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School Belonging in Adolescents

Theory, Research and Practice

Foreword is by Hugh MacKay

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This book is dedicated to all young people. May your educational aspirations be filled with compelling passion, boundless motivation, and a true sense of belonging.

Foreword

What is the Purpose of Education?

Everyone has their own answer to this question, ranging from learning "the basics", equipping yourself for the workforce and "learning how to think"; all the way up to discovering pathways to enlightenment. Whatever the academic or vocational purposes of education might be, every society with a formal school education system uses it to socialise and acculturate its young. So perhaps it is not surprising that, in retrospect, many people value the social aspects of their school experience. They recall a community where they were learning how to belong.

The role of schools as local community hubs can be seen in the swarming of parents around the school gates when children are being dropped off and collected; in the crowds that attend fundraising activities; in the willingness of parents and grandparents to volunteer to coach slow readers, mentor students who are struggling academically or socially, paint classrooms, run barbeques at sports carnivals, serve in the school canteen, offer clerical assistance in the school office or library, or help with supervision on school excursions and camps.

It can be seen in the intense interest shown in the appointment of new school or preschool principals, and in any school-based gossip. It is not only a matter of schools and preschools being places where our children are being educated, nurtured and influenced by strangers (so we want to know as much as possible about those strangers), but also that a local school is a highly visible symbol of the health and well-being of a community.

For most of us, life's richest meanings spring from our personal relationships and connections. That is why the desire to belong is a throbbing urge that will not be stilled until our hearts find safe lodgings.

2014

Hugh MacKay
Social Researcher and Author

Reference

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This book has been written for researchers, academics and practitioners working in school settings. A driving impetus for this text was to create a resource with a high level of applied impact for secondary school settings. Thus, the research presented in this text has relevance for intervention design and organisational structures within educational settings, particularly in respect to further research, policy and practice. We hope that students and schools as a whole can benefit from the research and perspectives presented here.

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Chapter 1
Introduction

Abstract Belongingness is a fundamental human need. A sense of belonging to the school, in particular, underpins the social and emotional needs of young people. Research clearly indicates how important belonging is to both children and adults, but its application is neither simple nor straightforward. In this introductory chapter, we offer a preliminary discussion of school belonging and provide an overview of the chapters contained within this book. Combining a deep investigation into the research with practical applications, we hope that this book will empower educators to help young people foster a sense of belonging and truly thrive.

Keywords School belonging · Wellbeing · Adolescence · Mental health

The car had been parked in a nearby street for several months. Others locked their cars for the night and headed indoors. But this car was different—always in the same place, always occupied. I was increasingly curious and concerned. Who was in the car? Why was it always there?

One evening, I found the courage to find out more. Darkness was settling in, as dusk turned to evening. I tapped on the glass… and received a blood curdling response in return. As I tried to catch my breath, the window slowly came down, and I met her.

Susanna was an articulate, intelligent woman in her late 30s, living in the back seat of a late model Saab. She had fled decades of domestic violence in an abusive marriage and now, despite living in her car on the streets of Melbourne, felt completely empowered. She was free of her husband and the financial pressures that had enshrouded her.

Susanna was born interstate, and most recently lived in the comfortable suburbs of Melbourne. Yet despite the material comfort, life had destroyed her. And now she found herself but 100 m from her former school.

It had been 20 years since she last walked the school ground. But it was a place where she felt safe and comfortable, and at a time of vulnerability, she had returned to the place where she felt she most belonged—her school.

A sense of belonging—feeling a part of and connected to others, be it family, peers, a school, a community, or something else—underpins an individual's sense

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of purpose, life satisfaction, and well-being. It can be to a group of people, such as family, peers, an organization, a community, or ethnic group, or to a place, such as a childhood home, a school, or workplace. A growing amount of research illustrates the benefits that come from a sense of belonging, including physical health and psychological well-being.

We focus here specifically on school belonging. Young people spend a considerable amount of time in the school environment. Schools have a tremendous opportunity to support the social and emotional needs of young people, with positive impacts on academics and lifelong health and well-being. But such opportunity also brings responsibility, and if such needs are ignored, there is potential for lasting harm.

So what is belonging? What are these benefits? Bringing together academic scholarship and real-life stories, we explore these questions. And we consider strategies for cultivating a strong sense of belonging, both in young people and the parents, teachers, school psychologists, friends, and others who work with them.

In this book, we journey through a detailed understanding of belonging. Part 1 considers definitions of belonging, its philosophical and theoretical underpinnings, how it has been studied over the past century, and the benefits that it provides. Chapter 2 focuses on a sense of belonging in general, and Chap. 3 specially considers a sense of belonging within the school context.

The positive outcomes associated with school belonging only matter in light of understanding factors that predict and can be changed to encourage greater belonging. Part 2 reviews literature on school belonging and suggests an organizing framework for thinking about factors that impact a sense of belonging. Chapter 4 identifies salient themes that relate to belonging in students. Building upon this review, Chap. 5 uses a statistical procedure called meta-analysis to determine the relative importance of these different themes. By understanding variables that predict greater belonging, it informs areas we should target for intervention. Chapter 6 then brings these findings together and provides an integrative model for thinking about the different influences on school belonging.

Part 3 turns to application, considering strategies for building and supporting a strong sense of belonging in young people. We include both self-driven strategies and ideas for those working with young people. Using the framework identified in Chap. 6, we organize these according to different levels, beginning with individual factors (Chaps. 7 and 8), turning to home and school-related factors (Chap. 9), and then considering more macro-level aspects (Chap. 10). We draw together what we have learned through our research with practical ideas and strategies for intervention.

Finally, Chap. 11 (Part 4) brings our findings on belonging together. We consider the implications of the research and framework, and ideas for future research. We consider ways that school belonging might be reconceptualised to have a positive impact on young people, and draw final conclusions of school belonging as a whole.

Research clearly indicates that a sense of belonging is important—to both children and adults. But there are also misunderstandings and myths about belonging. We hope that by translating the latest research, we can better help young people to thrive.

Chapter 2
The Need to Belong

Abstract The literature clearly indicates that having a sense of belonging is good for people. The most compelling of this research demonstrates marked benefits both during school years and throughout life. Belonging has been related to higher levels of well-being and life satisfaction and less distress and mental illness; healthier behaviours, and better physical health, social relationships, and educational and occupational outcomes. In this chapter, we define belonging and review predominant theories from psychology and sociology that are relevant to a sense of belonging. We consider the psychological and physical health benefits. And from a developmental lens, we consider why belonging is particularly important for adolescent development.

Keywords Belonging · School belonging · Adolescence · Wellbeing

Mike did not fit anywhere. The abandoned son of a heroin addict, he was in and out of foster homes from an early age. As he spent time in various homes, he felt envious of children he saw who had a stable family and a place to call home. As he entered school, other kids made fun of him. He dressed the wrong way, spoke inarticulately, and could not break through the various cliques. He increasingly skipped class to avoid the judging gazes and the harsh taunts of classmates. He started smoking and drinking as a young teenager as a way to cope with the sense of loneliness that consumed him. He dropped out of school by the age of 13 and took to the streets.

That's when he ran into the local gang. The leader saw a look of desperation in the young boy's eyes, and invited him in. Mike found a group of haphazard youth with similar stories to that of his own. After proving himself in a hazing ritual, he became a core part of the gang, running amuck on the streets of the city. For the first time in his life, he belonged.

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Fig. 2.1 Words indicating a sense of belonging

2.1 What Is Belonging?

Belonging matters. We will get into the research later in this chapter, but as a preview, considerable research shows that having a general sense of belonging is vital to psychological and physical health—for years into the future (Daley & Buchanan, 1999; Hagerty, Williams, & Oe, 2002; Hale, Hannum, & Espelage, 2005; Poulton, Caspi, & Milne, 2002; Wadsworth et al., 2001).

A sense of belonging has been studied and written about since the 1950s. Through the years, researchers have come up with various definitions of what belonging is, even coming up with various terms to describe the same general idea (see Fig. 2.1).

A common theme across various definitions of belonging is a need to connect with other people. For example, Rogers (1951) described belonging as a need to be regarded in a positive way by others. McClelland (1987) suggested that at a core level, we are motivated to affiliate with others. Vallerand (1997) discussed an innate desire to relate with others. Self-determination theory includes relatedness as a basic need that we all have (Deci & Ryan, 2001) and Friedman (2007) described a sense of belonging as the development of the self and identity building.

A sense of belonging is not dependent on participation with, or proximity to, others. Rather, it relies on perceptions about the quality of social interactions. Therefore, belonging reflects one's perception of his or her involvement in a social system or environment (Hagerty, Lynch-Sauer, Patusky, Bouwsema, & Collier, 1992). A general sense of belonging fulfils an individual's innate psychological drive to belong to groups, take part in meaningful social interactions and is so fundamental that it can be as "compelling as the need for food" (Baumeister & Leary, 1995, p. 498).

Table 2.1 Theories relevant to belonging

Theory	Key elements	Type
Maslow's Hierarchy of Needs (1968, 1971)	An individual has four basic needs: physiological, safety, belonging and esteem. Belonging needs include those concerned with one's social spheres such as close friends and family	Motivational
Self-Determination Theory (Deci & Ryan, 2001)	Behaviour is believed to stem from intrinsic motivation (cognition and thoughts, e.g., goals), extrinsic motivation (behaviour, e.g., performance and motivation) and amotivation (the absence of motivation). Psychological relatedness (or belonging) is a fundamental intrinsic need involved in self-determination	Motivational
Glasser's Choice Theory (1986)	Five basic needs that propel motivation: belongingness, power, freedom, fun and survival. The first four needs are deemed to be psychological needs, while the last one (survival) is a biological need	Motivational
Belongingness Hypothesis (Baumeister & Leary, 1995)	The need to belong is a fundamental human motivator; and thus, individuals are innately determined to find belongingness and maintain it	Motivational
Bowlby's Attachment Theory (1969)	Infant attachment with his or her primary caregiver influences development and improves survival. Furthermore, the development of different types of attachment impacts the individual's relationships later in life (including the relationships formed at school)	Relational
Epstein's Framework of Parental Involvement (1992)	Parents and communities are important for fostering caring school environments. School–family partnerships enhance the student's ability to achieve in school. Parental involvement improves school climate	Relational
Putnam's Social Capital Theory (2000)	Social capital represents the networks of relationships between people. Family systems, school settings, communities and societies are common settings in which social capital is manifested	Relational

(continued)

Table 2.1 (continued)

Theory	Key elements	Type
Fiske's Theory of Social Motives (2004)	Belonging is one of the five core motives alongside understanding, controlling, enhancing self and trusting	Relational
Belongingness and Boundary Constructs in a Community (Cohen, 1982, 1985)	Communities play a significant role in creating belongingness among its members	Sociological
Bronfenbrenner's Bioecological Model (1994)	A child's development is influenced by a combination of factors ranging from micro (e.g., biological, personality, individual aspects of the individual) to macro (e.g., culture, environment,) aspects, which intersect and influence one another throughout development. The child is a relational being within a complex inter-related web of inner and outer influences	Sociological/ecological

2.2 Theoretical Underpinnings

Various theories include the concept of belonging. Table 2.1 summarises some of these theories, noting what the theory is and the main elements of the theory.

While several of the theories that describe belonging are concerned primarily with the individual and his or her pursuit towards fulfilling the need to belong, Bronfenbrenner's (1994) bioecological framework explicitly acknowledges that people are innately intertwined within complex systems and group processes. According to this theory, a child's development is largely influenced by his or her environment, and in particular, their interaction with the layers of systems that this environment entails. Bronfenbrenner's framework defines five layers of the environment that influence and interact with a child's development (Fig. 2.2). The individual layer represents the unique characteristics of the child (e.g., sex, age, health); the microsystem represents the structures in which the child has the closest contact, like family and school; the mesosystem connects the child's microsystem to other systems within the broader environment; the exosystem represents the broader social system (e.g., neighbours and the workplace of parents); and the macrosystem represents culture, law and customs. Each system is interconnected and dynamically influences one another over time.

2.3 The Benefits of Belonging

A lot of things contribute to how healthy you are and how well you feel. We have basic needs, and when these are not met, it impacts how we function and feel. We need clean water to drink, healthy food to eat and a safe place to live. But once these needs are met, a sense of belonging can be just as important as eating and breathing.

A good deal of research demonstrates that there are psychological benefits to belonging. Individuals who report belonging to groups and networks are more likely to exhibit positive psychological functioning across a range of variables, including higher levels of self-esteem and self-efficacy, greater life satisfaction and

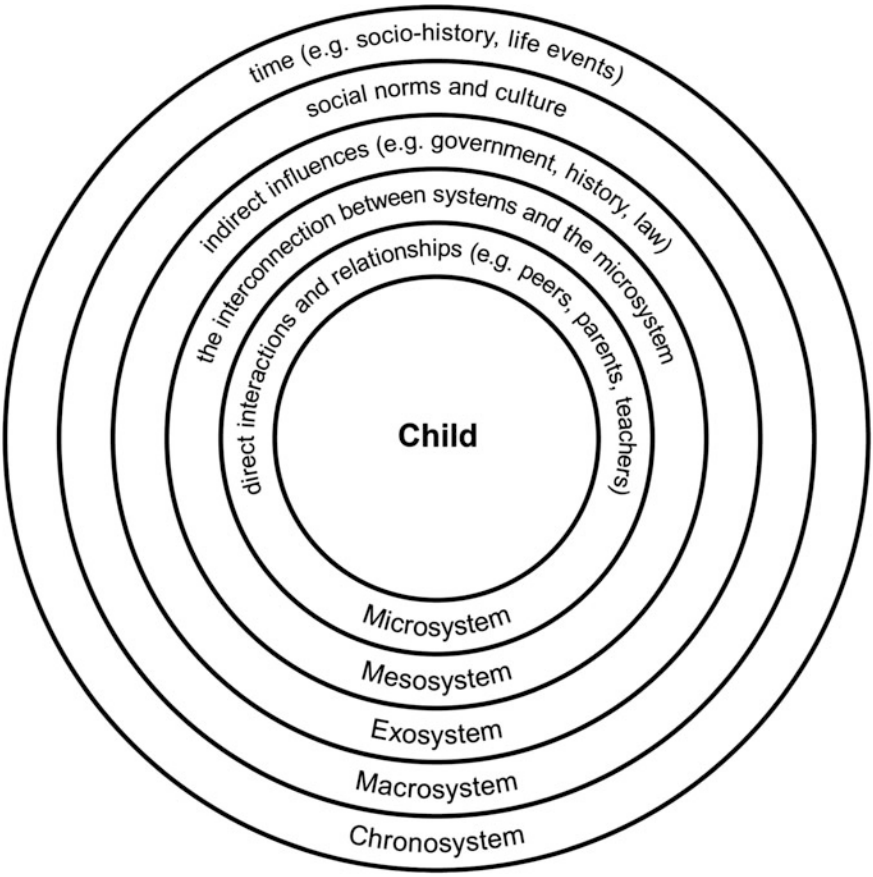

Fig. 2.2 Bronfenbrenner's bioecological model. The child is a part of an interconnected web of increasingly broader influences, ranging from internal aspects (biological and genetic) to distant external aspects (culture and environment). Each layer is interconnected and influences one another (adapted from Bronfenbrenner, 1995)

better transitioning into adulthood (Daley & Buchanan, 1999; Haslam et al., 2009; Iyer, Jetten, Tsivrikos, Haslam, & Postmes, 2009). Those who belong experience lower levels of stress and are less likely to suffer from psychological disorders, such as depression, anxiety and more extreme psychiatric conditions (Baumeister & Leary, 1995).

Belonging also provides physical health benefits. Those with a greater sense of belonging have faster recovery rates from infectious disease (Cohen & Janicki-Deverts, 2009). They are at lower risk for heart disease, and recover faster when heart disease does occur (Tay et al., 2012). Belonging even relates to longer life (Boden-Albala et al., 2005; Holt-Lunstad et al., 2010; Taylor, 2010). For instance, across a 9-year period, men who felt connected with others lived 2.3 years longer than those who felt disconnected, and women lived 2.8 years longer (Berkman & Syme, 1979).

In contrast, there are clear risks for not belonging. Loneliness, social isolation and a lack of social support have been linked to greater mortality, poor health behaviours, psychological distress, mental illness, self-harm behaviours and greater risk for suicide (Cacioppo & Hawley, 2003; McMahon, Singh, Garner, & Benhorin, 2004; Shochet, Dadds, Ham, & Montague, 2006; Resnick et al., 1997; Seeman, 1996; Seeman, Lusignolo, Albert, & Berkman, 2001; Tay et al., 2012; Taylor, 2010). Indeed, the impact of not belonging is similar to the adverse health effects that occur from smoking, obesity and high blood pressure (Haslam et al., 2009; Holt-Lunstad et al., 2010). An individual's positive sense of belonging could be seen on par with diet and exercise as a protective factor against psychological or physical ill health (Jetten et al., 2009).

To illustrate, let us look at a few of the thousands of studies that have been done on this topic. Boden-Albala (2005) studied people who had experienced a stroke. Those who felt socially isolated were twice as likely to have a second stroke, a heart attack or die than those who felt connected with others. In contrast, being connected to several social groups predicted successful stroke recovery and rehabilitation. Similarly, Haslam et al. (2008) demonstrated that stroke sufferers who reported belonging to several groups prior to their initial stroke recovered better than those who did not belong to groups. They also reported having a greater sense of well-being.

In another study, Haslam et al. (2008) considered the impact of belonging for 73 older aged-care home residents. Participants were randomly assigned to one of three groups: group therapy, individual therapy or a social group. Both of the group-based interventions had better outcomes than individual therapy. Participants in the group therapy had improved memory performance, and those in the social group felt less depressed and reported a better quality of life. Other research also supports improved cognitive effects following social interaction (e.g., Berkman, 2000; Cohen & Janicki-Deverts, 2009; Fratiglioni et al., 2000).

Caspi and his colleagues (2006) followed a cohort of children in 1972 from birth to young adulthood. Their findings suggested that social isolation during childhood was associated with poor cardiovascular health in adulthood. This is consistent with retrospective studies that have reported a link between a perceived lack of social

support in childhood and chronic health conditions (Russek & Schwartz, 1997; Shaw, Krause, Chatters, Connell, & Dayton, 2004) as well as behavioural, psychological and social difficulties (Offord & Bennett, 1994) later in life. There is clear evidence that adverse childhood experiences influence health in adulthood—and social isolation has one of the greatest impacts.

In one of the most interesting studies, Cohen and his colleagues (1997) took a group of people and quarantined them for a week. They intentionally infected the participants with a cold or flu virus. Those with a greater number of social ties were less likely to get sick. If they did get sick, the illness was not as bad and they recovered faster.

2.4 Belonging During Adolescence

Adolescence is the period of development that occurs after childhood and before adulthood. While the exact ages that are considered to be adolescence range by historical and cultural context, we define adolescence as the general teenage years from age 12 to age 18.

A sense of belonging plays a fundamental role in adolescent development. While the development of a sense of belonging is important for children of all ages (Quinn & Oldmeadow, 2012), priorities and expectations in respect to belonging change from childhood to adolescence, making the issue particularly salient during this period (O'Brennan & Furlong, 2010).

Adolescence is a time of identity formation (Brechwald & Prinstein, 2011; Davis, 2012). Teenagers are challenged with determining who they are, as separate identities from their parents and family, and how they fit amongst peers, classmates and others in their social context. During adolescence, young people spend an increasing amount of time with peers, rather than families and other adults. As such, friendships play a pivotal role in the formation of identity (Quinn & Oldmeadow, 2012). Good friendships provide social support and acceptance, and provide a foundation for well-being. Those who feel a sense of belonging with peers exhibit better psychosocial adjustment and easier transitions into adulthood (Hill et al., 2013; Tanti, Stukas, Halloran, & Foddy, 2011).

By mid-adolescence, a growing number of young people are at risk for depression, anxiety and other internalising and externalizing disorders (Allen & McKenzie, 2015). It is a time when disconnection from school and peers is frequently reported (O'Brennan & Furlong, 2010). At a time when young people need support and connection, they are at the greatest risk of becoming disconnected and isolated. Negative social experiences during adolescence can have a profound effect on psychosocial adjustment (Allen et al., 2014). For example, early onset of puberty may lead to a lack of assimilation with peers, which increases risk for psychosocial maladjustment (Mensah et al., 2013).

Using data from the Australian Temperament Project, a longitudinal study that has followed a large sample from infancy into young adulthood, O'Connor et al.

(2010) provided strong evidence for the key role that belonging plays for many young people. How students felt about their school—particularly their relationship with their teachers and the perception that school was a place where they felt respected and had a voice—was more strongly associated with their well-being than any other factor investigated. Other studies similarly find that school belonging has a major impact on the psychosocial adjustment of young adults (e.g., Lonczak, Abbott, Hawkins, Kosterman, & Catalano, 2002; Nutbrown & Clough, 2009; Sari, 2012).

Indeed, adolescence may offer a critical period for facilitating a sense of belonging, with long-term benefits. Many of the mindsets and behaviours that a young person carries into adulthood are developed during this time. While adolescents may have a sense of belonging in many facets of their life, such as family and peers, undoubtedly, schools provide a particularly salient domain. Most young people spend a considerable part of their adolescent years within the school setting. As we saw in Chap. 1, a sense of school belonging can provide a deep sense of connection that a young person carries with them into young adulthood and beyond. Without it, the young person can feel lost, disoriented and alone, without the social skills needed to effectively function in their adult years. As such, we now turn more specifically to understanding what school belonging is and why it matters.

Chapter 3
School Belonging

Abstract In this chapter, we turn from a general discussion of belonging to focus specifically on the sense of school belonging. The term itself has been used in a variety of ways, and similar terms abound, including connectedness, attachment and bonding. At times the terms are used interchangeably, at other times distinctions are made. We unpack relevant terminology and consider a range of measures that have been developed to evaluate it. We consider the benefits of school belonging for adolescence—especially with respect to psychological well-being, good academic outcomes and fewer negative behaviours. Despite these benefits, gaps exist between research and practice; while it is generally understood that a sense school belonging is desirable and beneficial for students, there are very few interventions that aim to specifically address it.

