(5), 857–876. <https://doi.org/10.1177/001316402236882>
- 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>
- Berkthold, J., Geis, S., & Kaufman, P. (1998). *Subsequent educational attainment of high school dropouts* (NCES-98-085). Washington, DC: US Department of Education.
- Boily, R. (2002). *Étude descriptive longitudinale du sentiment d'appartenance envers l'école chez des élèves du secondaire des secteurs publics et privés*. (Unpublished doctoral dissertation). Université de Montréal, Montréal, Canada.
- Bowlby, J. (1969). *Attachment and loss: Attachment* (Vol. 1). London, UK: Hogarth.
- Bowlby, J. (1973). *Attachment and loss: Separation* (Vol. 2). New York, NY: Basic Books.
- Centers for Disease Control and Prevention. (2009). *School connectedness: Strategies for increasing protective factors among youth*. Atlanta, GA: U.S. Department of Health and Human Services.
- Cheung, H. Y. (2004). Comparing Shanghai and Hong Kong students' psychological sense of school membership. *Asia Pacific Education Review*, 5(1), 34–38. <https://doi.org/10.1007/BF03026277>
- Christenson, S. L., & Thurlow, L. M. (2004). School dropouts: Prevention considerations, interventions, and challenges. *Current Directions in Psychological Science*, 13(1), 36–39. <https://doi.org/10.1111/j.0963-7214.2004.01301010.x>
- Cohen, A. P. (1982). *Belonging: Identity and social organization in British rural cultures*. Manchester, UK: Manchester University Press.

- Cohen, A. P. (1985). *The symbolic construction of community*. London, UK: Tavistock.  
<https://doi.org/10.4324/9780203323373>
- Connell, J. P., Spencer, M. B., & Aber, J. L. (1994). Educational risk and resilience in African-American youth: Context, self, action, and outcomes in school. *Child Development, 65*(2), 493-506. <https://doi.org/10.2307/1131398>
- Creemers, B. P. M., & Kyriakides, L. (2008). *The dynamics of educational effectiveness: A contribution to policy, practice and theory in contemporary schools*. New York, NY: Routledge.
- Creemers, B. P. M., Kyriakides, L., & Sammons, P. (2010). *Methodological advances in educational effectiveness research*. New York, NY: Routledge.
- Deci, E. L., & Ryan, R. M. (2000). The “What” and “Why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*(4), 227–268. [https://doi.org/10.1207/S15327965PLI1104\\_01](https://doi.org/10.1207/S15327965PLI1104_01)
- Deci, E. L., Vallerand, R. J., Pelletier, L. G., & Ryan, R. M. (1991). Motivation and education: The self-determination perspective. *Educational Psychologist, 26*(3-4), 325–346. <https://doi.org/10.1080/00461520.1991.9653137>
- Eccles, J. S., & Roeser, R. W. (2009). Schools, academic motivation, and stage–environment fit. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (3rd ed., pp. 404–434). Hoboken, NJ: Wiley.  
<https://doi.org/10.1002/9780470479193.adlpsy001013>
- Epstein, J. (1992). School and family partnerships. In M. Adkin (Ed.), *Encyclopedia of educational research* (6<sup>th</sup> ed., pp. 1139-1151). New York, NY: MacMillan.
- Finn, J. D. (1989). Withdrawing from school. *Review of Educational Research, 59*(2), 117–142. <https://doi.org/10.3102/00346543059002117>
- Fiske, S. T. (2014). *Social Beings: Core motives in social psychology*. Hoboken, NJ: Wiley.
- Flynn, T. M. (1997). *A sense of school membership and extracurricular activities*. (Unpublished dissertation). University of Pittsburgh, Pittsburgh, PA.
- Goodenow, C. (1993a). 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>
- Goodenow, C. (1993b). The psychological sense of school membership among adolescents: Scale development and educational correlates. *Psychology in the Schools, 30*(1), 79–90. [https://doi.org/10.1002/1520-6807\(199301\)30:1<79::AID-PITS2310300113>3.0.CO;2-X](https://doi.org/10.1002/1520-6807(199301)30:1<79::AID-PITS2310300113>3.0.CO;2-X)
- Gordon, T., & Burch, N. (2003). *Teacher effectiveness training: The program proven to help teachers bring out the best in students of all ages*. New York, NY: Three Rivers Press.
- Hagborg, W. J. (1994). An exploration of school membership among middle- and high-school students. *Journal of Psychoeducational Assessment, 12*(4), 312–323. <https://doi.org/10.1177/073428299401200401>