Keywords School belonging · Belonging · School connectedness · School bonding · Community · Attachment · Adolescence

Lucy grew up in a loving family. Her mother was a homemaker, her father an engineer. She was shy, warm, caring and sensitive by nature. Yet she always felt inferior to her more intelligent siblings, and struggled socially. While other neighbourhood kids attended the nearby government high school, she was sent to an elite private girls' school. There, she continually felt inferior to her peers. Though she had a few friends at school, she never felt like she belonged.

She put her time and energy into working hard as a student, spending extra hours each day to try and perfect her assignments. The hard work paid off, as she earned a full tuition scholarship to go to university. The school was a better fit for her, and she started to connect better with others. Still, she often struggled with feeling inferior and unacceptable to her friends, with a constant need to prove herself. She increasingly struggled with depression, anxiety and self-harm behaviours. Therapy helped, and she ultimately graduated from university and went on to have a very successful career. Still, mental illness remained a lifelong battle.

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School belonging is a growing area of research, which holds great promise for fostering well-being and promoting mental health. But its application is by no means easy or straightforward, which perhaps is why even as educators recognise the importance of belonging, they can be at a loss in terms of how to effectively support it.

Even though research has identified physical and psychological health benefits associated with a sense of belonging, many students report not feeling a sense of belonging to their school. The importance of school belonging is given significantly less attention than student academic success (Allen & Bowles, 2013), even though a sense of belonging plays a key role in student success (Gillen-O'Neel & Fuligni, 2013).

Part of this may be due to misunderstandings about what school belonging is, the role that it plays in adolescent development, and the best ways to support it at individual and collective levels. We begin by breaking down what school belonging specifically is, and then consider why it matters. In later chapters we will examine what the research has to say about the best approaches for positively supporting and impacting student belonging.

3.1 What Is School Belonging?

The construct of school belonging has been used interchangeably with numerous other terms, at times with the same meaning and at other times with different meanings. A review of the literature reveals more consistency in how school belonging is *defined* than in the terminology used to *describe* it. Indeed, terms such as bonding, attachment, engagement, connectedness and belonging have all been used. Contrary to this, students without a sense of belonging to school have been described as alienated, disengaged, socially isolated or disaffected (Willms, 2003). We first review some of these terms, and then bring them together to think about what school belonging really is.

3.1.1 School Belonging

A commonly used term, and the one that we use throughout this book, is that of school belonging. Perhaps the most agreed upon definition for school belonging comes from Goodenow and Grady (1993): 'the extent to which students feel personally accepted, respected, included, and supported by others in the school social environment' (p. 80).

3.1.2 School Connectedness

The term that has been used most interchangeably with school belonging is that of connectedness, which has also been defined in a myriad of ways. Definitions range from observable characteristics (e.g., social networks) to affective states (Townsend

& McWhirter, 2005). It has been described using a range of terms including school belonging, school bonding, engagement, connectedness, school climate, notions of territory, school attachment, acceptance, membership, orientation to school, social identify and the physical presence of teacher support (e.g., Finn, 1993; O'Farrell, 2004; Osterman, 2000; Ryan & Patrick, 2001; Tajfel, 1972). School connectedness is also often conceptualised according to what it is not (e.g., loneliness, alienation and social isolation), rather than what it is.

School connectedness reflects a student's affective experience (Libbey, 2007), and Libbey (2004) suggests that it reflects how much a young person *feels* they belong at school. Karcher and Lee (2002) suggest that it includes both affective and behavioural aspects. Affectively, it reflects a feeling of relatedness to others, activities and groups. Behaviourally, it involves taking an active interest in and being a part of groups, activities and affiliations.

Brown and Evans (2002) argued that student connectedness included things such as commitment to school, student autonomy, belonging to school and having a firm belief in rules of school. Barber and Schluterman (2008) suggested that connectedness had four components: the quality of a relationship (e.g., family bonding), the degree of liking of an environment or relationship (e.g., liking school), a feeling or attitude (e.g., sense of belonging) and perceptions of antecedent conditions (e.g., feeling close to people). Blum and Libbey (2004) described school connectedness as the belief, by students, that adults within their school community care about their learning, have an interest in them as individuals and have high academic expectations; teacher–student relationships are positive; and students feel safe at school. McNeely, Nonnemaker and Blum (2002) described connectedness in terms of students' feelings of closeness to the people at school, feeling happy at school, feeling a part of school, feeling that teachers treated them fairly and feeling that they were in a safe environment.

3.1.3 School Attachment

A third common term is school attachment, or a student's emotional attitude towards their school (Moody & Bearman, 2004). It refers to a student's sense of connectedness to their school and the degree to which the student is attached to the people at school, is happy at school and feels a part of it (Zwarych, 2004). As such, it is relatively interchangeable with the concept of school belonging that we discuss here.

3.1.4 School Bonding

School bonding, first described by Hawkins and Weis (1985), refers to a specific type of attachment to school that includes subjectively feeling attached to one's

peers, committed to academic outcomes, engaged in social activities and believing in specific norms for conduct and behaviour at school. The concept of bonding arose from social control theory, which emphasises the importance of societal order (Simons-Morton, Crump, Haynie, & Saylor, 1999). It reflects students feeling connected to—or bonded with—their school.

3.1.5 School Engagement

Quite a bit of research focuses on school engagement. School engagement is a multidimensional construct that includes affective/psychological, cognitive and behavioural components (Appleton, 2008, Brewster & Bowen, 2004). It includes accepting the school's values (affective), being interested in and attentive to one's learning (cognitive), and participating in school activities (behavioural). Finn (1989, 1993) describes engagement in terms of participation, which focuses on behavioural aspects, and identification, which focuses on the students' subjective sense of belonging. In contrast, disengaged students feel disconnected from school, are bored in class and withdraw from school activities (Willms, 2000).

While some definitions of school engagement are akin to descriptions of school belonging, the term should be used with caution. While affective and behavioural definitions overlap with other conceptions of school belonging, cognitive aspects speak more towards engagement in learning than belonging to a school community. For example, according to Skinner, Wellborn and Connell (1990), school engagement incorporates students' 'initiation of action, effort, and persistence on schoolwork, as well as ambient emotional states during learning activities' (p. 24). In such cases, a sense of belonging contributes to engagement, rather than being defined by it.

3.1.6 School Community

At times community and belonging have been used interchangeably. For example, Sanchez et al. (2005) described a sense of community as encompassing school belonging. Osterman (2003) suggested that a community exists when the members feel a sense of belonging. Such a community might refer to the school as a whole, or to a small group within the school.

There is, however, the question of whether the two are the same, or if one is a necessary but insufficient component of the other. If school community is defined in terms of feeling cared for, supported and emotionally connected with others (Osterman, 2000), then one needs to have feelings of belongingness first. Belonging, thus, is a prerequisite for community to exist. Alternatively, a school community can be defined in terms of the school that a student attends, with community being defined by the school, teachers, or students within the school.

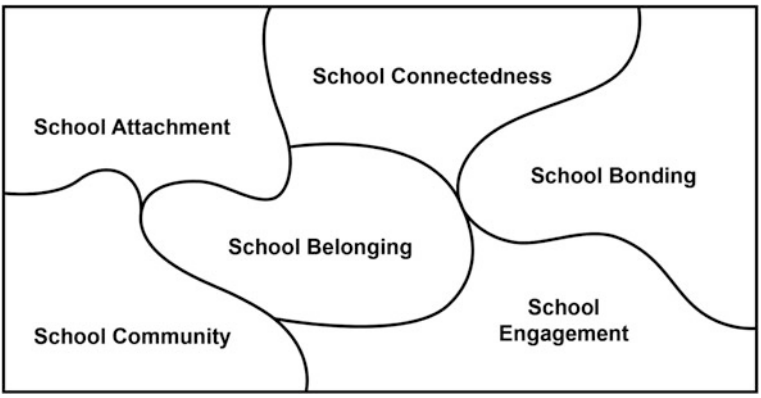

Fig. 3.1 Key terms that have been used to describe a sense of school belonging

Like Jenna's story above, she was a part of a school community, but did not feel like she really belonged. From this perspective, community then is necessary for belonging, but insufficiently captures the emotional aspects of belonging.

3.1.7 Towards a Consistent Terminology

Even though the terminology varies considerably, there are a number of consistent themes, including emotional attachment to others, having a place within the school, and a sense of inclusion. As illustrated in the Fig. 3.1, these different terms can be thought of as pieces of a puzzle. Together, these pieces create a picture of what school belonging is.

These terms tend to share three similar operational aspects (1) school-based relationships and experiences, (2) student–teacher relationships and (3) students' general feelings about school as a whole. In this book, we use the term school belonging as an umbrella term to describe the many variants that occur in the literature, and will only use alternative terminology (e.g., school connectedness, school bonding) if it is consistent with Goodenow and Grady's (1993) definition of school belonging.

3.2 Measures of Belonging

There are a wide variety of measurement tools that have been developed and used to assess school belonging. We consider a few of these here. The measures used for school belonging can help us understand what is really meant by school belonging, and provide hints towards what factors might impact it. We discuss this further in Chap. 4.

3.2.1 Psychological Sense of School Membership (PSSM)

One of the main measures of school belonging is the PSSM scale (Goodenow, 1993). The measure was designed to capture adolescents' perceptions of belonging, or psychological membership, within a school environment. The scale can be used to identify a sense of belonging versus alienation, as well as to identify social and contextual factors that influence this sense of membership. The scale measures three main constructs: connection to school, connection to adults and connection to peers. Some items include: 'I feel like a real part of this school', 'People here notice when I'm good at something', 'I can really be myself at this school', 'Most teachers at this school are interested in me'. Across these items, the PSSM measures perceived acceptance, feelings of inclusion, respect, encouragement for participation in school endeavours, and satisfaction with the support provided by teachers. It has a well-researched foundation to support its validity and reliability, with an internal consistency (Cronbach's alpha) ranging from 0.77 to 0.88 across different samples.

3.2.2 Hemingway Measure of Adolescent Connectedness (HMAC)

A second measure is the HMAC (Karcher, 1999). Karcher and Lee (2002) suggested that there are three distinct sub aspects of connectedness: belongingness, or the adolescent's perception of how much social support he or she generally receives; relatedness, their perception of support within specific relationships; and connectedness, or how much the individual is involved with and values the specific and general supports that are there. Based on these distinctions, the HMAC focuses on the third factor (connectedness), across three sources: schools, teachers and peers (classmates and friends). The 74-item measure asks how much an adolescent is involved in and cares about 15 different relational and institutional contexts, across four domains: family, friends, school and self.

3.2.3 School Connectedness Scale (SCS)

A third relevant measure is the School Connectedness Scale (SCS; Parker, Lee, & Lohmeier, 2008). The 54-item measure assesses relationships with school, adults and peers, across three different levels: general support (or belongingness), specific support (or relatedness) and engagement (or connectedness). The measure has demonstrated good psychometric properties across different populations (Furlong, O'Brennan, & You, 2011; Lohmeier & Lee, 2011)

3.2.4 Student Engagement Instrument (SEI)

A fourth commonly used measure is the SEI (Appleton et al., 2006). The 25-item measure assesses cognitive and psychological engagement at school. Engagement is assessed across six subscales: control and relevance of schoolwork, extrinsic motivation, future aspirations and goals, family support for learning, peer support for learning, and teacher-student relationships. Internal consistency for each of the subscales ranged from 0.72 to 0.88 (Appleton et al., 2006)

3.2.5 Other Measures

Other studies have used smaller sets of questions. For example, in the National Longitudinal Study of Adolescent Health (Add Health), a longitudinal analysis of adolescents in Grades 7–12 in the United States, McNeely and colleagues (2005) used five items to assess the impact of school connectedness:

1. feeling close to people at school
2. feeling happy to be at school
3. perceiving to be part of the school
4. feeling safe at school
5. having the perception that teachers treat students fairly.

Follow-up studies drawing from Add Health have used a varying number of items ranging from five (Bonny, Britto, Klostermann, Hornung, & Slap, 2000; Ozer, 2005) to eight (Jacobson & Rowe, 1999; McNeely, 2003). For example, Brown and Evans' (2002) used four items directly related to belonging:

1. I can be myself at school
2. I feel like I belong at school
3. I have friends at school
4. I am comfortable talking to teachers about my problems.

Moody and Bearman (2004) included three items:

1. I feel close to people at school
2. I feel happy to be at school
3. I feel like I am a part of this school.

In later research, Moody and Bearman added a school attachment measure to investigate students' sense of belonging. The items investigated the degree to which the student felt attached to the people in the school, felt happy to be at school, and felt like they were a part of the school.

Although frequently used, such scales have been criticised for being too brief to capture the complexity and multiple dimensions of school belonging (Fredricks, Blumenfeld, & Paris, 2004). Thus, although measures such as the PSSM, SCS and SEI are longer, they are generally the preferred option for assessment.

3.3 The Benefits of School Belonging

Regardless of how it has been defined and measured, the research literature finds compelling evidence for the importance of school belonging, across academic, psychological and behavioural outcomes.

School belonging is positively related to academic outcomes, such as higher levels of drive, motivation, engagement and academic self-efficacy (e.g., Battistich, Solomon, Kim, Watson, & Schaps, 1995; Booker, 2007; Gillen-O'Neel & Fuligni, 2013; Roeser, Midgley, & Urdan, 1996; Sanchez et al., 2005; Sari, 2012). Other research has also found direct correlations between academic achievement and school belonging (e.g., Pittman & Richmond, 2007; Sari, 2012).

School belonging has been positively associated with psychological well-being such as happiness (O'Rourke & Cooper, 2010; Sharma & Malhotra, 2010), psychological functioning, adjustment (Law, Cuskelly, & Carroll, 2013), self-esteem and self-identity (Nutbrown & Clough, 2009). For instance, Jose, Ryan and Pryor (2012) assessed school belonging in 10 and 15 year olds, and found that a greater sense of belonging significantly predicted higher levels of well-being. This finding has been supported across a range of populations including refugees (Correa-Velez, Gifford, & Barnett, 2010); gay, lesbian, bisexual, or transgender populations (Mayock, Bryan, Carr, & Kitching, 2008); and African American students (Booker, 2006).

Other research has demonstrated that a lack of belonging links to anxiety, depression and suicide ideation (McMahon, Parnes, Keys, & Viola, 2008; Moody & Bearman, 2004; Shochet, Smyth, & Homel, 2007). A high sense of school belonging has been found to buffer the relationship with emotional instability. For instance, Anderman (2002) found that students' higher individual levels of school belonging were related to lower levels of depression. McMahon et al. (2008) suggest that students face social stressors at schools (e.g., peer rejection, peer victimisation and peer harassment), which can correlate with psychological problems such as increased levels of depression.

School belonging has been associated with fewer negative behaviours. It relates to a reduction in absenteeism (Croninger & Lee, 2001) and truancy (Connell, Halpern-Flesher, Clifford, Crichlow, & Usinger, 1995; Hallinan, 2008) and higher rates of school completion. It also correlates with fewer incidents of fighting, bullying and vandalism (Wilson & Elliot, 2003), resulting in the decrease of disruptive behaviour and emotional distress (Lonczak et al., 2002). It is negatively associated with risk-taking behaviour related to substance and tobacco use (Goodenow, 1993a) and early sexualisation (Samdal, Nutbeam, Wold, & Kannas, 1998). A review of over 300 programs shows that socioemotional learning programs that emphasise connection can buffer students from antisocial behaviours (Durlak et al., 2011). Belonging also relates to prosocial outcomes, including contribution to the local community and civic engagement in young adulthood (Duke, Skay, Pettingell, & Borowsky, 2009; Torney-Purta, Richardson, & Barber, 2004).

3.4 A Research-Practice Gap

Considerable research points to the importance of school belonging across a range of outcomes. Schools offer opportunities for students to connect and play an important role in building groups and social networks for students. Students also contribute to the school community (Allen & Bowles, 2013). Schools are recognised as essential institutions that can build social networks for students and offer unique opportunities for them to develop a sense of belonging.

Yet many students across the globe struggle to feel like they belong (Allen & Bowles, 2013; The Collaborative for Academic, Social and Emotional Learning [CASEL], 2003; Hirschokorn & Geelan, 2008). For instance, the Programme for International Student Assessment (PISA) found that as of 2003, across 42 countries, 8354 schools and 224,058 15-year olds, student disaffection with school ranged from 17 to 40% (Willms, 2003). On average, one in four adolescents were categorised as having low feelings of belongingness and about one in five reported low levels of academic engagement.

Notably, belonging is given relatively little attention within education compared to academic performance. Little attention has been paid to interventions that foster school belonging in students or to the importance of belonging more generally (Allen & Bowles, 2013; CASEL, 2003). There appears to be a disparity between the understanding of the importance of this construct from research and how it is transferred into everyday practice within schools.

Jetten, Haslam, and Haslam (2012) suggest that this gap could be due to a failure by practitioners, school leaders and the public to acknowledge the importance of social relationships to life satisfaction, health and well-being. Further, the authors queried whether the absence of interventions related to social connectedness was fostered by a societal tendency to prioritise medical, pharmacological or technological innovations over more humanistic approaches.

It could also be that there is no clear guidance on the best approaches for positively impacting a sense of belonging. One cannot underestimate the complexities of creating and maintaining satisfying social relations. It takes effort at individual, social and communal levels—levels that often function independently. Psychologists might target individual behaviours and emotions; teachers might focus on their relationship with their students, and schools might focus on the activities and groups that are offered at the school. Yet with limited resources available, it can be challenging for educators to know how to best prioritise time and energy to be most effective.

What factors impact a sense of belonging? Which have the greatest and least impact? We now turn to the literature to start to make sense of these questions.

Part II
Influences on Belonging

Chapter 4
Major Influences on School Belonging

Abstract To begin to address the research–practice gap in the school belonging literature, we first need to understand the landscape—what factors and variables influence and relate to a sense of belonging? In this chapter, we discuss what prior reviews and studies have identified as correlates of school belonging. These factors cluster into various themes, including demographic variables (e.g., gender, school type, school location, age and race/ethnicity), individual factors (academic motivation, personal characteristics, emotional instability and mental health), social factors (peer support, teacher support and parent support) and environmental variables (e.g., perceptions of fairness, sense of safety).

Keywords School belonging · Belonging · Adolescence

While there is plenty of research demonstrating the importance of school belonging, very few attempts have been made to understand *how it can be fostered*. To develop belonging, it is important to first understand what factors relate to a sense of belonging. Here, we turn to the literature to see what research tells us about what is associated with a sense of belonging. In this chapter, we systematically review the literature, identifying a set of relevant themes that have been suggested. Then in Chap. 5, we use a procedure called meta-analysis, to evaluate the relative importance of these different themes and suggest a working framework for thinking about what these factors mean for schools.

4.1 Reviews of School Belonging

To date, several reviews have been conducted to identify constructs related to school belonging. In 2003, the Centers for Disease Control and Prevention's (CDC) Division of Adolescent and School Health and the Johnson Foundation convened an international gathering of educational leaders and researchers at the Wingspread conference centre in the United States. The convention aimed to identify strategies for positively influencing students' perceptions of their

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connection to school, based upon a review of the literature and in-depth discussion. The convention identified the following strategies (Wingspread Declaration on School Connections, 2004, p. 233):

- Implement high standards and expectations, combined with academic support for all students.
- Apply fair and consistent disciplinary policies that are collectively agreed upon and fairly enforced.
- Create trusting relationships among students, teachers, staff members, administrators, and families.
- Hire and support capable teachers who are skilled in content, teaching techniques, and classroom management to meet each learner's needs.
- Foster high parent/family expectations for school performance and school completion.
- Ensure that every student feels close to at least one supportive adult at school.

The Wingspread Declaration provides a useful starting point. The strategies clearly identify the importance of relationships for students—with teachers, parents, and other adults. However, some of these strategies are easier for schools to implement than others. For example, while schools can purposefully select who they hire, and can set expectations for a certain amount of interaction between teachers and students, how do they create trusting relationships? Further, the success of these strategies depends in part on the resources available to the school. While some schools might be able to offer academic support for all students, it quickly becomes practically and financially unsustainable. Potentially, such strategies can widen the gap between privileged and unprivileged schools.

A few years later, the CDC (2009) expanded the work of the Wingspread Declaration. A systematic review was conducted, including research articles and a myriad of secondary sources including books, reports from government and non-governmental organisations, and websites. The perspectives of expert researchers, public health practitioners, and educators were also included (CDC personal communication, 27 July 2012). As a result of the review, four factors were identified that foster belonging in a school setting (CDC, 2009, p. 5):

1. **Adult Support**: School staff members can dedicate their time, interest, attention, and emotional support to students.
2. **Belonging to a Positive Peer Group**: A stable network of peers can improve student perceptions of school.
3. **Commitment to Education**: Believing that school is important to their future and perceiving that the adults in school are investing in their education can help students engaged in their own learning and involved in school activities.
4. **School Environment**: The physical environment and psychosocial climate can set the stage for positive student perceptions of school.

Libbey (2004) reviewed measures of school belonging and identified common constructs that have been measured alongside it. These have included academic

engagement, discipline and fairness, students' liking of school, student voice, involvement in extracurricular activities, peer relations, safety, and teacher support. These constructs are all self-reported measures, and thus represent individual-level factors that potentially could be targeted.

4.2 Salient Themes

Throughout the work of the Wingspread Declaration on School Connections (2004), the CDC (2009), and Libbey (2004), as well as reviews of measurement instruments related to school belonging (e.g., Appleton et al., 2006; Goodenow, 1993b; McNeely et al., 2002), a variety of salient themes appear, including demographic variables (e.g., gender, school type, school location, age, and race/ethnicity), extracurricular activities, academic motivation, personal characteristics, emotional instability and mental health, peer support, teacher support, parent support, and environmental variables.

4.2.1 Gender

A first factor that has been considered is gender. While some studies suggest that girls are more connected to their schools than boys (Griffith, 1999; Goodenow, 1992; Nichols, 2006; Osterman, 2000; Sari, 2012), other studies find the opposite pattern (e.g., Bonny et al., 2000), or no difference (e.g., Caraway, Tucker, Reineke, & Hall, 2003; Sanchez et al., 2005; Sari, 2013). Gender might differ depending on year level. For instance, Gillen-O'Neel and Fuligni (2013) noted that in the 9th grade, girls had higher belonging scores than boys, but through subsequent years of high school, girls' scores of school belonging slowly declined while boys' scores remained stable. By the end of Year 12, the authors note that the observed gender difference in school belonging no longer existed.

Such gender differences may exist because adolescent girls have greater interpersonal concerns than boys (e.g., Kuperminc, Leadbeater, & Blatt, 2001), or because girls tend to report more positive attitudes towards school than boys (Gentry, Gable, & Rizza, 2002). Newman, Lohman, and Newman (2007) found that adolescent girls reported considerably greater belonging and belonged to more groups than boys. Similarly, other studies find that girls tend to participate in more extracurricular activities than boys (e.g., Lumpkin & Favor, 2012). However, Appleton et al. (2008) found that involvement in activities was more salient for boys.

The gender composition at a school might also play a role. In a study of over 6000 adolescent students in Belgium, all-girl schools were better at fostering a sense of belonging than coeducational schools or all-boy schools (Brutsaert & Van Houtte, 2002). In a second study, boys did not appear to be affected by girls being

present, whereas girls' sense of belonging was hampered in the co-educational environment (Brutsaert & van Houtte, 2004).

4.2.2 School Type

A second relevant demographic factor that might influence belonging is the type of school a student attends (e.g., public versus private school, religious versus non-religious, single sex versus co-educational). In a longitudinal study of Australian youth, Marks, Fleming, Long, and McMillan (2000) found that a sense of belonging was stronger for students in Catholic schools than for students in non-Catholic schools. Subsequent research by Marks and his colleagues (2001) found that students in independent schools reported higher levels of attachment to their school than students studying in Catholic schools, and Catholic students were more connected than students in government (public) schools.

Socioeconomic status might also play a role. Although Marks and colleagues (2001) did not find financial capacity to be directly related to a sense of belonging, the impact might be more indirect; students of higher-income families at independent schools may have more opportunities to participate in extracurricular activities, which in turn can increase a sense of belonging to the school. It is also possible that the school culture in independent and Catholic schools is more conducive to fostering a sense of school belonging than in public schools (McMillan & Marks, 2003).

4.2.3 School Location

Only a few studies have considered school belonging across different geographical settings. Trickett (1978) found that students in urban schools reported a greater sense of school belonging than those in rural schools. More recent studies found the reverse, with school belonging higher in rural schools than in urban schools (Cueto et al., 2010; Freeman, Hughes, & Anderman, 2001).

Freeman and Anderman (2005) found that rural schools demonstrated more consistency in retaining teaching staff members, more parental involvement, and fewer concerns regarding violence at school. Lawless (2009) argued that rural schools have greater community involvement.

Cueto and colleagues (2010) interviewed Peruvian students about their perceptions of belonging, suggesting several benefits of rural locations. First, students suggested that rural schools were more likely to experience changes within their school environment, such as structural changes to buildings, which were interpreted positively by students and were regarded as improvements to their school. Second, students were more likely to have attended primary school with their peers, thus easing the transition from primary school to high school and enhancing their peer

support network with a familiar group of students. Third, students had more opportunities to engage with peers outside of school, through activities such as walking to and from school and extracurricular activities.

4.2.4 Year Level

Mixed evidence exists for year level differences. While some studies find no differences across year levels (e.g., Anderman, 2002; Sari, 2012), other studies find that school belonging decreases as students progress through primary and secondary education (Marks, 2000; Ryan & Patrick, 2001). O'Brennan and Furlong (2010) found that significantly more students in Year 10 reported not feeling connected to their school, compared with students in Years 8 and 12. Others similarly find increased experiences of school belongingness in upper-level (e.g., Bonny et al., 2000) and lower-level students (e.g., O'Brennan & Furlong, 2010), compared to mid-level students.

The influence of a student's year level on school belonging seems reasonable as priorities, expectations, and developmental needs change through their time at school. School structures also become more disjointed, as students shift from being in the same class with the same group of students in primary school, to attending a variety of classes throughout the day with different students in secondary school.

4.2.5 Race and Ethnicity

Although some authors have suggested that race and ethnicity play an important role in themes that affect school belonging, such as identity, engagement, and completion of high school (e.g., Booker, 2006), few studies have explored the relationship. Race or ethnicity might be included as part of standard demographic information, and the questions are investigated for an effect, but studies mostly have not directly investigated its effect.

The exception is a focus on African American populations (e.g., Bonny et al., 2000). While some studies found that White students are more connected to their schools (Bonny et al., 2000), other studies have found the reverse (e.g., Voekl, 1997), or no relationship at all (Singh, Chang, & Dika, 2010; Whitlock, 2006).

The mixed findings might be due to other factors at play. For instance, Mello and colleagues (2012) examined the role of stereotype threat, which occurs when an individual is made aware of negative stereotypes about their particular race, group, culture, or ethnicity. While adolescence is a developmental period marked by identity formation and a desire to assimilate and fit in with peers (Resnick, 2011), stereotype threat disrupts this from happening. The study found that minority adolescents reported a lower sense of belonging when stereotype threat was present.

In contrast, Voelkl (1977) found a greater sense of belonging in African American students. Their race was a form of identity that contributed to belonging.

4.2.6 Extracurricular Activities

Students often are involved in various groups, enabled primarily through extracurricular activities. Studies suggest that the number, type, and experience of groups and activities that a student is a part of influence their sense of belonging (e.g., Blomfield & Barber, 2010; Clark, Koch, & Soria, 2011; Dotterer, McHale, & Crouter, 2007; Drolet & Arcand, 2013; Knifsend & Graham, 2012; Libbey, 2004; Waters et al., 2010). Generally, studies find that participation relates to greater belonging. Such findings have been found to be equally relevant in ethnically diverse populations (e.g., Booker, 2006, 2007).

Formal and informal group structures are ever present in schools, but their value may not always be emphasised through school policy and practice, particularly in the presence of competing academic-based curriculum targets and standardised testing priorities (Roffey, 2010). They appear to be a valuable addition when students value and perceive them to be a positive part of their lives (Faricloth & Hamm, 2011; Newman et al., 2007).

4.2.7 Academic Motivation

Beyond demographic factors, some studies have considered individual differences within students. One such factor is academic motivation: "the extent to which students are motivated to learn and do well in school" (Libbey, 2004, p. 278). Lee, McInerney, Liem, and Ortiga (2010) define motivation as "an internal state that instigates, directs, and maintains behaviour" (p. 264). Both of these definitions highlight both cognitive (motivation) and behavioural (performance) components.

One of the most dominant perspectives on motivation comes from Self-Determination Theory (SDT; Ryan & Deci, 2000). SDT suggests that behaviours and cognitions are impacted by three types of motivation: intrinsic motivation (internally-driven, e.g., personal goals); extrinsic motivation (externally driven, e.g., through rewards); and amotivation (absence of motivation). Cognitive and behavioural components are equally important. For academic motivation specifically, this involves the ability to plan, set goals and exhibit academic confidence.

Academic motivation might both result from and be impacted by a sense of belonging. Numerous studies find that academic performance positively correlates with a sense of belonging (e.g., Anderman, 2002; Benner, Graham, & Mistry, 2008;

Bonny et al., 2000; Goodenow & Grady, 1993). Goodenow and Grady (1993) found that academic motivation was more influential to a sense of belonging than peer support or friendship groups. Sari (2012) suggested that when students feel valued and attached to their school environment, they may also be more likely to be academically motivated and succeed at school, and vice versa.

However, this mutually supportive relationship between academic motivation and belonging does not hold true across different ethnic groups. In a group of Latino students, academic motivation increased school belonging, and school belonging reduced absenteeism (Sanchez et al., 2005). In contrast, in a group of Chinese high school students, belonging did not predict academic achievement, and achievement did not impact belonging (Liu & Lu, 2011). The authors suggest that for Chinese students, cognitive factors become more dominant in relation to academic outcomes than emotional factors.

4.2.8 Personal Characteristics

Beyond academic motivation, numerous individual characteristics might impact one's sense of belonging (e.g., Samdal et al., 1998; Sirin & Rogers-Sirin, 2004; Uwah, McMahon, & Furlow, 2008). As a whole, studies suggest that school belonging positively relates with self-efficacy, self-esteem, self-concept, optimism, and hope (e.g., Reschly, Huemner, Appleton, & Antaramian, 2008; Ryzin, Gravely, & Roseth, 2009; Samdal et al., 1998; Sirin & Rogers-Sirin, 2004; Uwah et al., 2008).

Other literature has focused on personal characteristics related to sociability and social skills (e.g., Connell and Wellborn, 1991; Samdal et al., 1998; Sirin & Rogers-Sirin, 2004). Connell and Wellborn (1991) found that competencies related to social awareness and relationship skills with peers and adults, self-awareness of feelings, emotional regulation, and conflict regulation skills help define a student's sense of belongingness. They also suggested that when a student is engaged in school and experiences a sense of school belonging, the development of capacities, skills, and better psychological functioning can occur (Connell & Wellborn, 1991).

4.2.9 Emotional Instability and Mental Illness

Emotional instability can be viewed as a type of psychopathology and defined as a pattern of maladaptive behaviour or state of distress (Cole, Llera, & Pemberton, 2009). The psychological and emotional wellbeing of students has become an increasing priority in schools, and recent studies in mental health have heightened the need for a greater emphasis on the area due to the growing incidence of depression, suicide, and anxiety rates among students, combined with a younger average age of onset. Mental illness for 15- to 25-year-olds accounts for over 50%

of the burden of disease (Australian Institute of Health and Welfare, 2007), and for most of these disorders, the average age of onset occurs in this time period (Australian Bureau of Statistics, 2012).

As we discussed in Chap. 3, a sense of belonging has major implications for one's mental health. The research consistently indicates that a lack of belonging puts one at risk for mental illness. The reverse is also true. Those with existing psychopathologies struggle more with social acceptance and belonging. Those who need support the most are often the least likely to receive it. The presence or absence of mental illness appears to have implications for an individual's sense of school belonging. In light of school stressors and their potential effect on school belonging, environmental structures within schools, such as those concerning safety, discipline, and fairness need to be considered.

4.2.10 Peer Support

A particularly important factor in adolescents involves a young person's relationships with their friends and classmates. Both same-sex and heterosexual peer relationships can be quite dynamic during the adolescent years, and assist the adolescent to explore and establish a sense of identity.

Numerous studies find that the perceived support of peers plays a key role in one's sense of belonging (e.g., Goodenow & Grady, 1993; Hamm & Faircloth, 2005; Libbey, 2004; Reschly et al., 2009; Osterman, 2000). Peers can influence belonging through providing social and academic support (Wentzel, 1998), offering acceptance (Wang & Eccles, 2012), trust (Garcia-Reid, Reid, & Peterson, 2005), or merely by being present (e.g., Whitlock, 2006). While adolescence is a developmental period that has been associated with negative peer pressure, being surrounded by positive peer influences facilitates positive decisions (Eccles & Gootman, 2002) and coping skills (Frydenberg, Care, Freeman, and Chan, 2009), both of which have been positively associated with school belonging.

Using individual, semi-structured interviews, Hamm and Faircloth (2005) examined the role that friendships play. They found that for many students, strong friendships prevented feelings of alienation, contributed to a sense of community, and offered a reliable means of feeling belongingness to school. For some students, however, the presence of friendships did not appear to influence their levels of connectedness to school. The authors suggested that this might reflect the qualities of the friendships concerned. For instance, individuals who reported having a sense of school belonging may have had friends who were also positively connected towards the school. In contrast, those individuals who reported no school belonging may have had friends who were disengaged from school.

Vaquera and Kao (2008) stressed the importance of reciprocated friendships. Adolescents with reciprocated friendships report higher levels of school belonging, which suggests that it is not merely the number of friends that matters, but the quality of relationships that one has.

4.2.11 Teacher Support

Teachers have consistently been identified as influential to student academic, social, and emotional outcomes (e.g., Anderman, 2002; Crouch, Keys, & McMahon, 2014; Hattie, 2009; Wang & Eccles, 2012). In a large-scale synthesis of research, Hattie (2009) ranked a teacher-student relationship as one of the key contributors to student performance. Numerous studies indicate that teacher support is more essential than any other types of social support (e.g., Anderman, 2003; Brewster & Bowen, 2004; Garcia-Reid, 2007; Johnson, 2009; Sakiz, 2012).

Of the many things that teachers do, what really impacts a students' sense of belonging? Using a mixed methods approach, Johnson (2009) concluded that teachers who focused on the student-teacher relationship, and thus the developmental needs of students, were more likely to nurture feelings of belongingness in their students. Cemalcilar (2010) found that teachers who respected and valued students, offered social support, and developed a good rapport fulfilled an imperative social function for students in addition to teaching the curriculum. Anderman (2002) found greater school belonging when teachers provided a sense of mutual respect in the classroom. Roffey (2012) found greater school connectedness when staff members were perceived to be available to students, showed care, and interacted with them in a positive manner.

Interestingly, encouraging a sense of belonging does not come at the expense of academic performance. For example, Stevens, Hamman, and Olivárez Jr. (2007) found that teachers who focused on acquiring new skills and mastering new situations promoted a sense of belonging in their students. Further, teachers who challenged their students and encouraged their ideas supported both student academic achievement and their sense of belonging.

Research has demonstrated that the student-teacher relationship remains vital as a young person progresses through high school (Tillery, Varjas, Roach, Kuperminc, & Meyers, 2013; Quinn & Oldmeadow, 2013). In fact, adult connections may become more important as a student progresses through secondary school. Findings related to the importance of the student-teacher relationship is reinforced by Hattie (2004), who points out that teachers are in a position to "make a difference" (i.e., influence learning outcomes) and that of the variables amenable to change, looking at what teachers can offer may be more efficacious than solely looking at policy change, programs or student roles.

4.2.12 Parent Support

Although by secondary school, peers and teachers have an increasing influence on how the student functions and feels, parents continue to play an important role in supporting and fostering school belonging (Brewster & Bowen, 2004; Wang & Eccles, 2012). When parents provide support and show care, compassion, and

encouragement towards academic endeavours, young people are more likely to exhibit greater connectedness to school (Bell-Booth, Staton, & Thorpe, 2014; Benner et al., 2008; Carter, McGee, Taylor, & Williams, 2007; Brewster & Bowen, 2004; Wang & Eccles, 2012). Benefit arises from parents who provide academic support (Benner et al., 2008), parent-adolescent attachment (Sirin & Rogers-Sirin, 2004), a sense of family cohesion (Wentzel, 1998), and types of connection, such as communication, encouragement, and appreciation (Brewster & Bowen, 2004; Garcia-Reid, 2007; Waters et al., 2010).

4.2.13 Environmental Variables

Several aspects of the physical school environment such as classroom climate, the availability of recreational spaces, opportunities to play and socialise, and school size also play a role in a student's sense of belonging (e.g., Anderson, Hamilton, & Hattie, 2004; Chan, 2008; Waters et al., 2010).

Several studies have found that a student's satisfaction with the school environment positively relates to their sense of belonging (e.g., Cemalcilar, 2010; McMahon, Wernsman, & Rose, 2009). Reviews by Anderson (1982) and Weinstein (1979) report varying support for the size of school and building characteristics, while Waters et al. (2010) established that school size, socio-economic status, and presence of graffiti were significant correlates.

One environmental factor that may play a particularly salient role is the students' perceptions of the rules, discipline, and fairness of policies within the school. Research suggests that school engagement and retention in schools is much stronger where discipline is enforced consistently and fairly (Finn & Voelkl, 1993; Rumberger, 1995). However, the literature also suggests that there are limits to discipline. Townsend (2000) reported a negative effect on students who had been disciplined. A link was found between students who had been suspended and students who felt disconnected from their peer group. The resultant feelings of "not belonging" led to an increase in deviant actions. The study suggested that students who felt that their teachers did not treat them fairly felt excluded from their school.

Catalano, Haggerty, Oesterle, Fleming, and Hawkins (2004) similarly found that school bonding was negatively correlated with grade repetition, dropping out of school, school misbehaviour, having been disciplined at school, and suspension. A student's perception of fairness appears to be key in fostering a sense of belonging. Mulvey and Cauffman (2001) found that belief in the fairness of school rules and discipline was more effective in reducing school violence than zero-tolerance policies and strict discipline. Therefore, it seems that school connectedness can be built through fair and consistent discipline and strong positive relationships with staff members (Blum & Libbey, 2004).

A second environmental factor is a sense of safety. Using a qualitative case study approach, Rowe and Stewart (2011) found indirect and direct relationships between perceptions of safety by students and school connectedness. Other research has also

supported the claim that students report greater feelings of school belonging when they feel safe at school (Cunningham, 2007; Garcia-Reid et al., 2005; Whitlock, 2006).

4.3 A Note on Causal Relationships

For many of the themes found to influence school belonging discussed here, it is uncertain whether the relationship with school belonging for these themes is causal, an antecedent, or spurious. Many studies researching the area of belonging have done so by investigating the bivariate relationship between different variables. Thus, while we might think of some of these factors as causes of belonging, they could just as easily be a result of one's sense of belonging, or another variable could be influencing both the sense of belonging and the other factors reported.

Even though the direction of the relationship between the variables described in this chapter with school belonging (and the interplay between the variables themselves) are less understood, as a whole, the literature provides inferential insights into the importance of these themes in relation to school belonging. However, while there are consistencies, there are also numerous inconsistencies, making it challenging to identify the most effective and efficient places to intervene. We now turn to a systematic consideration of these different factors, to move towards an effective framework for intervention.

Chapter 5
Making Sense of the Major Influences on School Belonging

Abstract While prior research and reviews identified various variables that relate to school belonging, findings at times are mixed. With limited resources available, it is important that schools can identify which areas might have the biggest impact. To bring order to the literature, we meta-analytically synthesised the existing research. We combined 45 studies, which included over 67,000 students. Across studies, academic motivation was studied the most, whereas extracurricular activities were studied the least. Most effects were moderate in size. Teacher support and personal characteristics were the strongest correlates of school belonging. The findings may be useful in improving perceptions of school belonging for secondary students through the design of policy, pedagogy and teacher training, by encouraging school leaders and educators to build qualities within the students and change school systems and processes.

Keywords Meta-analysis · Belonging · School belonging · Academic motivation · Mental health · Personal characteristics · Parental support · Teacher support · Peer support

In Chap. 4, we considered various themes that have been found to be associated with school belonging, stemming from reviews by the Wingspread Declaration on School Connections (2004), CDC (2009), Libbey (2004), and others. The Wingspread and CDC reviews included research literature as well as numerous other sources and opinions, including expert and practitioner perspectives. While these reviews identify potentially relevant factors, it is not easy to clarify the relative impact that different factors have. They are also quickly becoming dated, as new research continues to be conducted. In light of this, we systematically reviewed the literature as it currently stands.

In this chapter, we use a statistical approach called meta-analysis to systematically review the extent to which 10 different themes relate to school belonging. Meta-analysis provides a way of quantitatively combining the findings from multiple studies in a common metric, allowing the impact of different factors to be directly compared. Its true strength is its systematic and replicable method of

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integrating findings that can lead to more precise conclusions about a given field (Valentine et al., 2010). Seeing that schools have limited time and resources, it is valuable to identify which factors have the greatest impact. Educators, school leaders, and school psychologists may benefit from understanding the different levels of impact as a way to make more conscientious decisions about what strategies and interventions are introduced within the school.

We also saw in Chap. 4 that many of the themes reported mixed results, with some studies finding a positive effect and others finding a negative effect or no effect. Meta-analysis offers an opportunity to consider moderators, or other factors that change an association. For instance, peer support might have a greater impact on school belonging for girls than for boys (or vice versa).

5.1 Approach

Based on the salient themes that we identified in Chap. 4, we focus our review on 10 different factors:

1. Academic motivation (e.g., homework completion, academic support, goal setting, aspirations)
2. Mental health (e.g., mental illness, anxiety, depression, suicide ideation)
3. Personal characteristics (e.g., self-efficacy, self-esteem and self-concept, positive emotions, social awareness, self-awareness, coping skills, emotional regulation)
4. Parental support (e.g., perceived care, compassion, encouragement, positive relationships)
5. Peer support (acceptance, encouragement, support by friends and peers)
6. Teacher support (e.g., academic support, social support, likeability, fair treatment)
7. Gender
8. Race and ethnicity
9. Environmental aspects (classroom climate, the availability of spaces and opportunities to play and socialise, class-seating arrangements, safety processes and structures that affect the culture, organisational structures, behaviour management, support structures for staff members, a "welcoming" environment)
10. Extracurricular activities (number of group memberships).

We also examine three potential moderators:

1. Year of study
2. Country where the study was conducted
3. Geographic location of school (urban versus rural).

5.1.1 Findings Studies to Include in the Review

Our review focused on research that was published in a scholarly journal between 1993 and 2013. We searched several of the major search engines that are typically used in psychology, education, and social science.[1] The terms we searched for are found in the Appendix A.

5.1.2 Criteria for Deciding Which Studies to Include

We used several different criteria to determine which studies should be included in the review. The study had to have the following characteristics:

1. Study participants were adolescents, defined as being age 12–18 (on average), attending a secondary school.
2. The study was written in English.
3. The study occurred in a developed, English speaking country.
4. The article comes from a primary source, published in a peer-reviewed journal.
5. The study used a quantitative research design (i.e., there were numbers and statistics).
6. One or more of the 10 themes listed in Sect. 5.1 were measured.
7. A measure of school belonging was used, which aligned with Goodenow and Grady's (1993) definition (described in Chap. 4).
8. To make sure the measure of school belonging was reliable, it needed to use multiple items.
9. School belonging was the outcome variable in the study.
10. An effect size was reported or could be calculated from the reported analyses.

5.1.3 Selecting Studies to Be Included in the Review

Figure 5.1 provides a flowchart showing how we selected studies to include in the study. Our review consisted of several stages. Based on our search strategy, we identified 623 studies that potentially could be included in our analysis. We first screened the articles based on their basic characteristics, including the age of the sample, where the study was conducted, the language it was written in, and whether it used a quantitative methodology. Through this screening process, we removed 220 studies. We then more closely considered the methods used, that is, what statistical information was available, and how variables were measured. Fifty-one studies met our inclusion criteria and were included in our analysis.

[1]Ovid Medline, Mental Health Abstracts, PsycINFO, Social Sciences Abstracts, Sociological Abstracts via SocioFile, Academic Search Premier, Social Sciences Citation Index, and ERIC.