- Hagerty, B. M., Williams, R. A., Coyne, J. C., & Early, M. R. (1996). Sense of belonging and indicators of social and psychological functioning. *Archives of Psychiatric Nursing, 10*(4), 235–244. [https://doi.org/10.1016/S0883-9417\(96\)80029-X](https://doi.org/10.1016/S0883-9417(96)80029-X)
- Hagerty, B. M. K., Lynch-Sauer, J., Patusky, K. L., Bouwsema, M., & Collier, P. (1992). Sense of belonging: A vital mental health concept. *Archives of Psychiatric Nursing, 6*(3), 172–177. [https://doi.org/10.1016/0883-9417\(92\)90028-H](https://doi.org/10.1016/0883-9417(92)90028-H)
- Hagerty, B. M. K., & Patusky, K. (1995). Developing a measure of sense of belonging. *Nursing Research, 44*(1), 9–13. <https://doi.org/10.1097/00006199-199501000-00003>
- Janosz, M., Bouthillier, C., Bowen, F., Chouinard, R., & Desbiens, N. (2007). *Rapport de validation du Questionnaire sur l'Environnement Socioéducatif des écoles primaires (QES-primaire)*. Montréal, QC: Université de Montréal.
- Janosz, M., Georges, P., & Parent, P. (1998). L'environnement socioéducatif à l'école secondaire: Un modèle théorique pour guider l'évaluation du milieu. *Revue Canadienne de Psychoéducation, 27*(2), 285–306.
- Juvonen, J. (2006). Sense of belonging, social bonds, and school functioning. In P. A. Alexander & P. H. Winne (Eds.), *Handbook of educational psychology* (2nd ed., pp. 655–674). Mahwah, NJ: Erlbaum.
- Kalvin, C., Bierman, K. L., & Erath, S. A. (2015). Prevention and intervention programs promoting positive peer relations in early childhood. *Encyclopedia on Early Childhood Development, 9*, 2015.
- Kestenberg, M., & Kestenberg, J. S. (1988). The sense of belonging and altruism in children who survived the Holocaust. *Psychoanalytic Review, 75*(4), 533–560.
- Langevin, L. (1999). *L'abandon scolaire, on ne naît pas décrocheur!* Outremont, Québec: Éditions Logiques.
- Lavigne, G. L., Vallerand, R. J., & Crevier-Braud, L. (2011). The fundamental need to belong: On the distinction between growth and deficit-reduction orientations. *Personality and Social Psychology Bulletin, 37*(9), 1185–1201. <https://doi.org/10.1177/0146167211405995>
- Lee, J. A. (1973). *Colours of love: An exploration of the ways of loving*. Toronto, Ontario: New Press.
- Maslow, A. H. (1962). *Towards a psychology of need*. Princeton, NJ: Van Nostrand. <https://doi.org/10.1037/10793-000>
- Maslow, A. H. (1970). *Motivation and personality*. New York, NY: Harper & Row.
- Midgley, C., Maehr, M. L., Hruda, L. Z., Anderman, E., Anderman, L., Freeman, K. E. ..., & Urdan, T. (2000). *Manual for the Patterns of Adaptive Learning Scales (PALS)*. Ann Arbor, MI: University of Michigan.
- Mucchielli, R. (1972). *Options et changement d'opinion*. Paris, France: ESF.
- Mucchielli, R. (1980). *Le travail en groupe*. Paris, France: ESF.
- Neel, C. G. O., & 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>

- Negola, T. D. (1998). Development of an instrument for predicting at-risk potential for adolescent street gang membership. *Journal of Gang Research*, 5(4), 1–14.
- Newmann, F. M., Wehlage, G. G., & Lamborn, S. D. (1992). The significance and sources of student engagement. In F. M. Newmann (Ed.), *Student engagement and achievement in American secondary schools* (pp. 11–39). New York, NY: Teachers College Press.
- Osterman, K. F. (2000). Students' need for belonging in the school community. *Review of Educational Research*, 70(3), 323–367. <https://doi.org/10.3102/00346543070003323>
- Osterman, K. F. (2010). Teacher practice and students' sense of belonging. In T. Lovat, R. Toomey, & N. Clement (Eds.), *International Research Handbook on Values Education and Student Wellbeing* (pp. 239–260). Dordrecht, The Netherlands: Springer. [https://doi.org/10.1007/978-90-481-8675-4\\_15](https://doi.org/10.1007/978-90-481-8675-4_15)
- Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. New York, NY: Simon and Schuster. <https://doi.org/10.1145/358916.361990>
- Richer, S. F., & Vallerand, R. J. (1998). Construction et validation de l'Échelle du sentiment d'appartenance sociale. *European Review of Applied Psychology*, 48(2), 129–138.
- Roeser, R. W., Midgley, C., & Urdan, T. C. (1996). Perceptions of the school psychological environment and early adolescents' psychological and behavioral functioning in school: The mediating role of goals and belonging. *Journal of Educational Psychology*, 88(3), 408–422. <https://doi.org/10.1037/0022-0663.88.3.408>
- Sagy, S., & Dotan, N. (2001). Coping resources of maltreated children in the family: A salutogenic approach. *Child Abuse & Neglect*, 25(11), 1463–1480. [https://doi.org/10.1016/S0145-2134\(01\)00285-X](https://doi.org/10.1016/S0145-2134(01)00285-X)
- Smith, K. K., & Berg, D. N. (1987). *Paradoxes in group life: Understanding conflict, paralysis, and movement in group dynamics*. San Francisco, CA: Jossey-Bass.
- Walker, L., & Avant, K. C. (2011). *Strategies for theory construction* (5<sup>th</sup> ed.). New York, NY: Prentice Hall.
- Wehlage, G. G., Rutter, R. A., Smith, G. A., Lesko, N., & Fernandez, R. R. (1989). *Reducing the risk: Schools as communities of support*. Philadelphia, PA: Falmer Press.
- Williams, L. J., & Downing, J. E. (1998). Membership and belonging in inclusive classrooms: What do middle school students have to say? *Journal of the Association for Persons with Severe Handicaps*, 23(2), 98–110. <https://doi.org/10.2511/rpsd.23.2.98>
- You, S., Ritchey, K. M., Furlong, M. J., Shochet, I., & Boman, P. (2011). Examination of the latent structure of the psychological sense of school membership scale. *Journal of Psychoeducational Assessment*, 29(3), 225–237. <https://doi.org/10.1177/0734282910379968>
- Wingspread declaration on school connections (2004). *Journal of School Health*, 74(7), 233–234.

**Corresponding author:** Jonathan Smith

**Email:** jonathan.smith@umontreal.ca