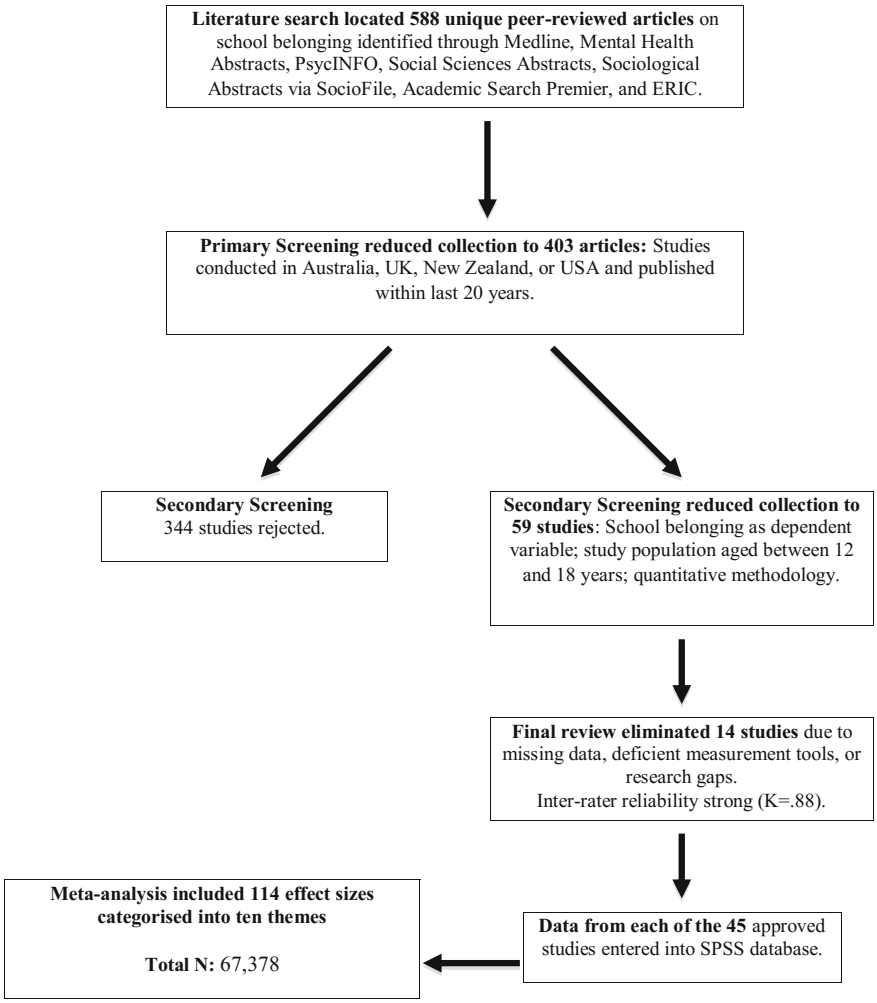

Fig. 5.1 Exploring school belonging through a systematic review. The flow chart depicts the different phases of study selection (The PRISMA Group, 2009)

5.2 Preparing the Data for Analysis

Carefully reading through each of the 51 studies, we extracted key information about each study, including: The year of publication, country where the study took place, sample size, school location (urban versus rural), average age of participants, gender composition, race/ethnicity, and school type. We also noted how the data was analysed in the original study and what that study found.

We recorded the data from each study on a spread sheet. To ensure that data was coded correctly, a second researcher, also with master's level qualifications in statistics, coded 10 of the studies. In most cases, the two raters agreed on the information to extract. When there were differences, the two raters discussed these differences, coming to a consensus.

To statistically combine studies together, we needed a common metric that showed how much each of the variables related to school belonging. 39 of the studies reported a Pearson *r* correlation. Other studies used regression or ANOVA, and we converted this information into an *r* correlation. The Pearson *r* indicates the size of the effect—how two variables are related to each other (ranging from −1 to +1). When the correlation is closer to +1, it indicates that as one variable increases, so does the other. If the correlation is closer to −1, as one variable increases, the other decreases. Values close to zero indicate the two variables are not related. So the number indicates how strong the effect is. As a rule of thumb, values around $r = 0.10$ are considered a small effect, 0.30 is a moderate effect, and 0.50 is a large effect.

5.3 Analysing the Data

We used a program called Comprehensive Meta-Analysis (CMA, version 3.0; Borenstein, Hedges, Higgins, & Rothstein, 2015) to analyse the data. Separately for each theme, we calculated the average correlation and the 95% confidence interval around that average.

We used both fixed and random models. The fixed effects model is weighted by the number of participants in each study. The analysis is done at the individual person level. It has a lot of power, but is only generalizable to the studies included. The random effects model is based on the number of studies included in the analysis. It is less powerful, especially with few studies, but the results are more generalizable.

We also tested year of study, country of study (Australia, US, New Zealand), and location of the school (urban, suburban, or rural) as moderators. We entered the moderators simultaneously into a meta-regression analysis, which considers the unique effect of each factor.

5.4 Overall Study Characteristics

We included 45 studies, which included 67,378 students. Sample sizes ranged from 45 students up to 7613 students. Information on each study is provided in Appendix B. Thirty-nine of the studies were conducted in the United States, 11 took place in Australia, and 1 took place in New Zealand. About 28% of the studies occurred in urban settings, 21% were in suburban areas, 11% were in rural areas, and 38% included a mix of urban and rural. Half of the studies used a convenience sampling approach, while the remaining half used random or biased approaches.

The studies used a few different terms to describe school belonging. Most studies used the term belonging, connectedness, or engagement. Other terms, used by a handful of studies each, were bonding, engagement, climate, identification, attitude, liking, and interest.

5.5 Impact of the 10 Themes

Across the studies, we calculated 114 effect sizes. Academic motivation was studied the most and extracurricular activity was studied the least. About 94% of the studies found statistically significant association between the variable and school belonging, with effect sizes ranging from $r = 0.20$ to $r = 0.80$. Most effects were moderate in size.

How did each theme relate to school belonging? Below, we describe the results for each theme. We also provide figures that show the effect sizes and confidence intervals for each study. The size of the marker represents how big or small the sample was. The figures also show the average effects. Teacher support and personal characteristics had the strongest effects. Extracurricular activities and race/ethnicity were not significantly related to school belonging.

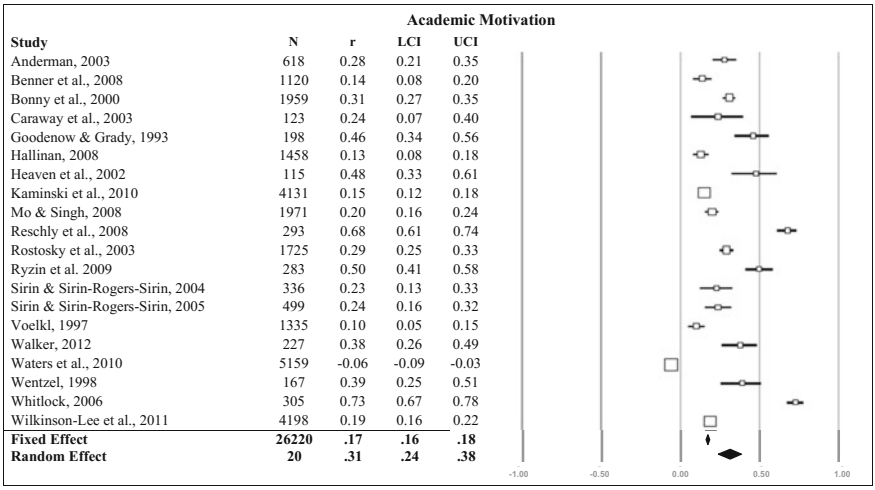

Fig. 5.2 Studies that tested the association between academic motivation and school belonging. *Note* N = sample size, r = effect size, LCI = lower confidence interval, UCI = upper confidence interval. The size of the markers are proportional to sample size. Effects below r = 0.00 indicate less school belonging, values greater than 0.00 indicate greater school belonging. The fixed effect analysis is weighted by the sample size; the random effects model is based on the number of studies included

5.5.1 Academic Motivation

Our first theme, which reflects an orientation towards academics, was moderately associated with school belonging (see Fig. 5.2). Academic motivation was measured in various ways, including future aspirations and goals, academic self-regulation, self-academic rating, and education goals, motivation, and valuing academics. These different measures speak to the *process* of learning, more than about academic achievement and performance (*outcomes*).

Many schools focus on academic achievement, placing pressure on students to perform at a high standard. While such a focus might help students earn high marks, this doesn't necessarily cultivate a sense of belonging to the school. In fact, focusing on outcomes (high marks) can create a sense of competition amongst students, undermining cooperation and connection amongst students. Such a focus can also create anxiety in sensitive students. In contrast, by focusing on the process of learning, it reduces competition, helps students connect with the material, and even achieve at higher levels (Dweck, Walton, & Cohen, 2014).

5.5.2 Personal Characteristics

A second theme refers to individual aspects of the student, such as their personality, temperament, and abilities. Studies included characteristics such as self-efficacy, conscientiousness, coping ability, positive emotions, hope, and social intelligence. Our analysis found personal characteristics to be one of themes that was most strongly associated with school belonging (see Fig. 5.3). All of the studies found at least moderately-sized positive correlations with school belonging. The strongest

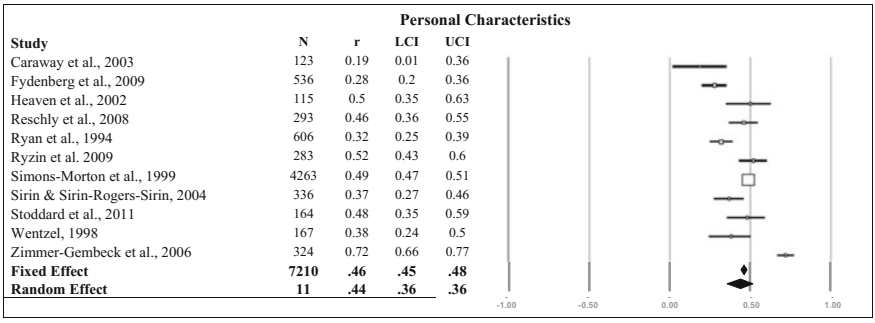

Fig. 5.3 Studies that tested the association between personal characteristics and school belonging. *Note N* = sample size, r = effect size, LCI = lower confidence interval, UCI = upper confidence interval. The size of the markers are proportional to sample size. Effects below r = 0.00 indicate less school belonging, values greater than 0.00 indicate greater school belonging. The fixed effect analysis is weighted by the sample size; the random effects model is based on the number of studies included

characteristics were hope, positive affect, conscientiousness, and relatedness/closeness to others. Self-esteem, coping style, and social self-efficacy were weaker, but still quite significant.

Over the past decade, research has made it clear that personality is central to health and wellbeing (Friedman & Kern, 2014). The areas of positive psychology, positive education, social and emotional learning, and positive youth development have identified various strategies for building positive characteristics in students, with an increasing number of interventions and curricula available. We'll consider these in greater detail in Chap. 7.

We must make an important caveat. While we see the positive personal characteristics strongly correlate with school belonging, we don't know if developing them in those who lack them will have the same benefits as those seen here. But the positive characteristics identified here with the greatest impact are good places to start.

5.5.3 *Emotional Stability*

Considerable research points to the negative influence of mental illness on how students experience and perform at school. Studies included in our meta-analysis measured mental health in terms of anxiety, poor coping skills, psychoticism, depression, negative emotions, and feelings of stress (for the analysis, we reversed these to be consistent with the other themes, so that higher scores indicate *less* of these problems). Our analysis found that emotional problems had a sizeable effect on student sense of belonging (see Fig. 5.4).

Most likely, mental health and a sense of belonging impact each other. Students who feel better are more likely to feel like they belong, which can contribute to

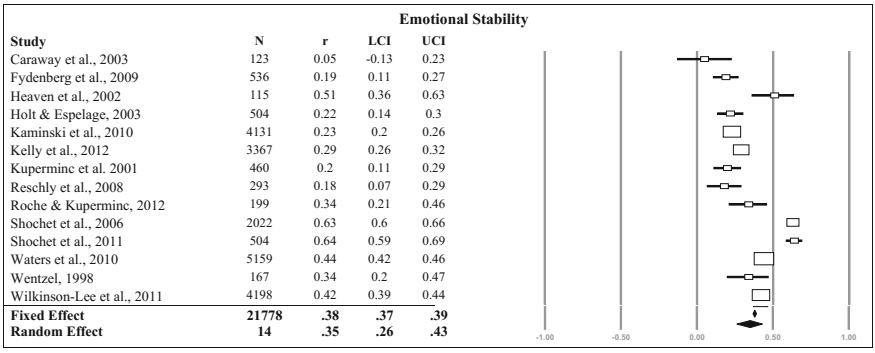

Fig. 5.4 Studies that tested the association between emotional stability and school belonging. *Note N* = sample size, r = effect size, LCI = lower confidence interval, UCI = upper confidence interval. The size of the markers are proportional to sample size. Effects below r = 0.00 indicate less school belonging, values greater than 0.00 indicate greater school belonging. The fixed effect analysis is weighted by the sample size; the random effects model is based on the number of studies included

better mental health. But for those who struggle with mental health, it can be harder to fit in at school, contributing to further mental health difficulties. These findings make it clear that it is important to promote good mental health in schools, and identify students who are at risk for mental health problems early.

5.5.4 Gender, Race, and Ethnicity

We consider two demographic factors—gender and race/ethnicity (see Fig. 5.5).

Gender was simply defined as male versus females (no study indicated if other gender orientations were present). While gender was significantly related to school belonging, such that girls felt a stronger sense of school belonging than boys, there were also mixed results. Most of the studies were done in the US. A single Australian study found the reverse, with boys feeling greater school belonging than girls.

Race (White versus Black) and ethnicity (majority versus minority) similarly were only weakly related to school belonging. This theme was only included in four studies. Although one study found a moderately positive effect, the other studies found a very weak or non-significant relationship.

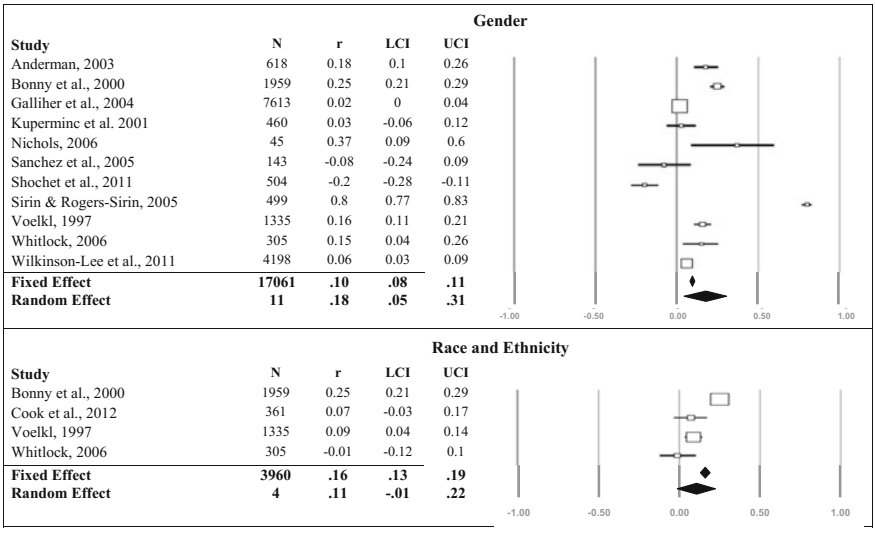

Fig. 5.5 Studies that tested the association between gender or race/ethnicity and school belonging. *Note N* = sample size, r = effect size, LCI = lower confidence interval, UCI = upper confidence interval. The size of the markers are proportional to sample size. Effects below r = 0.00 indicate less school belonging, values greater than 0.00 indicate greater school belonging. The fixed effect analysis is weighted by the sample size; the random effects model is based on the number of studies included

The mixed findings and small number of studies that focused on gender and race/ethnicity make it hard to draw conclusions. At the same time, these are set characteristics of the student. Although some adolescents might struggle with their gender orientation, it is a factor that we generally have the least control over. Similarly, one is born of a certain race or ethnicity and can not simply change their biology or cultural heritage.

The encouraging message here is that it seems that things we can do something about—such as aim to increase a sense of academic motivation or protect one's mental health—have a greater impact on belonging than biological factors that we cannot control (e.g., race and gender).

5.5.5 Parent, Teacher, and Peer Support

A considerable number of studies have tested the association between different types of social relationships and supports and a sense of school belonging. We considered three types of supports: parents, teachers, and peers (see Fig. 5.6). Each one was strongly related to school belonging.

Although peer support had some degree of influence on one's sense of belonging, parents and teachers had a greater impact. Other research suggests that peers have the strongest influence on a student's behaviour (Steinberg, 2001). But behaviour is not the same as feeling emotionally connected with others. While peers might influence what a person does, the perceived quality of relationships plays a key role.

Teachers, parents, and others who work with adolescents play an important role in helping a student connect. Even when, as a part of a normal healthy developmental trajectory, a young person is seeking independence and detaching from parents and other adults, studies emphasise how vital adult relationships really are (e.g., Anderman, 2002; Greenberger, Chen, & Beam, 1998; Shochet et al., 2011; Zimmer-Gembeck et al., 2006).

In a large meta-analysis of other meta-analyses, Hattie (2009) has made it clear that teachers have the biggest impact on student learning. Similarly, we found that teacher support had the strongest impact on a sense of belonging. When students feel that their teachers care about them, are fair, and are a resource when problems occur, they feel more connected to school. Teachers can even buffer negative relationships with parents and peers (Hamre & Pianta, 2006).

Research consistently identifies how necessary social relationships are (e.g., Brophy, 1988; Hawkins, Catalano, & Miller, 1992; Lerner et al., 2005; Poortinga, 2012; Ranson & Urichuk, 2012). Our findings clearly point to the importance of significant others. Schools should identify ways to support healthy relationships for all members of the educational community. We include some strategies in Chap. 9.

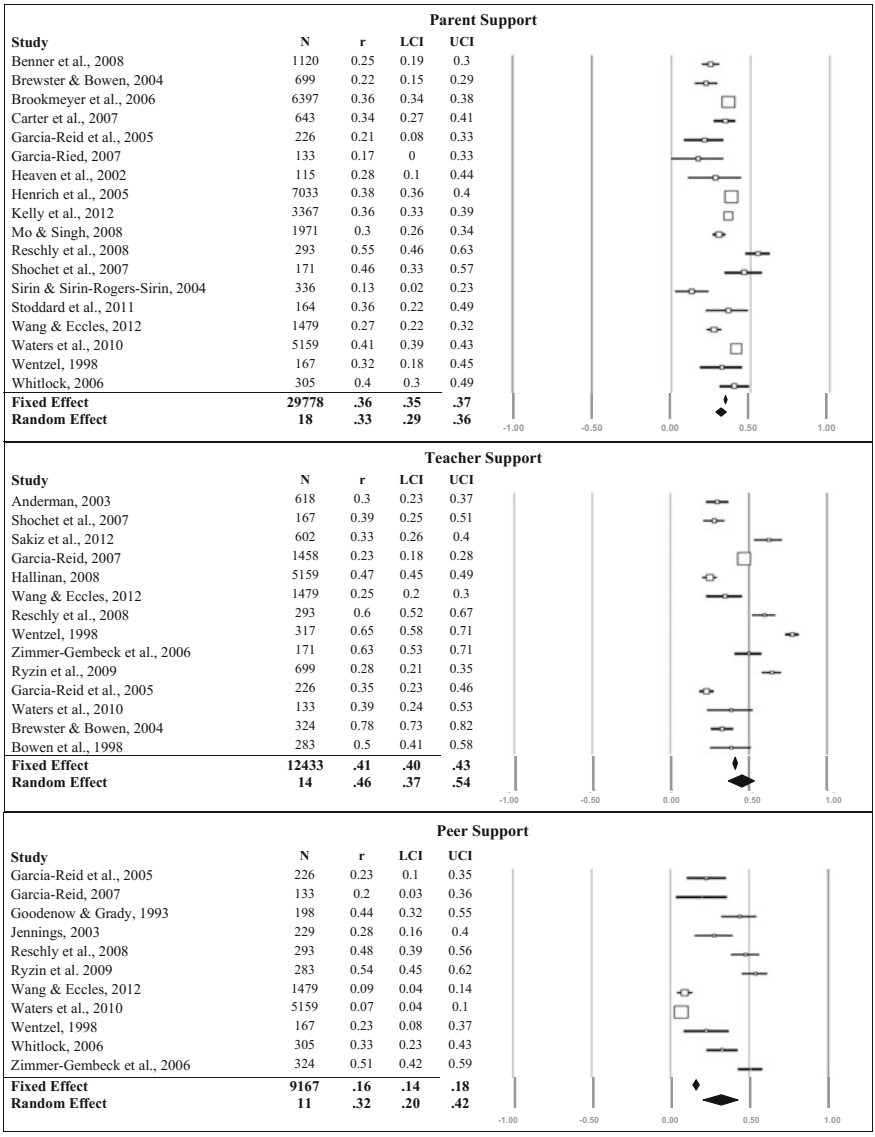

Fig. 5.6 Studies that tested the association between parent, teacher, or peer support and school belonging. *Note N* = sample size, r = effect size, LCI = lower confidence interval, UCI = upper confidence interval. The size of the markers are proportional to sample size. Effects below r = 0.00 indicate less school belonging, values greater than 0.00 indicate greater school belonging. The fixed effect analysis is weighted by the sample size; the random effects model is based on the number of studies included

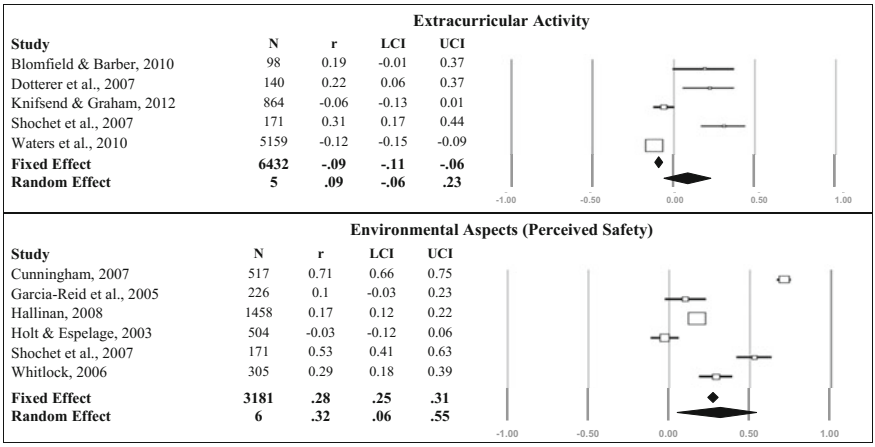

Fig. 5.7 Studies that tested the association between extracurricular activities or school environment and school belonging. *Note N* = sample size, r = effect size, LCI = lower confidence interval, UCI = upper confidence interval. The size of the markers are proportional to sample size. Effects below r = 0.00 indicate less school belonging, values greater than 0.00 indicate greater school belonging. The fixed effect analysis is weighted by the sample size; the random effects model is based on the number of studies included

5.5.6 Extracurricular Activities and the School Environment

Finally, we considered broader factors that a school might have some degree of control over—the number of activities that students are involved in, and a student's perceptions about the school's environment (see Fig. 5.7). Only a handful of studies looked at these two themes.

Involvement in extracurricular activities had mixed results, with three studies finding a positive effect and two studies finding a negative effect. It is possible that there is a U type relation between extracurricular involvement and a sense of belonging—such that no involvement is harmful, but over involvement could also be harmful. Alternatively, it might depend upon the types of activities that students are involved in, how social those activities are, and how well they fit with the student's personality and interests. There are a lot of unanswered questions here, suggesting that forcing students to be involved in extra activities is a counter-productive way for increasing school belonging.

The studies on environment focused on the perceived sense of safety. Perceptions of safety at school had a moderate effect. The biggest impact here were norms around bullying. This is an ongoing issue that schools are facing. Research clearly indicates the negative impacts of bullying, on both the perpetrator and the victim (e.g., Cunningham, 2007). Schools play a central role in establishing policies and norms around bullying. Our results suggest that purposely creating healthy norms is key to helping students feel like they belong at the school.

An overall sense of safety was still important, but had less of an impact than bullying norms. The local community, the home environment, and the general climate that the school establishes all impact one's perception of safety. A sense of safety may depend upon one's background. For at-risk students, schools can create a safe haven. For students from high socio-economic backgrounds, the school may be an extension of an otherwise safe home life, and a sense of safety may be an expected norm. Ultimately, schools have an ethical responsibility to ensure a safe learning environment for all of their students.

5.6 Moderator Effects

Beyond the 10 themes, we also examined publication year, country of study, and geographic location as possible moderators. As illustrated in Fig. 5.8, publication year made a difference for personal characteristics, such that the effect sizes tended to be stronger for more recent publication years. For the other themes, publication year didn't make a difference.

The study's country of origin also didn't make a difference. Other research similarly hasn't found significant differences between country and reported levels of a sense of belonging (e.g., Willms, 2003). Our studies were based mostly in the US and Australia, therefore, our analysis does not indicate how our results might apply to other countries—especially developing or non-Western countries.

Where we did see a difference was in the geographical location of the school. Significant differences occurred across all themes except for gender. As illustrated in Fig. 5.8, rural locations tended to have stronger effect sizes and urban locations tended to have smaller effect sizes. This was particularly true for academic motivation, personal characteristics, and teacher support. The one exception was emotional stability, where effects were similar in rural and urban locations, and differed more in mixed locations.

Rural schools are more likely to have smaller classes and more time for student and teacher interactions (Freeman & Anderman, 2005; Knoblauch & Woolfolk-Hoy, 2008). Such personal attention might be beneficial. Of course, urban schools vary a lot, and the type of school, the size of the school, student-to-teacher ratio, opportunities for extracurricular activities, and a myriad of other factors could have an impact on school belonging. These are possible avenues for future research.

5.7 Summary and Conclusions

We systematically reviewed 51 studies, which included more than 67,000 students. We quantitatively brought together the literature on school belonging to consider how 10 different themes related to school belonging. We also examined several factors (country, location, year) that might moderate effects.

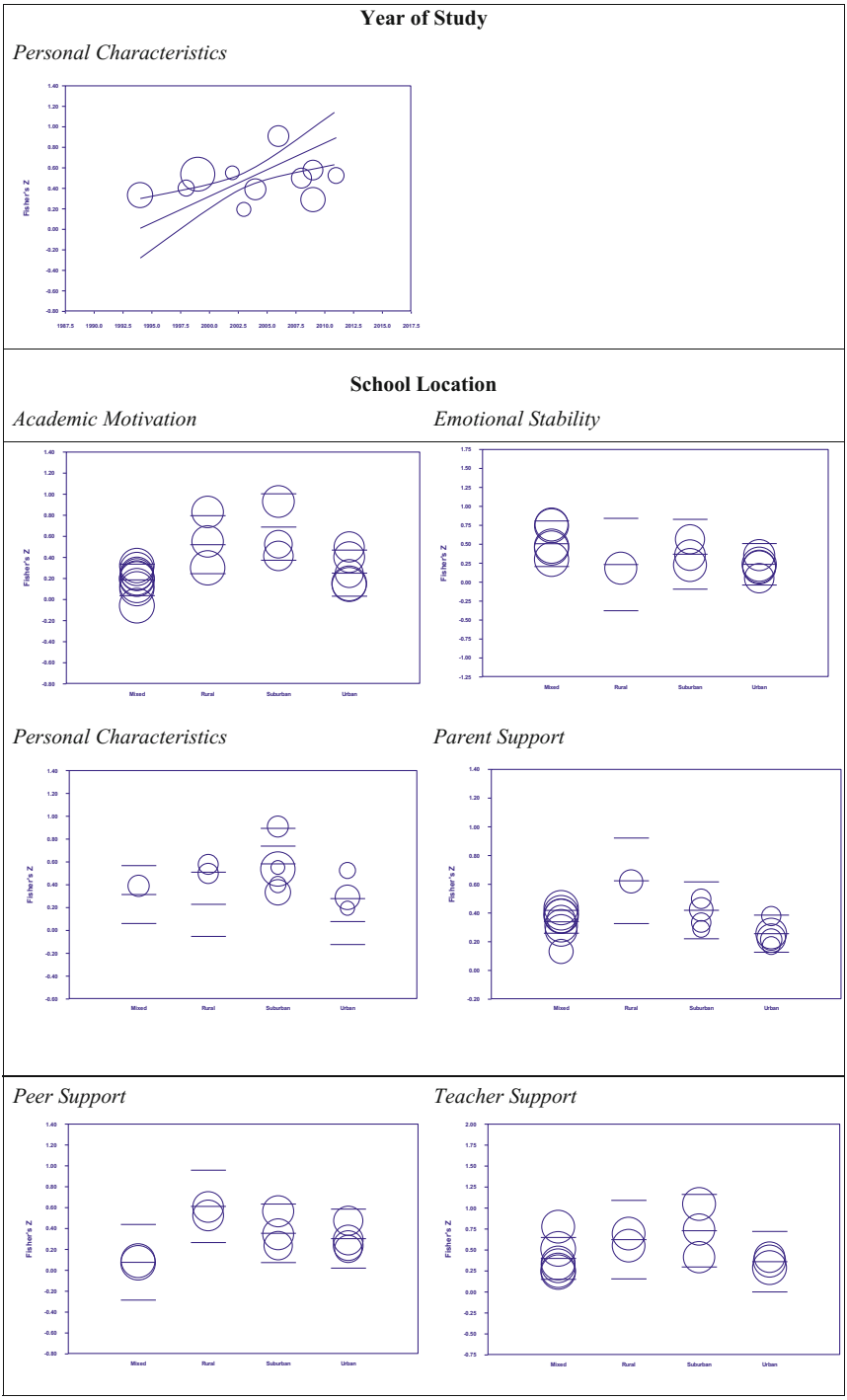

Fig. 5.8 Year of study and geographic location as moderators of how the themes related to school belonging

Many studies have looked at variables that relate to school belonging. A crucial next step for research is to investigate how intervening with these different themes can actually shift a student's sense of belonging. But first, what matters most for school belonging?

Of the 10 themes, all but race/ethnicity and extracurricular activities were significantly related to belonging. Teacher support and personal characteristics had the biggest impact on school belonging, so these themes might be essential areas to target. Schools should be careful to value the importance of teachers for fostering both school belonging and academic achievement. Finding ways to develop positive characteristics in young people may have a beneficial impact both on students' sense of belonging, as well as their success in school.

As a whole, our review shows that multiple factors play a role in how connected students feel to their school. Some of these are intrapersonal (inside the person), others are external (interpersonal). Homes, schools, and communities will benefit from creating healthy environments and specific interventions that target the mindsets and skills of young people. We'll get to different strategies that might be useful in Part 4, but first we present a framework for making sense of the different influences on school belonging.

Chapter 6
A Multilevel Framework of School Belonging

Abstract Much of the literature that investigates school belonging has focused attention on individual factors. However, our review (Chap. 4) and meta-analysis (Chap. 5) suggest that school belonging is a complex multi-faceted construct that can be influenced by multiple levels and systems within a school. Synthesizing the themes apparent in our review of the literature, we present a multi-level framework to examine school belonging, that is, the bio-psycho-socio-ecological model (BPSEM) of school belonging. We present the BPSEM framework and unpack the different domains. The framework provides a foundation for application, which we turn to in proceeding chapters.

Keywords Socio-ecological · Belonging · School belonging · Framework

The last two chapters reviewed research on school belonging. We concluded that many factors matter, including aspects of the individual, relationships with peers, teachers, and parents and elements of the school. So how do we interpret these findings? In this chapter, we provide a framework for thinking about the factors that influence school belonging.

When we consider the various themes reviewed in Chaps. 4 and 5, we see that they incorporate various aspects of a student's life. This chapter presents a framework of school belonging that draws from the research reviewed in the past few chapters. Then, in the next section of this book, we turn to practical ways to put this framework into action, with the hope of helping our young people feel more connected to the school.

6.1 A Framework for School Belonging

When schools start to think about how to build school belonging, it can be hard to know where to begin. The findings that we reviewed in the last two chapters suggest several areas that have been examined and targeted across different studies.

K.-A. Allen and M.L. Kern, *School Belonging in Adolescents*,
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But the findings from this body of research provide little guidance to school with respect to how they can foster school belonging. We suggest that a framework is needed, to help school systematically and strategically foster school belonging in their students.

Some frameworks do exist. The problem is that these frameworks have focused mostly at the student level, identifying things like motivation, individual characteristics and emotional stability (e.g., Brendtro, Brokenleg, & Van Bockern, 2002; Connell & Wellborn, 1991; Malti & Noam, 2009; Ryan & Deci, 2000). Such frameworks only focus on school belonging as an internal experience. They do not account for relational factors and broader aspects of the school environment. The last two chapters clearly indicate that these broader aspects of school belonging matter. These broader aspects also are what school may have a greater ability to control and change.

A framework is needed that presents school belonging as a multidimensional construct that exists within multiple layers. The framework should integrate the research literature and provide multiple layers in which a school may intervene to create effective, sustainable change.

We suggest that such a framework can arise when findings around school belonging are interpreted through the lens of Bronfenbrenner's (1994) bioecological model, with additional emphasis given to psychological and social aspects. We call this the **bio-psycho-socio-ecological model of school belonging** (**BPSEM**). That is certainly a mouthful. But let us breakdown the different parts. ***Bio*** refers to genetic and biologically based aspects of the students, which predispose the student to certain social and behavioural patterns of interacting with others and thinking about the world. ***Psycho*** refers to the psychological aspects of the student, such as their attitude, ways of thinking, personality, cognitive styles, and emotions. ***Socio*** captures the inherently interconnected character of school belonging—relationships with peers, teachers, and others within the school environment. ***Ecological*** refers to the broader school environment and the local community, policies, and cultural norms—all of the broader influences that influence a student's experience at school. Each of these influences dynamically interacts with one another to influence how a young person feels at any point in time.

Figure 6.1 provides a representation of the BPSEM. The different factors that we reviewed in the last two chapters of this book fall across various levels, starting with aspects of the student (including their biological predispositions), and moving out across multiple interconnected layers to the broader school, cultural, and temporal context.

6.2 Biological Factors

The core of the BPSEM represents internal genetic, physical, physiological, and neurological factors. This is the level that schools, teachers, and students have little to no control over. It is imperative to consider how biological aspects of the child,

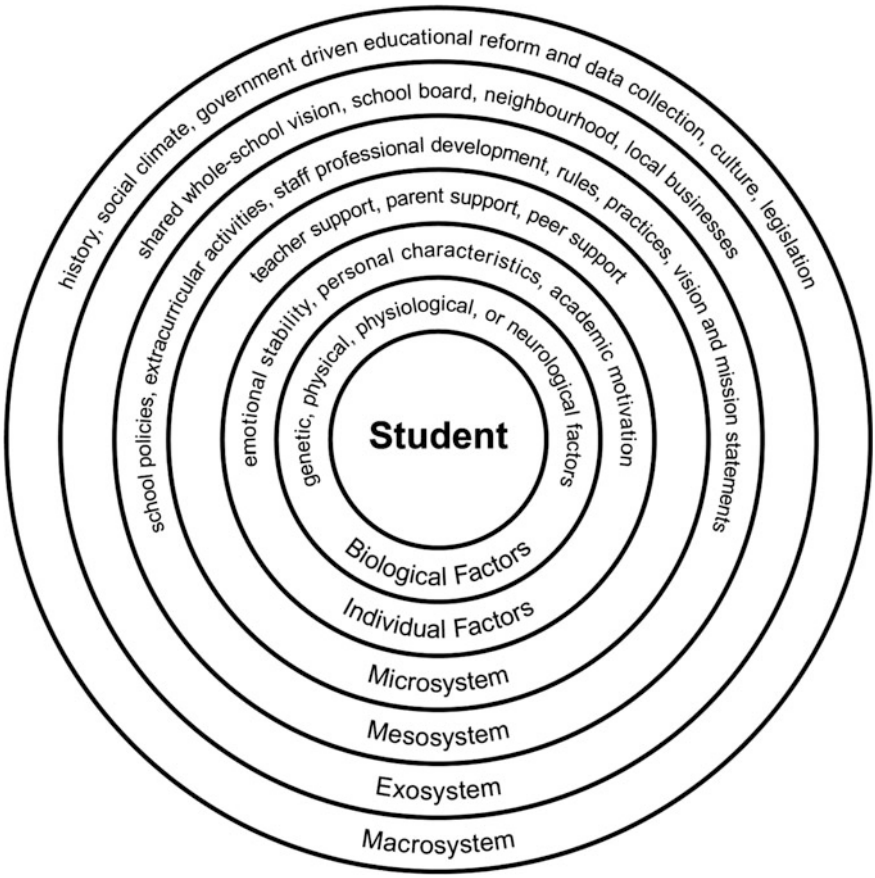

Fig. 6.1 The bio-psycho-socio-ecological model of school belonging. The findings presented in the last two chapters are illustrated across the different interconnected layers

and their context, influence their school experience. Within natural constraints, some aspects can be changed and some cannot. Fortunately, while empirical evidence at this level is limited, the research that does exist indicates that these biological factors seemingly play a minimal role in a student's sense of school belonging.

6.3 Individual Factors

How a person perceives and experiences the world is impacted by numerous individual psychological factors. A great deal of the school belonging literature, and related frameworks, focus on personal characteristics of the student, such as his or her motivation, personality, optimism, self-efficacy, self-esteem, sociability, or

social skills (e.g., Connell & Wellborn, 1991; Samdal et al., 1998; Sirin & Rogers-Sirin, 2004; Uwah, McMahon, & Furlow, 2008). Although personality is relatively stable, it can and does change over time. Personality is particularly malleable in adolescence, and as such, the literature has identified three sets of individual factors that clearly relate to a sense of belonging: academic motivation, emotional stability, and positive personal characteristics.

Academic motivation is defined as the expectancy of academic success through goal setting and future aspirations, and concerns how motivated students are to learn and function well at school (Libbey, 2004). Emotional stability refers to a lack of maladaptive behaviour, psychopathology, mental illness, and persistent distress. Positive personal characteristics include coping skills, optimism, self-efficacy, self-esteem, and self-concept. A growing area of research is positive psychology aims to find ways to build mental well-being, positive personal qualities, and emotional stability—we will explore these strategies more in the next chapter.

A key thing to note is that the causal direction is unknown. Individual factors clearly relate to a sense of belonging, but does motivation influence belonging, belonging influence motivation, or a combination? Most likely, the direction is inconsequential, and by working on one aspect, the other follows.

6.4 Social Factors (Microsystem)

The individual student, with their unique biological and psychological makeup, functions within a social system of parents, peers, teachers, and others. Bronfenbrenner (1994) calls this the *microsystem*. Studies clearly indicate the importance of social relationships. Qualities such as teacher supportiveness and caring, the presence of good friends, positive relationships with parents, and academic and social support from peers and parents are all significant contributors to a sense of school belonging. Further, the individual influences and is influenced by those around them, in a dynamic, interrelated manner.

The importance of a student's relationship with parents, peers, and teachers has been illustrated through various models and frameworks. For example, the Self-System Process Model (Connell & Wellborn, 1991) incorporates relationship skills with peers and adults, self-awareness of feelings, emotional regulation, and conflict resolution skills.

Peers play an increasingly critical role in adolescent well-being, both in helping one another feel a sense of belonging, as well as providing academic support. As the young person searches for their personal identity and who they are in relation to others, they also influence their peers' social and personal identities, in a dynamic manner. Peers can be a source of great connection, but also can be detrimental to one's sense of self, especially in cases of bullying and victimisation.

It is often thought that parents play an increasingly diminished role throughout adolescence, as the young person establishes their own identity away from the family. Yet as our review indicated, parents do continue to play a significant role.

When parents provide support and show care, compassion, and encouragement towards academic endeavours, young people are more likely to exhibit greater connectedness to school (Benner et al., 2008; Brewster & Bowen, 2004; Carter, McGee, Taylor, & Williams, 2007; Wang & Eccles, 2012). Parental relationships are the first form of support a child typically receives, and parents provide their children person with encouragement and a safe place for making sense of their social and academic experiences at school.

In both our review and others, teachers play a pivotal role in developing and maintaining a sense of school belonging. Students feel supported when teachers are perceived as likeable, when they praise good behaviour and work, and when they are available for personal and academic support. Supportive teachers hold students at a high standard, expecting students to do their best, while scaffolding learning and providing encouragement and support along the way. They make it safe to try and fail, focusing on the learning process.

Brophy (2004) encourages educators to enhance students' positive dispositional traits such as initiative and self-perceived competence, which in turn contribute to strong relationships with adults and peers. When a school builds the personal characteristics of self-perceived competence (e.g., self-efficacy, self-esteem, and self-concept), this increases the students' relational skills, which in turn strengthen relationships throughout the microsystem. These relationships in turn feed back into the students' sense of self, and their perception of how they connect with the world around them, especially with their school.

6.5 Ecological Factors

Beyond the dyadic relationships that students share with their peers, teachers, and parents, broader ecological factors also play a role in shaping how the student functions and feels at school. Bronfenbrenner's (1994) model splits these ecological factors across several interconnected levels: the mesosystem, the exosystem, and the macrosystem.

First, the meso-level includes the climate, implicit and explicit culture, norms, and practices of the school. Schools create a climate that may be more or less supportive of student belonging. The culture of the school is either purposefully shaped, or will create itself, either in a healthy or unhealthy way. School structures and policies impact a sense of fairness, and how safe and secure a student may feel at school (CDC, 2009). For example, schools may promote a sense of safety through school rules and policies (Saab, 2009). Also related to the mesosystem, schools can provide various opportunities for extracurricular activities. These explicit structures and initiatives play a role in shaping the culture of the school and increasing or maintaining school belonging.

School vision and mission statements are another examples of a way that a school shapes the culture of the school. School vision and mission statements outline a school's purpose or they may provide a school with an opportunity to

create a shared vision in respect to how school belonging is prioritised. The importance of school belonging suggests that schools should include belonging in their vision and mission statements, making a clear commitment to helping students feel connected to school.

The meso-level is shaped through the explicit culture of the school—the mission statement, physical environment, norms around behaviour and dress, competencies of staff, and school rituals and traditions—as well as through the implicit or underlying culture—the underlying attitudes, beliefs, and behaviours of its members. It represents school processes, practices, policy, and pedagogy (Libbey, 2004; Saab, 2009), but also highlights the unique bidirectional interactions of the features within the microsystem layer.

Second, the exo-level encapsulates the broader educational community, including the shared vision of the school, the local community, and broader social relationships. These reflect the communities in which the school and student reside. Like the mesosystem, this layer is facilitated by the opportunities provided by schools that bring these groups together. Schools might connect with local businesses or other schools within the neighbourhood, or implement school activities that involve the broader school community and the extended families of its students. Also relevant to the exosystem, schools may connect with the services of local community partners (e.g., a visiting GP, nurse health checks, dental services) (CDC, 2009).

Third, at an even broader level lies the macrosystem—the broader context in which the school resides. This includes local, national, and international policies, norms and expectations around standardised testing, legislation and curriculum demands, and the culture, as well as the historical (e.g., past events, climate, collective attitudes, and conditions) and cultural (e.g., language, norms, customs, beliefs) context unique to each school. These are factors that lie outside of the school's control, but constantly shape decisions that are made.

The macrosystem can be influential in the processes of daily school practice, particularly on how schools orient their priorities and goals. One example can be seen in Australia, where the use of NAPLAN testing has been controversial and intertwined with debates around teacher effectiveness and performance pay. A teacher's ability to implement a curriculum or bolster the study scores of students is not reported in the literature as a concern for students, yet it can often be a pressing burden for teachers in modern-day schools (Roffey, 2012; Thompson, 2013). This is perhaps a reflection of the pressure by governments and legislation to prioritise academic outcomes, arguably above other important factors in the school system. Roffey's (2012) Wellbeing Australia Survey found that "The additional stress on teachers working in unrealistic performance-driven environments has a negative impact on them, which in turn must impact [on the] health and well-being of the students in their classrooms" (p. 4). Increased teacher stress may affect the student–teacher relationship found to be important for fostering school belonging in this paper. Therefore, schools should be mindful of the effect of government-driven initiatives and data collection on the socio-ecological layers common to schools, with concerted attention towards the members of the school community,

particularly staff and students. When a teacher reports a high sense of well-being and belonging to their school, they are in a better place to foster those factors in the students they teach.

Unless government bodies become aware of the growing pressure on schools and teachers from over-prioritising academic outcomes, schools may be reluctant to implement proactive interventions related to school belonging or other mental health areas (e.g., coping, resiliency, positive psychology) due to an already overcrowded curriculum (Thompson, 2013). Government bodies concerned with schools should therefore ensure that school belonging (and well-being more generally) is prioritised in major sources of information disseminated about schools. For example, a school belonging measure could be included on the Australian *My School* website.[1] How students perceive their sense of belonging to their school may be the information that parents wish to seek about a school in addition to academic scores. This is particularly relevant for addressing school dropout rates and student retention issues at a school.

Given that school life generally encompasses a diverse range of outcomes and experiences for students, it seems reasonable that a school's educational practices should not be reduced to a set of standardised scores based on one element of the school's performance (Hardy & Boyle, 2011). At the school level, schools must be mindful of these macrosystem level influences from government reform and policy. It is paramount that schools set realistic and inclusive expectations for academic outcomes for their students, while being mindful of the needs of teachers (Roffey, 2012).

Unfortunately, there is less empirical information available for the exosystem and macrosystem levels on school belonging, and we thus have provided only a limited overview of these systems. It can be difficult for educational researchers to examine these broader levels, especially through studies concerned with preventative interventions like school belonging. These layers do not have a direct association with the student (or individual) where most studies are focused (and where data is easiest to obtain). Studies at the exo- and macro-levels tend to occur in fields such as epidemiology and public health, which rarely intersect with psychosocial aspects of schools. Preventative interventions have traditionally engaged whole neighbourhoods, which costs considerable time and resources (Brown, Kirschman, & Karazsia, 2014). Furthermore, publically available data concerned with the exosystem are not available as they are for other systems (e.g., mesosystem, microsystem). Future research will benefit from interdisciplinary approaches that directly take into account the varying levels in an integrative manner.

[1] *My School Website* (ACARA, 2009), which publishes the Australian National Assessment Program—Literacy and Numeracy (NAPLAN) results, a standardised measure of academic achievement, for all primary and secondary schools in the country.

6.6 The BPSEM in Context

The BPSEM is based on empirical evidence derived from a detailed synthesis of the literature on school belonging. The framework is designed to enable schools to consider where and how they might intervene to maintain or foster school belonging in their secondary school settings. The next few chapters draw on this framework to identify practical ways that schools can apply this framework.

While the BPSEM provides a way to organise the research and think about specific strategies that can be implemented at different levels, it also has some caveats and limitations that must be mentioned. While the framework itself has been developed from peer-reviewed empirical studies, the inclusion of mainly correlational findings means that the direction of the relationship between the themes found to be strongly correlated with school belonging requires further analysis. Thus, an important caveat is that the influence of themes associated with school belonging cannot be regarded as causal. Further investigation of the relationship between the broader school community, neighbourhoods, and extended families on the perceived sense of belonging by young people may be a source of further future research.

We hope that the BPSEM provides an organising framework for ongoing research to occur. For example, a case study could be used to refine the understanding of how context affects the practices that are implemented, how practices are implemented, and the success of such practices. A deeper understanding of what the model looks like in practice would be useful. Future research should incorporate longitudinal designs with objective measures (e.g., observation) for a more detailed understanding of school belonging.

Questions also remain about how school belonging may differ within specific populations. Research has mostly been conducted in the United States and Australia. Future research could add insight into the suitability of the framework for different countries. Further, how does the model apply to young people who do not belong? How does the framework apply to minority groups? While it is clear that social support is essential to improve belonging among students, this appears to be even more salient for minority groups (e.g., Aerts et al., 2012; McMahon et al., 2008). For these students, the acceptance of their peers, teachers, and parents has been found to be an important variable in developing prosocial behaviour and a positive attitude towards school (Galliher et al., 2004).

Empirical evaluation of the framework in different samples would allow identification of the direction of the relationships of the various individual, microsystem, mesosystem, exosystem, and macrosystem levels with school belonging, thus creating a clearly identified pathway for fostering this construct (e.g., what layers are interdependent, how are they weighted, and what combinations are especially important for school belonging to occur?). As a whole, the BPSEM provides a starting point, but further research is needed to empirically validate the framework and associated evidence-based school practices and further understand the

importance of school belonging and how to increase and/or maintain it in secondary school settings.

6.7 Conclusion

This chapter presented a framework of school belonging using an ecologically orientated perspective of schools. We hope that the framework will help schools think about how to prioritise and impact school belonging across multiple levels. What does that look like in practice? Using the BPSEM as a framework, the next section turns to practical strategies to foster school belonging at these different levels.

Part III
Evidence Based Approaches for Cultivating and Supporting Belonging

Chapter 7
Individual Factors: Academic Motivation

Abstract Chapter 6 presented the BPSEM as an organising framework for fostering school belonging. What does this look like in practice? In this chapter, we begin to unpack what this looks like, building from our deep investigation into the research literature and moving toward practical strategies for application. The relationship between academic motivation and school belonging is of great interest to researchers and schools. Studies suggest that the relationship between the two constructs appears to be reciprocal; academic motivation influences a sense of belonging and belonging influences student motivation. We present various evidence-based strategies found to increase academic motivation, with the flow on effects for school belonging. These individual-based strategies include perceived academic ability, future aspirations, goal pursuit, embracing failure, motivation, making learning meaningful and self-regulation.

Keywords Academic motivation · School belonging · Belonging · Failure · Goals · Motivation · Self-regulation

Chapter 6 presented the BPSEM as an organising framework for fostering school belonging. What does this look like in practice? We turn to considering evidenced informed practices, beginning with individual factors (This chapter, Chaps. 8), then social (Chap. 9) and ecological (Chap. 10) factors. In each chapter, we first summarise aspects that have been linked with greater school belonging in the studies that we reviewed. Consistent with the last chapter, we include the average Pearson r correlation coefficient (or range) as an indicator of how much of an effect that predictor had, based on the studies noted. Values close to one have a minimal effect; $r = 0.10$ is considered a small effect; $r = 0.30$ is considered a medium effect; and $r = 0.50$ is considered a strong effect.

We note, however, that while the effect sizes give some indication of how important the predictor might be, the size itself should be interpreted with caution. The effect size is impacted by the number of studies that were included and characteristics of those studies. Due to heterogeneity across the studies, often as more studies are included, the effect becomes smaller but more reliable. We

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encourage readers to see the tables simply as a summary of aspects that may be relevant to each domain, and the specific areas to target should be fit more to the specific school context.

This chapter will also look at practical strategies for building these different characteristics, suggesting practices and ideas that individuals, teachers, and schools might be able to use. These strategies are evidence informed, but need to be empirically tested across different educational settings. These are not intended to be prescriptive, and much more work is needed in understanding what this actually looks like in the classroom, and what works best, for whom, and under what condition. Thus, readers should take these suggestions into consideration in light of their own unique needs, culture, and context. In addition, Appendix C provides some resources that readers might find useful.

We begin with the individual factor that is closely tied to both school belonging and to academic performance: Academic motivation. Table 7.1 summarises markers of academic motivation that the studies in our review found to be significantly related to school belonging.

Academic motivation is impacted by the mindset, attitudes and beliefs that a student enters the classroom with, but it can also be impacted by the beliefs and mindset of the teacher. A student's perceived abilities, their goals and future aspirations, motivation, and ability to self-regulate all come together to impact their sense of academic motivation, and by proxy, their sense of belonging.

7.1 Perceived Academic Ability

Students arrive to class with different levels of ability. Some students have an accurate understanding of their academic abilities, while others under or over estimate their competencies. These perceptions—accurate or not—impact the goals students set for themselves as well as their future aspirations, their motivation for learning, and often the outcomes they achieve.

For example, Susie hates maths but loves literature. She enters math class with the mindset that she cannot do maths, and is unmotivated to learn. She has low

Table 7.1 Indicators of academic motivational that significantly predicted school belonging

Predictor	Effect size	Related studies
Self-academic rating, educational goals	0.48	Guthrie & Davis, 2003; Heaven et al., 2002; Klem & Connell, 2004
Perceived instrumentality	0.38	Walker, 2012
Valuing academics	0.40	Battistich et al., 1996; Whitlock, 2006
Mastery goal orientation	0.39	Dweck, 1986; Wentzel, 1998
Future aspirations	0.68	Reschly et al. (2008)
Motivation	0.46	Battistich et al., 1996; Goodenow & Grady, 1993
Academic self-regulation	0.50	Ryzin et al. (2009)

expectations and believes that she will barely pass the class—and this becomes a self-fulfilling prophecy. When assigned a series of homework problems, the numbers confuse her, and rather than working through the problems or getting help, she gives up. Not surprisingly, she scores poorly on her exams. In contrast, she arrives confidently to her English class. She soaks up the lessons like a sponge, and spends countless hours of additional time on her English assignments. Her teacher praises her natural talent, and she earns a consistent A+ in her class. Her perception of her academic abilities impact on her behaviour, and consequently, her resulting marks.

A student's perception of their ability can be influenced and shaped by parents, teachers, and peers. Indeed, teachers have both the privilege and the responsibility of setting and shaping students' goals and expectations of themselves.

Back in the 1970s, Professor Robert Rosenthal stumbled upon the idea of self-fulfilling prophecies. When we have expectations about a student's ability, we can act in ways that bring those expectations about. Imagine that Paul and Ben join Ms. Henry's class at the beginning of the year. Paul enters with a history of high performances, with notes by prior teachers praising him for his hard work. Ben, on the other hand, has barely passed his classes, with notes about him exhibiting problematic and disruptive behaviours. Ms. Henry immediately starts to worry about how she will keep Ben on track. Without realising it, she treats Paul and Ben differently. She listens carefully to Paul, positively affirming his answers, giving him extra resources and supporting his academic growth. For Ben, she's quick to notice every mistake, is critical of the comments he makes, and sends him to detention for the slightest disruption. She finds herself relieved as Ben misses a growing number of classes. Without realising it, her expectations about Paul and Ben influenced her behaviour, which subversively impacted their behaviour, attitudes towards school, their rapport with her and their resulting academic outcomes.

What can teachers do to support positive self-perceptions in their students, and to avoid falling prey to underlying biases they might have? First, it can be helpful for teachers to recognise that everyone is prone to biases and misperceptions. Teachers need to get to know their students personally, assessing where they are at academically, mentally, and socially. This can be challenging in a time-poor environment. A variety of self-reported surveys has been developed, speaking to academic and psychosocial functioning. For example, the Values in Action (VIA) survey identifies 24 different character strengths, such as kindness, curiosity, love of learning, zest, leadership and humour (Peterson & Seligman, 2004). The free survey takes about 20 min to complete (see www.viacharacter.org).

A variety of subject-specific tests and tasks can also be used to determine each students' academic level in a subject, and what might be reasonable expectations for a given time period. When they are successful in learning, celebrate that success. Learning can then be individualised to the level that the student currently is at, incorporating flexible teaching methodologies, and scaffolding lessons and learning expectations at a level and rate that match the student. Learning then becomes about demonstrating *personal* growth over the year rather than growth compared to the general average (Hattie, 2007).

7.2 Future Aspirations

Students' perceptions of themselves, as well as their teachers' perceptions, impact their future aspirations. An A+ student at a private secondary school might have high hopes for the future, expecting to be accepted at a top university, graduate with honours, and go on to have a successful career. A struggling student from a low socioeconomic background often has much lower expectations—hoping to graduate from secondary school at best, and seeking a minimum wage job. Such expectations are shaped, reinforced, or changed by teachers and parents who can affirm, encourage, and praise; or criticise and discourage the aspirations a young person may express.

We should expect more out of our students than what first seems possible, but within reason. Students ought to be encouraged to have hopes and dreams for the future, but not aim so high that failure is inevitable. A tone-deaf student is unlikely to become a virtuoso opera singer. Those who work with young people have the privilege and responsibility of helping young people find the right balance for them.

It is important for educators to gain a realistic understanding of a student's abilities, strengths, weaknesses, and resources available to them. Teachers and school psychologists play a key role in providing guidance and helping students to set achievable long-term goals and ambitions. They also can assist students in creating realistic pathways to make those goals possible.

7.3 Goal Pursuit

To effectively assist students to meet personal and academic goals in a supportive manner, it is important to challenge them, while scaffolding learning to meet those challenges. The SMART goal framework (Doran, 1981) is an immensely popular and widely used strategy for goal setting, which provides a practical approach to effectively scaffold growth.

First, achievable goals are *Specific*. Goals are often vague in nature, making it unclear as to what the goal actually is. For instance, Jen might have the goal of being a good student. But what does that mean? SMART goals are clear and well defined. Instead, Jen sets the goal of earning a high score on an advanced calculus exam. A series of smaller specific goals, such as attending class each day, paying attention to the lessons, completing each homework assignment, and spending an hour each day studying, will move her towards that larger specific goal.

Second, SMART goals are *Measurable*. There is some way of knowing when the goal is fulfilled, and progress can be measured along the way. Jen has reached the goal when she receives the results of the calculus exam. Along the way, she can track how much time she spends studying, looks at her score on homework and class exams, and complete some practice tests to see that her knowledge and skills are increasing.

Third, SMART goals are *Achievable*. An achievable goal will take work and effort, but is possible. The A can also refer to *Agreed upon*—stakeholders agree what the goal should be. Jen's teacher and parents affirm that a high score will be challenging to earn, but she has enough natural maths ability that it appears possible.

Fourth, SMART goals are Realistic. SMART goals can be achieved with the constraints of existing time and resources. A high score is within Jen's ability level, she has time available to study, and resources from her teacher to help her master the lessons. SMART goals are also relevant—there is a reasonable rationale for focusing on the goal. A high score will allow Jen to fulfil the university maths requirements, so she will be able to take more of the classes that she is passionate about.

Finally, SMART goals are *Time-bound*. There must be enough time to reach the goal, but this timeframe cannot extend on endlessly. For Jen, the exam is on a specific date, and she can arrange her study schedule leading up to it.

SMART goals challenge students to go beyond what they think is possible. Achieving such goals builds greater self-efficacy and interest in learning. A SMART framework also teaches students how to set and pursue other goals, be they educational, occupational, social, physical, or in respect to their other pursuits in life.

7.4 Embracing Failure

A teacher's role is not only to challenge students and scaffold learning, but also to help young people learn to accept and deal with failure. Failure and mistakes are a part of the learning process, but also is something that many students and teachers fear. Students who comfortably manage mistakes and failure in the short term are more likely to succeed academically in the long term. They are also more likely to feel a sense of belonging.

The process of taking risks with learning new concepts begins early in life. Toddlers and young children learn at an exponential rate and develop an understanding of how the world works through trial and error. A child tries to build a block tower, and places a square block on top of a triangular shape. The tower falls down. The child moves the blocks around, and discovers that by placing the triangle on top of the square block, both blocks remaining standing.

The willingness to take risks in the learning process becomes more difficult as children grow older. This is due in part to traditional school structures (e.g., exploration might be replaced by memorisation and exam-specific learning), cultural perspectives around failure, and the needs and motivations of the student. For instance, the media perpetuates the message that winners succeed, losers fail. Parents, teachers, and governments communicate that this type of success is based upon grades and standardised test scores.

As young people develop an identity as a learner, they can form unrealistic beliefs and ideals about what a successful student looks like. For example, they may believe that the purpose of learning is about scoring well on the exam, not the process of learning itself. The student who can easily achieve high marks has little motivation to try harder. The student who cannot achieve high marks feels increasingly helpless and becomes disengaged from school.

Martin and Marsh (2003) suggested that the extent to which students are motivated to avoid failure and oriented towards success results in different attitudes and behaviours around failure, which can be grouped into four general types. *Overstrivers* are oriented towards approaching success and avoiding failure. They deal with their fear by succeeding, so they perform well, but also experience anxiety and low self-esteem. Failure is a foe, to be avoided at all costs. *Self-protectors* similarly fear failure, but deal with the fear by undermining success, through behaviours such as self-handicapping and setting low expectations for themselves. *Failure acceptors* have given up, not even avoiding failure, disengaged from learning, unmotivated, and demonstrate learned helplessness behaviours. Then there are the *optimists*, who are motivated towards success, but not afraid of failure. Failure is a friend, not a foe.

While there might not be specific "types" of students, this model provides a way of thinking about how to support a positive approach to successful learning. Martin (2001) suggested four factors that support a success orientation, which can be targeted to promote a healthy perspective on failure: self-belief (confidence in one's abilities to perform well, accomplish the tasks at hand, and face challenges), the value of school (to what extent is school material useful and relevant), learning focus (focusing on solving problems and developing skills, rather than on specific outcomes), and control (how much they can control success and failure outcomes).

In recent years, a key focus of schools has increasingly become student performance on standardised tests. High stakes testing has resulted in education being focused on performance, rather than the process of learning. Shifting the focus to the learning process itself, rather than the end goal (e.g., achievement measures) encourages students to strive for their personal best, regardless of the outcome achieved. Failure is part of the experimental process, and there is reason to keep trying, striving for mastery rather than performance.

Teachers, parents, and clinicians can equip young people with actions to take when failure occurs. In the face of failure, they can give up and walk away, or they can pick themselves up and try again. By equipping students with skills to overcome mistakes and learn from them, we are empowering them with a choice as to how they can react. They also model behaviour to students, based on how they respond to failure in their own lives.

The relationships a student has with their parents and teachers can also perpetuate a fear of failure or support success orientation. Most students want to know that others care about them, and there can be a fear of losing that care if they fail. Consistent, positive messages are needed to encourage students that failure will not negatively impact the relationship, whether it is with a caregiver, parent or teacher. Teachers, parents and peers can be cheerleaders and supporters. The learning

process requires on-going effort and persistence. Along the way, there might be a lot of missteps, failures and barriers that make students vulnerable to giving up. Students need significant others to encourage them to keep going, cheering them along the way.

Returning to Jen and her SMART goals for the calculus exam, her teacher structures the conversation around the process, rather than earning top marks. Her teacher encourages her to put her full effort into each learning task, trusting the learning process. Jen understands that when she takes the exam, the top marks may or may not happen. Her teacher affirms that he is proud of the effort that she has given to her studies, regardless of how she scores. While Jen has her eye on a performance goal, by focusing on the process itself, her identity becomes focused on being a hard worker, rather than whether she is smart enough to score well.

7.5 Motivation

Closely tied to performance, success and feedback are the motivations underlying learning. Self-determination theory suggests that the motivation for any behaviour can be internalised, externalised or lacking completely (i.e. amotivation) (Deci & Ryan, 2001).

External motivation involves avoiding punishment or gaining reward. Students might be rewarded with a sticker or other token for completing their assignment. Disrupting the class will earn a trip to detention. External motivation is the easiest to provide, but often becomes increasingly unsustainable over time. The behaviour can become dependent on the reward and may stop once the reward is gone. It may also hinder the development of internal motivation.

Internal (intrinsic) motivation comes from within, growing from one's own interests and passions. For example, George loves to read. He soaks up every book assigned to him and seeks out more. His behaviour is not driven by token rewards, but rather by a love of learning. Internal motivation is more complex to cultivate, but is more sustainable over time.

Motivation influences how engaged students are in their learning. Activities that are student-directed and based on strengths and abilities are more likely to engage students. Here are a few ideas to encourage student engagement:

- Present novel and interesting learning opportunities to students that are based on their interests and abilities.
- Use interactive approaches such as role play, group work and problem-solving.
- Teach skills and strategies related to academic motivation, competence and effective study (i.e. positive self-talk, goal setting, time management, organisation, help seeking).
- Encourage intrinsic rewards from learning by seeking feedback of student work from other students, teachers, parents and the local school community.

Feedback also plays an important role in motivating students towards their goals. When feedback focuses on performance, it encourages external motivation, (e.g., the drive for success and avoid failure), which is not easily controlled by students. In contrast, when feedback focuses on effort and progress, it can give students valuable information about their learning that is within their control (e.g., are their goals on track? What can be changed?). The focus on the process, rather than an end goal, fosters a deeper level of motivation.

7.6 Making Learning Meaningful

Another driver of academic motivation is how valuable a topic is to a student. As educational priorities have become increasingly influenced by standardised testing, the relevance of the material to the student for their current or future interests is not always clear. It is not surprising to observe high rates of student disengagement in schools. For many students, the drive for high achievement comes from parents, teachers and the school system. This can cause anxiety and stress, or detachment and disinterest, as behaviour is motivated by external factors, rather than a belief that what is being taught is valuable and relevant.

Many periphery subjects, such as physical education, health, home economics, arts, and more, teach skills that apply well beyond the confounds of school life. While maths might teach how to multiply fractions and find the area under a curve, at a deeper level it also teaches concepts of logic, reasoning and problem-solving. English and literature classes can provide lessons such as how to overcome adversity and manage moral dilemmas. These deeper lessons are often the reason that educators became interested in teaching to begin with, providing purpose and reason to learning.

It is important to help students to understand the value of what they are learning in relation to both their short and long-term goals. Teachers should know their students. What are their hopes and dreams? Are there ways to connect the lessons to those dreams? This not only taps into a deeper sense of meaning for the students, but also helps them see the value of delayed gratification—studying now might not be fun, but it will provide greater reward in the future.

It is also helpful to relate the information being taught to students' real world life and experiences. What do students care about? Are there ways to connect lessons to their everyday experiences? Knowing the answers to these questions can take lessons beyond the walls of the classroom. Not only does this assist memory and retention, but it also fosters student engagement. In the future, most students will not remember details of a book or how to calculate a particular formula, but they will remember their learning experience, how a particular teacher made them feel and how they may have been challenged to think beyond the task itself, to the greater lessons of life.

Finally, the teacher's attitude matters. Passion is contagious! If a teacher demonstrates that what is being taught is important and valuable, it can motivate

students. Unfortunately, the system can create challenges. As pressures increase around academic outcomes, teachers are held accountable for the scores and marks that students achieve. Timetable constraints and diminishing resources might mean that teachers are allocated to subject areas that they have no interest or prior training in. These factors can undermine the teacher's sense of autonomy. Schools need to support teachers to develop a passion for teaching in their subject area and whenever possible; teachers should be allocated to subject areas that they are care about.

7.7 Self-Regulation

A final characteristic that relates to a student's academic motivation and their sense of belonging is their ability to regulate or control their own thoughts, emotions and behaviours in relation to their academic skills. Self-regulation relates to a range of positive outcomes, including better academic performance, good social relationships, healthier behaviours, and better physical and mental health (Eisenberg, Duckworth, Spinrad, & Valiente, 2014). Greater self-control even correlates with longer life (Kern & Friedman, 2008).

Many tasks, such as sitting through a lesson, listening to a teacher, working through a problem, reading and taking notes requires extended periods of focused attention. Students are expected to behave in a particular manner (e.g., sit quietly, reframe from talking, not texting friends during class). These behaviours require self-regulation.

Internally, two processes are at work: longer term goals (e.g., to pass the class) and immediate impulses (e.g., to check social media to see what I have missed in the past two minutes). Self-regulation involves taking control of those impulses, for the sake of a longer term goal—"resisting the hourly temptations", so to speak (Duckworth & Gross, 2014, p. 319).

Self-regulatory capacities develop across childhood and adolescence, through a combination of natural and taught mechanisms. It is influenced by genetics, the early environment, and socialisation throughout the early years. By the time that students are in secondary school, clear differences in regulatory ability are apparent, with boys generally maturing at a slower and longer rate than girls (James, 2007).

Unfortunately, our modern lifestyles and behaviours do little to support self-regulation in ourselves, let alone our young people. Our environments are busy, providing constant stimulation. Young people increasingly talk of FOMO—a fear of missing out. What will happen on social media in the two minutes since they last checked? Even those with the strongest self-will can become depleted with constant stimulation.

Experiences and stresses outside of the classroom also add to regulatory problems. Disadvantage, trauma and living in unsafe environments add considerable load, which leaves little energy to regulate attention and emotion. For students with traumatic backgrounds, even at a neurological level, the development of brain structures that are critical for regulation can be delayed (Brunzell, Stokes, & Waters, 2015). Their physiological systems are functioning at a high level of stress.

Various strategies can help increase self-regulation (Duckworth, Gendler, & Gross, 2014). First, as the environment itself impacts regulatory ability, students can be taught how to select situations that will help them focus their attention. For instance, studying in the library might be more conducive than being at home. A student might be encouraged to spend more time with *better-controlled* friends, than those who are more impulsive.

Second, the environment itself can be adjusted. The teacher has the most control over the classroom. Maintaining a consistent order and structure, establishing clear rules and enforcing those rules, and running classes in a predictable manner are helpful ways to regulate the environment. Mobile phones could be turned off and placed out of reach. Computers could be programmed to block sites, or monitored for time spent on email and social media.

Third, a growing amount of research suggests that mindfulness and simple meditative exercises can be useful in shifting and controlling attention. Verbal scripts can teach the young person to take hold of their attention and focus it in specific ways, through exercises ranging from 2 to 10 min and beyond. Breathing, which is often included in such exercises, helps calm and focus the person at a physiological level.

Fourth, self-regulation can be built over time through a series of small goals. Teachers, parents and school psychologists can help students create a study plan that harnesses the use of rewards and checklists. This can encourage students to celebrate their small successes and reward themselves for effective study behaviour. A reward may entail watching a movie or spending five minutes on social media. Such rewards may taper off over time as regulatory skills increase. These small gains can help build confidence with future study habits.

Finally, lapses in control and self-regulation happen. A key skill for students to learn is when to recognise attention has slipped or behaviours are out of control, early on. Students might create a plan with specific strategies to take when lapses occur. For example, if they check their social media feed and then realise that hours have suddenly passed, they could plan to turn it off and refocus attention.

7.8 Academic Motivation Revisited

Academic performance is often the core business of schools. It is more likely that students who are motivated in their studies and feel excited about learning will be connected to their school. While some students are naturally more oriented towards academics than others, all students can benefit from a focus on academic motivation. Schools that focus on characteristics such as motivation and self-regulation, mindsets around ability and aspirations, and strategies such as goal setting, embracing failure, and making learning meaningful are able to build a strong sense of efficacy in their students, and potentially help them to feel more connected to their school.

Chapter 8
Individual Factors: Mental Health

Abstract Schools are increasingly becoming aware of the importance of mental health promotion and the early identification of mental illness. The literature clearly indicates that good mental health has a positive outcome on school belonging as well as academic outcomes. In this chapter, we investigate both positive and negative personal characteristics—emotional instability and positive personal characteristics such as self-esteem, character strengths, mindset, social and emotional competence, and positive emotionality. We consider strategies for minimising emotional instability and promoting positive personal characteristics, as important pathways for fostering a sense of school belonging.

Keywords Mental health · Prevention · Self-esteem · Character strengths · Mindset · Social and emotional learning · Positive emotionality · Belonging · School belonging · Mental illness

The last chapter identified strategies that can be used to support school belonging through building academic motivation. Academic motivation, performance and belonging are also impacted by and impact upon mental health. Here, we consider individual factors that impede school belonging (emotional instability), and individual factors that support school belonging (positive personal characteristics). Table 8.1 summarises markers of emotional instability (we reversed these in our review for consistency) that significantly related to (less) school belonging and positive personal characteristics that promote school belonging. These factors are markers of and impact upon one's mental health.

The impact of mental health on other areas of life—academic, physical, social, emotional, cognitive, etc—is clearly documented throughout the research literature. Good mental health supports learning, belonging and overall functioning. Poor mental health increases the risk of learning difficulties, disconnectedness from school and numerous other problems. In what can become a vicious negative spiral, these, in turn, increase the risk for additional mental health problems. School belonging and emotional stability often go hand in hand—on the positive side, each

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Table 8.1 Indicators of emotional (in)stability and positive personal characteristics that significantly predicted school belonging

Predictor	Effect size	Related studies
Indicators of emotional instability		
Depressive symptoms	−0.64 to −0.65	Kaminski et al. (2010), Kelly et al. (2012), Kumperminc et al. (2001), Shochet et al. (2006, 2011)
Emotional distress/problem	−0.32 to −0.42	Waters et al. (2010), Wentzel (1998), Wilkinson-Lee et al. (2011)
Stress	−0.34	Roche and Kuperminc (2012)
Fear of failure	−0.50	Caraway et al. (2003)
Psychoticism	−0.51	Heaven et al. (2002)
Indicators of positive personal characteristics		
Self-esteem	0.32 to 0.37	Ryan et al. (1994), Sirin and Rogers-Sirin (2004)
Prosocial goal pursuit and behaviour	0.38 to 0.72	Wentzel (1998), Zimmer-Gembeck et al. (2006)
Hope/Optimism, Positive affect	0.46 to 0.50 0.48 to 0.52	Ryzin et al. (2009), Stoddard et al. (2011), Heaven et al. (2003), Reschly et al. (2008)

Note $r = 0.10$ is considered a small effect; $r = 0.30$ is considered a medium effect; and $r = 0.50$ is considered a strong effect

supporting the other, and on the negative side, putting students at risk for poor mental health and a lack of belonging.

Some students are more vulnerable to mental health problems than others, based on inherent genetic, temperament and personality differences, but all young people are at risk. Mental illness affects young people from every socioeconomic, cultural and demographic background. By the time students reach secondary school, a good portion already reports signs of depression, anxiety and more severe psychopathologies, or display externalising behaviours including bullying, aggression, fighting and criminal behaviours. As high stakes testing has increased pressure for high performance on standardised tests, stress is repeatedly voiced as a primary concern for young people.

The traditional approach to mental health involves having school psychologists on site or referring students out for care, dealing with problems as they arise. But this is a resource intensive approach, and students are often already demonstrating high levels of emotional distress by the time they are referred for treatment. Psychologists may be shared across several schools, adding additional strain for all involved. In high-risk schools, teachers may feel like they spend more time being boxing referees than educators. A preventative model is needed, which proactively supports mental health and inhibits mental disorder from occurring in the first place.

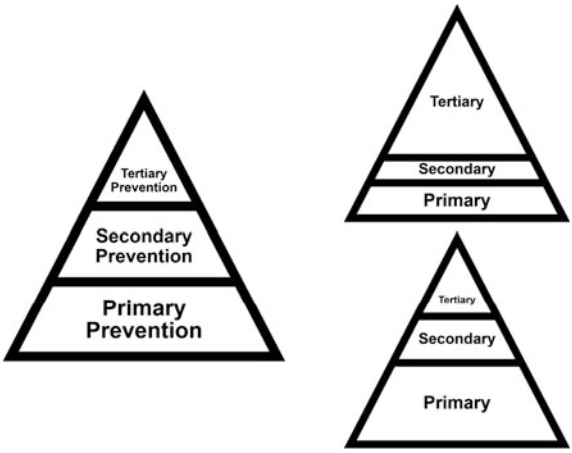

Fig. 8.1 From a prevention framework, three levels at which intervention can occur (*left*). Many schools primarily use tertiary approaches (*top right*), treating cases of mental illness as they occur. Ideally, by focusing more attention on primary and secondary approaches (*bottom right*), fewer students will need to utilise the resource intensive tertiary treatments

8.1 Approaches to Prevention

As illustrated in Fig. 8.1 (left), from a prevention framework, mental health interventions might be approached at three different levels, which are increasingly resource intensive. Primary prevention targets an entire group, aiming to prevent illness from ever occurring. Secondary prevention targets a specific group that might be at particular high risk, or those who show early signs of illness, aiming to minimise the impact. Tertiary prevention treats illness that has already appeared. Many schools primarily use tertiary approaches (Fig. 8.1, top right). Ideally, a greater focus on primary and secondary prevention will result in fewer students needing the resource intensive tertiary treatments (Fig. 8.1, bottom right).

We first consider what these levels look like within the school context, and then identify how different preventative approaches might promote emotional stability and a sense of belonging at the school.

8.1.1 Primary Prevention

Primary prevention refers to activities that promote mental health and prevent illness before it occurs. Primary prevention proactively builds capacity, skills and resources. For example, a school might timetable lessons on how to deal with stress and exams, train students to view stressors as challenges rather than as insurmountable problems and help them to identify specific resources and pathways for dealing with stressors that may occur in the years to come, including academic and social pressures.

A growing number of programs, interventions and strategies have been developed to promote mental health. Such programs teach skills related to self-care,

resiliency, social connectedness, managing stress, resolving conflict and emotion regulation, among other topics. These programs often provide activities to recognise one's thoughts, feelings and behaviours. They attempt to build positive characteristics, which we focus on below. They teach students to recognise their internal strengths, which can be applied in different situations. They also emphasise the benefit of accessing local resources, including seeking help from peers and adults as needed, when facing physical, psychological and social challenges. Appendix C provides a list of resources for some of these programs.

Students often are wary of seeking help. They are trying to form their identity and want to be respected by peers and teachers. Culturally, there can be negative stigmas associated with mental health, such that seeking help is perceived as being weak, which undermines young people from getting the support that they need. Over time, this can cascade into full mental illness. As a primary prevention approach, schools can create a climate that supports and encourages help seeking. Students could be encouraged to know what to do if a friend needs help, including how to access key staff members (e.g., school counsellor, psychologist, chaplain), and how to support themselves in the process.

8.1.2 Secondary Prevention

Secondary prevention involves a more intensive focus on those at particular high risk or those who show early signs of mental disorder. It aims to reduce the impact of disease, before it becomes a full mental illness. For example, students with a high level of test anxiety might be invited to a special weekly study group that provides peer support, an academic tutor and a mentor to help deal with the stress. Students can gain additional skills in managing test anxiety within a supportive environment.

A key feature of secondary prevention is the early recognition of risk factors. A general mental health audit across the school, which includes the personality trait of neuroticism (which is a proneness toward emotional instability), can be used to identify students who show signs of distress. Students can then be provided with additional resources to support them.

A school might develop a specific plan for student referrals to study groups, a tutor or a youth mentorship program. Staff might be educated about how to recognise early signs of mental difficulty, and be provided with specific referral and response pathways for students at risk. Staff could be encouraged to proactively reach out to students who are exhibiting signs of stress or distress, following the plan provided. Teachers often feel ill-equipped for the mental health problems appearing in their classrooms, so having specific pathways will help students get appropriate levels of care, and will better support the mental health of the teachers themselves. Key staff members can also be trained in postvention, or interventions that restore well-being of students and staff after a critical incident occurs.

8.1.3 Tertiary Prevention

Tertiary prevention involves treating mental illness and aims to lessen the impact of illness. This is the traditional approach in schools and remains an important part of mental health promotion. Regardless of prevention efforts, many students have severe needs. Cognitive, behavioural and when necessary pharmaceutical interventions may be needed.

Stabilising acute symptoms is a necessary first step, and this is where pharmaceuticals can be useful. But a long-term view should be taken. Treatment should help the young person identify the underlying causes of dysfunction, including personal aspects of the student and their home and school environment. Schools can play a role in helping clinicians support strategies that help young people to manage their mental illness and lessen its effect on day-to-day activities.

Tertiary prevention efforts also support students who enter school with an existing mental illness diagnoses. Such students might be provided with a personalised plan for managing the disorder that includes a contingency plan of where and how to get help if symptoms worsen. In some instances, when consent is provided, such plans may be shared with classroom teachers and other key staff to better support the student and ensure the plan in working and adhered to. Such plans should be regularly updated, appointing a specific individual in the school (e.g., a school psychologist) to ensure that this occurs.

Tertiary prevention is the most time and resource intensive approach to supporting student mental health, yet remains a necessary part of supporting student mental health. Notably, by increasing primary and secondary prevention efforts, in the long term, fewer students will need the intensive tertiary approaches. However, schools should also recognise that initial efforts to promote mental health may result in a greater need for tertiary intervention in the short term.

8.2 A Focus on Primary Prevention: Building Positive Personal Characteristics

From a primary prevention perspective, it is imperative to build capacities and skills that support good mental health. A growing amount of research in the field of positive psychology has identified several positive characteristics that support mental health. Whereas emotional instability places students at risk for disconnection from school and various other problems, considerable research now shows the benefit of positive personal characteristics, including a healthy self-esteem, character strengths, optimism, a growth mindset, prosocial behaviour and a positive disposition overall. A full review is beyond our scope (see Allen, Vella-Brodrick, & Walters, 2017 for a full review), but we provide some places to start here.

8.2.1 Self-esteem

Adolescence is a period in time that is characterised by the developmental task of identity formation—figuring out where they belong and how they fit in with peers and others. Self-esteem is shaped by how a young person feels about themselves and their abilities, often in comparison with their peers.

A distinction must be made here between high self-esteem and healthy self-esteem. In the 1980s, self-esteem was a focal point of American education. The thought was that if students felt good about themselves, it would translate into good academic performance. Students were rewarded for everything ranging from high performance to simply participating. Unfortunately, this did not result in high achieving students—if anything, it undermined academic performance, and resulted in a good portion of young people with unrealistic views of themselves.

People with healthy self-esteem know themselves. They are able to quickly identify their personal strengths and weaknesses, and live authentically. They are also proud of their achievements and abilities and have a healthy sense of self-worth. Those with low self-esteem often compare themselves to others and view themselves as inferior in comparison. It is also possible to have an overinflated self-esteem, which is often manifested by perceiving others as inferior. Striving to understand one's own unique set of strengths becomes a basis not only for a better sense of self but also an impetus for continued growth.

One challenge in establishing and maintaining a healthy sense of self is a strong culture of comparison. As young people develop their identities, they are particularly vulnerable to social comparison. The media perpetuates unrealistic and unobtainable standards through images that are frequently photo shopped or orchestrated in a way that promotes an unrealistic ideal. Young people can be bombarded with "perfect" images that may represent a particular look that even the person being photographed cannot attain in real life. Perfection becomes the gold standard, and students are constantly reminded through different media outlets (e.g., advertising, marketing, social media, magazines) that they are not thin enough, tanned enough, strong enough, smart enough, etc.

What can schools and teachers do to foster a healthy sense of self? First, ensure that students understand that they have a role to play in fostering their own achievements and their connection with the school. Emphasise the importance of effort and hard work, rather than natural talent, because these are factors that students have control over and can change.

Second, incorporate activities that help students get to know themselves—their strengths, talents, abilities and potential. Encourage students to live authentically—and create a school environment that supports authenticity and vulnerability. Teachers are role models with this. Be willing to admit mistakes and imperfections.

Finally, develop a strengths-based culture. We will look at this more closely in the next section. Too often, students are quick to see the weaknesses in themselves and others. This creates a critical culture. Teach students to look for their own strengths and those of other students.

Table 8.2 The VIA character strengths with their corresponding virtue. See www.viacharcter.org for a free survey, descriptions of each strength and activities to put the strengths to use

Virtue	Strength
Wisdom & knowledge	Creativity/originality Curiosity/openness to experience Judgment/critical thinking Love of learning Perspective/wisdom
Courage	Bravery/valour Perseverance/industriousness Honesty/integrity Zest/enthusiasm
Humanity	Love Kindness/generosity Social intelligence
Justice	Teamwork/citizenship Fairness Leadership
Temperance	Forgiveness Humility Prudence Self-regulation/self-control
Transcendence	Appreciation of beauty & excellence Gratitude Hope/optimism Humour/playfulness Spirituality/purpose

8.2.2 Character Strengths

Young people are often bombarded with messages around ways they do not measure up. Positive psychology focuses on identifying and supporting character strengths—things that a young person is good at doing—and considering how a person can use their strengths to help themselves and others. There are different models of strengths, but one of the most duominant ones is the Values in Action (VIA), which was developed by Professor Chris Peterson and Professor Martin Seligman in the US. They identified 24 different strengths that are valued across most cultures, which are grouped into six higher virtues. Table 8.2 summarises the strengths and the value they are a part of (see www.viacharacter.org for more information).

The VIA model argues that everyone has all of these strengths to some degree, but each person tends to have a different profile of their strengths. For instance, one person might be high in fairness, perspective, and prudence, whereas another person might be particularly strong on creativity and appreciation of beauty. Numerous studies have linked character strengths to a variety of positive outcomes (cf. Niemic, 2015), including greater well-being, achievement, academic performance and better social functioning.

The VIA character strengths can be freely assessed online (www.viacharacter.org), which allows students to discover their strengths and learn about ways to apply their strengths. The VIA provides a foundation for those working with young people to develop prosocial goals around how their strengths can be utilised. For example, students might be encouraged to put their strengths in practice, or to identify strengths in others. Strengths-based language can also be included in class and extracurricular activities. Students might draw on their strengths to do an activity that they do not particularly enjoy, practice kindness to others to foster stronger connections, or be challenged to work on their lesser strengths (e.g., practicing self-control to complete an assignment, rather than going to the shopping centre with friends). The VIA site offers some great ideas around using and building strengths.

8.2.3 Mindset

In Chap. 7, we talked about perceptions that a student or teacher has about their perceived ability. These perceptions reflect one's mindset. Professor Carol Dweck from Stanford University talks about two types of mindsets: a fixed mindset, where intelligence and other characteristics are innate and fixed and a growth mindset, where intelligence and other characteristics are changeable and can be developed through effort.

A good deal of research points to the impact that mindset has on psychological functioning and academic performance (Dweck, 2006). One's mindset impacts one's aspirations, goals chosen and how much effort is applied. With a fixed mindset, intelligence is something you either have or do not have. As we have seen, students either worry about proving their ability, or give up trying, saying things like, "it's too hard". A growth mindset, in contrast, encourages greater effort and a focus on learning for the sake of learning, rather than to achieve a particular outcome.

Mindset is malleable, influenced by expectations by teachers and others, feedback, the praise and language itself. For example, students often complain that they "can't do it". Such a statement shuts down the possibility of even giving it a go. Adding the simple word "yet" (i.e. can't yet) opens up the possibility to try. Studies suggest that it is helpful to encourage students to view errors and mistakes as learning opportunities, rather than as an attack on their personal self-worth.

8.2.4 Social and Emotional Competence

Considerable research shows the importance of social and emotional skills for success in school and for the rest of life (e.g., Durlak et al., 2011). Social and emotional learning (SEL) interventions aim to build competencies in students that

improve social and emotional skills. Greater social and emotional skills, in turn, relate to a greater sense of school belonging (Allen et al., 2017; Sirin & Rogers Sirin, 2004). SEL programs teach students a variety of non-cognitive skills, including understanding and managing their emotions, coping skills, adaptability, resilience, setting goals, building good relationships, having empathy for others, behaving in an ethical manner, positive prosocial behaviour and problem-solving. Taking a whole school approach, SEL curriculum is embedded into the policies and practices of the school, and supported by family and community partnerships.

Fortunately, a growing number of SEL programs and curricula are available. For instance, the Collaboration for Academic, Social, and Emotional Learning (www.casel.org) is working to make social and emotional skills a core part of education. They focus on six main competencies: self-awareness, self-management, responsible decision-making, relationship skills, and social awareness. These competencies provide a framework to engage students in setting personal goals related to their social and emotional skills in addition to goals that may already be in place for their academic outcomes. In Australia, the Resilience, Rights, and Respectful Relationships program (Cahill et al., 2016) builds skills in emotional literacy, strengths, coping, problem-solving, stress management and help seeking.

8.2.5 Positive Emotionality

Finally, research and practice in positive psychology and positive education are identifying activities and practices that can add positive emotion to learning (cf. Parks & Biswas-Diener, 2013). Activities include reflecting on the good things in life, thinking about your best possible self, showing gratitude toward others and doing kind acts for others. Such activities are simple to do, and can all help students feel good and foster feelings of belongingness to school.

While primary schools often incorporate considerable fun into learning, play and fun become less common through secondary school. Some secondary schools have tackled this problem by building play grounds and play spaces for Year 7 and 8 students or by striving for novelty in daily routines and classrooms practices. Future research will benefit from focusing on strategies for directly incorporating positive emotion into everyday learning.

8.3 Prevention and the Mental Health Continuum

Scholars have suggested a variety of ways to think about well-being and mental illness. A dominant view places mental health on a continuous spectrum, from dysfunction at the low end, normal functioning in the middle and flourishing at the high end. From this perspective, flourishing students are those without mental illness and who report high levels of well-being. Such students are more likely to

feel a sense of school belonging, perform well in their classes and succeed in other areas of life—all of the correlates of school belonging that we have seen throughout this book. Such students are at lower risk of developing mental illness.

Flourishing does not just happen—it takes continued care. A garden provides a helpful analogy. It may flourish at a single point in time, but requires continued care for it to maintain its flourishing state. When storms come and threaten the plants, a good gardener knows how to protect the plants and how to minimise damage that is done. Primary prevention provides students with strategies, behaviours and resources that can help a young person tend to their mental garden across their lifespan.

In contrast, mental illness and low well-being often go hand in hand. Languishing refers to students with low well mental health and the presence of mental illness. Such students are at high risk of academic, physical, mental, cognitive and social problems. Tertiary prevention methods are needed to treat and deal with the consequences of illness. The earlier mental illness is detected, and intervened upon, the better. When mental illness is identified late, treatment becomes more challenging. A neglected garden takes much more effort. Weeds need to be pulled out, extra nutrients needed, and considerable time and resources are needed to rejuvenate plants.

We often think of mental health and mental illness as the continuum between the flourishing and languishing person. The two are often highly inversely correlated (that is, as one goes up, the other goes down). However, the correlations are moderate at most. Professor Corey Keyes suggested a different model of mental health, illustrated in Fig. 8.2. Here, mental illness and mental health are two different dimensions. From this perspective, flourishing (upper right) and languishing (lower left) are the typical continuum. But the other two diagonals (upper left and lower right) provide some interesting possibilities, especially from a preventative

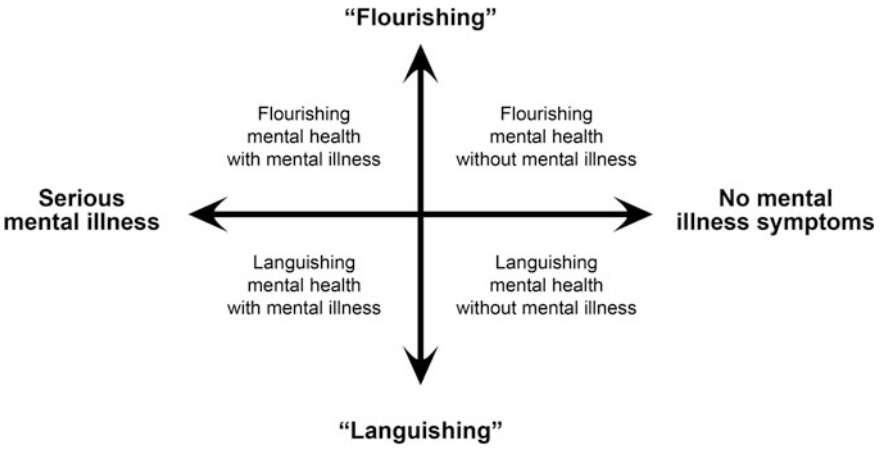

Fig. 8.2 Flouring versus Languishing model adapted from Corey Keyes (2002)

lens. The lower right box represents students who have no signs of mental illness, but also are not particularly thriving. A plant that is alive but not growing is not flourishing—it is simply surviving. When we consider high rates of student disengagement and lack of school belonging, a surprisingly large number of young people are in this group. They simply survive secondary school. They are also at higher risk of mental illness in the future. For these struggling students, primary prevention efforts might focus on equipping the young person with skills and resources that help them to be resilient when challenges do occur and to prevent mental illness from occurring. They might also help motivate a young person to move beyond simply surviving adolescence, and thrive.

A teacher's relationship with a student is also necessary at seeing students grow and reach their potential. Schools should look at ways for the student–teacher relationship to be encouraged and to also support teacher mental health as a part of this process. But such efforts also take time. Crowded time tables give teachers little time to get to know their students, and surviving students are the most likely to fall through the cracks, unnoticed. Secondary prevention programs, such as coach mentoring and study group, which provide additional resources to surviving students and a sense of connection with others, may be particularly beneficial for such students.

Then there is the upper left corner, which represents flourishing students with mental illness. These are students who live with mental illness, and yet are well connected to others and perform well. Studies show that mental illness and well-being can indeed coexist. A person with asthma can become a successful athlete, by accepting that the condition is there, learning how to work within the constraints that it brings, and knowing how to deal with symptoms of the disease. Similarly, a person with any range of mental illnesses can live a fulfilling life, by accepting the condition as part of him or her and managing the associated psychological sequelae. This requires a secondary prevention approach—putting resources in place to help the young person manage an illness, preventing additional disorder and living the best life possible within the constraints of life.

8.4 Personal Factors Revisited

In the last two chapters, we have considered mindsets, personal characteristics, behaviours, positive habits and ones' overall approach to life. Emotional instability places the adolescent at higher risk for disconnection from school, poor academic outcomes, physical and mental illness and a host of other problems. The adolescent period is a critical period to target and support mental health, from a preventative framework. By proactively promoting the mental health of young people, students, teachers and the educational community as a whole benefit in the long term, regardless of short-term costs that preventative efforts may entail.

A core part of this is to encourage students to take an active role in feeling a sense of belonging while creating an environment and providing resources to help

students take on that role. Schools need to create an environment that supports high levels of motivation, good mental health and positive personal characteristics. Teachers and others who work with youth play a crucial role in equipping students with tools and resources to build these individual factors. This can be done through psychologically based educational opportunities provided by the school, social and emotional learning, small group interventions, and individual coaching and counselling and peer-to-peer approaches, among numerous other strategies and interventions.

Underlying these individual factors are the relationships that exist and that are developed amongst the students, between the students and their teachers and the students and their parents, and the many other relationships that occur within the school environment. We turn next to some of these social factors and investigate how they may be encouraged to foster stronger feelings of belonging in young people.

Chapter 9
Social Factors

Abstract While much of the research has focused on individual factors impacting school belonging, such factors are shaped and interact with social factors. It is clear from the literature that social factors matter in respect to how connected adolescence feel to their school, with teachers having the strongest effect, for good or for bad. Parents and peers also matter. In this chapter, we explore practical ways in which teacher, parent and peer support can foster school belonging.

Keywords Peer support · Teacher support · Parent support · Belonging · School belonging

Research clearly shows the extent to which social factors influence a sense of belonging—for better or for worse. In this chapter, we consider strategies from the literature that impact peer, parent and teacher relationships. Table 9.1 summarises social indicators that significantly relate to school belonging.

9.1 Peer Support

Peers are critical to a young person's sense of belonging. As adolescents grow increasingly independent from parents and families, they often align themselves with friends and peers, adopting similar values, behaviours, language and clothing. Peers provide a source of acceptance, and communicate strong messages around acceptance and rejection. Not surprisingly, being accepted by peers supports a sense of school belonging, whereas social rejection can make the school social environment uncomfortable and psychologically unsafe.

Schools can offer school-sanctioned activities that foster social connectedness. Strength-based activities can help students look for positive characteristics of their classmates. Schools can help create an environment that promotes acceptance, and should have policies and structures in place that emphasise inclusion. Bullying policies need to be established and followed, with *whistle-blowing* structures in

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Table 9.1 Indicators of peer, parent and teacher support that significantly related to school belonging

Predictor	Effect size	Related studies
Peer Support		
Having friends and feeling accepted	0.33 to 0.86	Jennings (2003), Shochet et al. (2011), Whitlock (2006), Zimmer-Gembeck et al. (2006)
Academic support through peers	0.44 to 0.48	Goodenow and Grady (1993), Reschly et al. (2008)
Emotional support	0.54	Ryzin et al. (2009)
Parent Support		
Family support for learning	0.55	Reschly et al. (2008)
Parent–child relationship	0.30 to 0.46	Brookmeyer et al. (2006), Carter et al. (2007), Henrich et al. (2005), Kelly et al. (2012), Mo and Singh (2008), Shochet et al. (2007), Stoddard et al. (2011), Waters et al. (2010)
Teacher Support		
Positive student–teacher relationship	0.30 to 0.86	Anderman (2003), Bowen et al. (1998), Garcia-Reid (2007), Garcia-Reid et al. (2005), National Research Council and the Institute of Medicine (2004), Reschly et al. (2008), Shochet et al. (2007, 2011), Waters et al. (2010), Zimmer-Gembeck et al. (2006)
Teacher fairness	0.65	Wentzel (1998), Sakiz (2012)
Academic support	0.39 to 0.78	Ryzin et al. (2009), Wentzel (1998)

Note Values close to one have a minimal effect; $r = 0.10$ is considered a small effect; $r = 0.30$ is considered a medium effect; and $r = 0.50$ is considered a strong effect

place so that any problem can be reported without threat to the victim. Students of all backgrounds need to feel accepted—both explicitly (through policies and statements) and implicitly (by how they are treated by leadership, staff and other students).

Peers are well suited to provide academic and social support. Teachers might set up cooperative learning tasks, in which the right answer can only come from students working together. Considering that one of the key skills of the *twenty-first-century worker* is the ability to work collaboratively with others, such an approach to learning not only fosters a sense of belonging, but also prepares students for the future workforce. In addition, students might be assigned a peer collaborator, with a project that requires them to coach each other towards success. Then, both are offering and receiving support as they strive to become the best learners they can be.

Finally, as we have noted, peers are often the first point of contact that a student will go to with emotional issues. Students might be trained not only to understand and support their own mental health, but also be able to recognise problems in their friends, and to know what to do to be supportive. All students might be encouraged to check in on friends who seem to be quieter and more reserved than usual (e.g.,

asking R U OK?; http://www.ruok.org.au). New students may be assigned a peer group or buddy system to help them feel a part of the school. Students might be challenged to take responsibility to identify their own ideas for making their school an accepting and inclusive place, one where everybody belongs.

9.2 Parent/Caregiver Support

While it is true that adolescents increasingly turn to their peers for social support, parents continue to play a critical role in supporting their child's sense of competence, belonging and autonomy. The studies that we reviewed point to several strategies that support positive parent–child relationships. This is an active area of research, and new studies point to multiple helpful strategies (cf. Waters, 2017). Adolescents benefit from parents who provide encouragement, provide care and compassion in both personal and academic endeavours, value education and have good communication skills with their child.

When new parents take a newborn baby home from hospital, their new bundle of joy almost immediately begins a slow but sure developmental trajectory towards becoming an independent adult. Assuming typical development occurs, a parent provides opportunities for social, motor, perceptual, behavioural and cognitive development from learning to walk, to exploring the world, all within the safe confounds of parental rules and boundaries. The teenage years become a time of discovery—risk taking, experimenting and testing boundaries—as the young person makes sense of who they are and how they fit in their world. The authority and role of the parent evolves. It can be challenging for parents to maintain a healthy, positive relationship with their child, as emotional, physical, intellectual and social changes occur.

Studies have identified three predominant parenting styles that are used throughout childhood and impact upon the parent–child relationship in adolescence. Permissive parenting involves applying low levels of demands and rules, driven by the desires of the young person. Authoritarian parenting involves exercising close control, with high levels of demands and rules driven by the parent. Authoritative parenting involves having clear boundaries, which are consistently enforced, combined with clearly communicating love and support. The latter style has been found to result in the best outcomes for healthy psychological functioning and positive transitions into adulthood. Young people with authoritative parents clearly understand boundaries that have been set. They recognise that they have the autonomy to go beyond those boundaries, but know that by doing so, they must also take responsibility and face the consequences of their actions.

Parents benefit from learning parenting skills early (i.e. during the preschool years). Trying to add in boundaries during adolescence that never existed in the past is often like teaching an adult dog to walk on a leash after being allowed to roam free as a puppy. This can be a recipe for stressful familial relationships.

Schools can assist parents in maintaining positive relationships with their children by offering parenting courses and information nights that promote ways to foster healthy relationships and positive communication skills. They can ensure that parents are aware of school support staff and teaching staff that may be able to provide appropriate referral pathways and support when there has been a breakdown in the parent–child relationship. Teachers might work collaboratively with parents. For instance, if a teacher can identify the student's strengths and scaffold learning accordingly, they might share their plans with the parent, and collaboratively identify ways to support the student at both school and home.

Although parents tend to be more involved during the primary years, there is still a place for parents to be involved in school life and show an active interest in their child's educational experiences. School leaders might consider how to involve parents in the school in meaningful ways, including family events and parent-led committees. Schools might allow greater opportunities for combined committees that include staff, teachers and students, fostering a diversity of perspectives. School leaders might also consider the existing culture of the school. Is it one that welcomes parents, making them feel a part of their child's learning, or from a parent's perspective, is there an "us against them" feeling?

Schools may also consider offering programs for the parents that support their mental health and well-being. While there are concerns around growing rates of mental illness in young people, many issues are intergenerational in nature. Some of the same strength-based programs and activities that can be used in classrooms and the school for students can be offered for parents and families as well, as an approach towards creating a healthy educational *community*, not simply healthy *individuals*.

While these strategies sound good theoretically, what they look like in practice is a challenging question. Parental involvement is especially difficult for time and resource poor parents, such as single parents, parents from low socio-economic backgrounds or parents with mental health issues. It is commonly observed in schools that the parents who already have the desired parenting skills are the ones most likely to attend school events aimed at bolstering parenting proficiencies, while the parents that could actually benefit from the programs are the ones that are absent. Best approaches for bridging gaps between parents and schools are an ongoing question for future research.

A further challenge is how to enable good communication between schools and parents. Relying on the students to mediate communication (e.g., sending letters home with the student) can be unreliable. While technology is increasingly making it easier for schools to directly communicate with parents (e.g., text messages, emails), language, cultural barriers, lack of time and other factors impede communication. Developing strong connections and communication protocols with parents from the time the student begins attending the school is easier than trying to get parents involved later.

9.3 Teacher Support

Numerous studies clearly indicate how important good student–teacher relationships are, for both academic performance and school belonging. Connection to a single teacher is sufficient to create the benefits seen throughout the research. Teachers not only communicate knowledge about their subject, but also model behaviours and attitudes across a myriad of domains, implicitly and explicitly influence student mindsets, encourage or discourage achievement, hold students responsible for their learning and potentially act as role models and mentors. How can teachers foster a sense of school belonging, and what can schools do to support this?

Like any relationship, the student–teacher relationship takes time and effort to develop over time. Teachers who know their students have a head start at building positive relationships with their students. The best teachers not only know their students by name, but also know their strengths and challenges; they can see their potential and they understand their current abilities and future goals.

Despite the clear importance of the student–teacher relationship, the reality of many secondary school environments creates numerous barriers to creating strong student–teacher bonds. Teachers see many students during a single day, making it hard to connect with individual students. Teachers may be teaching in areas that go beyond their expertise, managing complaints by unhappy parents, and handling ever-changing curriculum, policies and initiatives. In addition, as the incident of mental health problems grows in students, they are challenged to deal with psychological issues that may go far beyond their skills and capabilities.

If student well-being and belonging are to be priorities in school, as we suggest they should be, then structures need to be put in place that will allow student–teacher relationships to flourish. This may very well mean changing the very structures and practices of the school itself. What changes are necessary?

We suggest that teachers should be encouraged to provide pastoral support to students. With the many complicated needs students bring to the modern classroom, time is needed for teachers to provide both academic and personal support. School structures need to allow opportunities for teachers to get to know and understand their students. It takes time to build rapport with a student and identify their strengths and needs to personalise learning.

A practical way to do this might be to assign each staff member to a certain number of students, and hold them accountable for getting to know and support their allocated students. That same teacher could journey with those students throughout secondary school, acting as a mentor, maintaining regular contact and providing advocacy for them should the need arise. For instance, many boarding schools within Australia have staff members that are assigned as mentors for students. The role of the mentor is to provide students with social opportunities, personal support and academic encouragement. The mentors can openly communicate with classroom teachers to identify the student's learning goals and challenges. An assigned mentoring structure would ensure that every student has at least

one positive relationship with a teacher within his or her school. Alternatively, classes, tutorial or home groups could be set up so that teachers stay with the same students for a number of years.

Within the classroom, teachers can support autonomy and student involvement in their own learning. Interactive activities, visible learning practices (Hattie, 2009) and formative feedback can aide students to feel connected to their learning, the teacher and the school. Teachers might consider how technology can be effectively used to understand the needs of students, provide additional resources, individualise learning options and extend skills. Tutoring program can also provide students with additional academic support and create opportunities for additional relationships and points of connection, after school and during school holidays.

The classroom environment also matters. When students feel safe and supported in their learning context they are more likely to feel connected to their school. Teachers should be held accountable to demonstrate fair practices within their classroom. Teachers should be encouraged to model respectful behaviour towards each other and to students and implement reasonable and consistent disciplinary procedures that are agreed upon by students and other staff. As part of this, teachers might create student led groups that provide mechanisms and pathways for student voice (e.g., student representative committee or a quality of teaching committee).

9.4 Summary

We are social creatures, and the quality of relationships that we have with others clearly impacts our sense of belonging. For students, good relationships are critical to feeling a part of school. Students can be taught skills, mindsets, attitudes and behaviours that foster school belonging, but it is through peers, parents and especially teachers that those skills, mindsets, attitudes and behaviours are developed and encouraged.

Strong positive relationships do not just happen, they require time to develop and maintain. They are more likely to occur within a supportive environment. While schools cannot force good relationships amongst students, teachers, staff, parents and other members of the educational community, they can create a context that is more or less supportive, through norms, structures, policies, resource allocation and other macro-level factors. We turn now to this broader level.

Chapter 10
Ecological Factors

Abstract Young people live within a broader socio-ecological context, which influences their sense of belonging and well-being, often in the unacknowledged way. Although few studies have considered ecological factors, schools play an important role in creating an environment that is more or less supportive of a sense of belonging. This chapter aims to highlight ecological factors for consideration in improving a sense of school belonging for students. We consider the value and mission statements that a school subscribes to, policies within the school, language, staff professional development, curriculum and extra curricular activities. Although such factors might have less of a direct effect on school belonging, they create a critical context for the development and should not be ignored.

Keywords School policies · Staff professional development · Extracurricular activities · Systems · Socio-ecological · Belonging · School belonging · Vision and mission statements · Curriculum

In the last few chapters, we considered individual and social factors that schools and teachers might focus on to support school belonging. We turn now to the outer most layer of the BPSEM—ecological factors. If school belonging is to be a priority, then schools have the responsibility to create an environment that supports students, teachers, staff and the educational community as a whole. School leaders have less control features of the larger ecological levels and systems (e.g., curricula demands, national policies, the broader culture), but the school does have control over the environment and culture that is created within the school walls.

A systems perspective is particularly useful when we consider broader level factors. There are a lot of places where we could try and intervene. Some will be more effective, some will be less effective, some will be resource intensive and others less so. To intervene in an effective, resource-efficient manner, then it is beneficial to identify leverage points or places to intervene where the biggest change occurs with the least amount of effort (Meadows, 1999). As an analogy, consider a large ocean liner. It is sizeable and powerful. But it is steered by a very small rudder. The captain turns the rudder, and the ship changes directions.

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What are the leverage points within a school? These might be the mission statement of a school, how teachers are selected and trained, the focus of professional development sessions, time allowances for teachers, the length and timing of classes, curricular and co-curricular activities, what is measured and assessed or any number of areas that the school can intervene upon. The levers of each school are unique to the individual school context. For school leaders, it is about finding the right levers to push, in the right direction, at the right time. Here we focus on a few possible levers that might be targeted to help create a positive school culture.

10.1 Values and Mission Statement

The culture of the school can either be purposefully created or it will create itself. Culture is like a massive cruise ship, making its way across a vast never-ending ocean. The course must be carefully plotted, with corrections along the way; otherwise the ship might end up in a very different place than intended. There needs to be a vision of where the school wants to be, and a strategy or plan to get there. Along the way, amendments may be made, but ultimately the vision will help guide the direction of the school.

A school's vision or mission statement makes an explicit statement about the identity and future purpose of the school. It reflects school values and makes a public declaration about the school's goals and objectives. Vision and mission statements may also provide stakeholders with clarity around the commitments of a school. For example, they might inform training and funding decisions (e.g., to what extent does the statement prioritise a strong social community?).

Statements can be word-crafted to sound good, but there also needs to be a shared understanding of what the statements mean for day-to-day practice. For instance, consider these two mission statements:

- "to be recognised as a great world school"
- "Creating new and successful futures".

What is meant by great? Recognised by whom? How is success defined? Who is new? It has been argued that vision and mission statements can be vague and subjective, and these statements reflect this vagueness. In contrast, other schools have conscientiously crafted their statements to be directive and actionable. Take the following two examples:

- "We equip young people to realise and enhance their talents. We know that learning is for us all. We are a community whose positive relationships allow us to challenge ourselves and each other. The paths we each follow will take us out into the world changed and confident".
- "[We] will be the premiere regional college preparatory school that serves academically focused and intellectually gifted students by providing a rigorous, challenging curriculum and by offering programs that reflect the diverse

backgrounds, talents and cultures of our students within a supportive school-wide community".

These latter statements are much more detailed and provide guidance for specific strategies staff can follow to support students.

Many schools already have well-established mission and vision statements, as this is often required by governing boards. But to what extent are students, staff, and others in the community aware of and held accountable to the vision of the school? The vision is an explicit statement of school culture, but does it align with the culture experienced in the everyday life of the school? The latter two statements were developed collaboratively by key members of the school community: school leaders, staff, students, and parents. New leaders might come in with great ideas for a school and develop a strong vision and mission statement, but find it challenging to bring others on board with that vision. In contrast, a vision that is developed collaboratively amongst leadership, teachers, students, and parents can foster a greater commitment to that vision.

The needs and character of the school also shift over time, as people come and go, and it is important to consider how well the statement matches the school. Are they being updated and changed as the needs and vision of the school changes? A shared whole-school vision that prioritises school belonging and other qualities that are valued by members of the school community is important. We recommend that vision and mission statements be revisited intermittently throughout the year to ensure that the statements remain a good fit for the community. As new staff and students come into the school, it is important for school leaders to ensure that all new members of the school community understand and are committed to the vision for the school.

There are different approaches to creating or updating a shared vision. One approach that some organisations have found to be useful is appreciate inquiry (AI; Cooperrider & Srivastava, 1987). AI is a strengths-based approach that aims to collaboratively identify strategies to bring out the best in people and organisations. It can be used in coaching-style conversations with individuals or small groups, but is most commonly used with larger groups, in what is called an *AI summit* (Cooperrider & McQuaid, 2012). The summit brings multiple stakeholders from across the organisation together for a day (or several days), guiding participants through four stages (Cooperrider, Whitney, & Stavros, 2008).

In the *discovery* stage, participants identify existing strengths of the organisation and processes that work well. In the *dream* stage, participants envision the best of what could be and what might work well in the future. In the *design* stage, participants prototype possible solutions and strategies for bringing those future visions about. In the *deliver* stage, participants make specific plans to carry out the proposed design and commit to actions they will take moving forward.

Applied to a school, school leaders, teachers, staff, parent representatives and student representatives could come together for a professional development day centred around creating a shared vision for the school. Participants might explore what the core values and strengths of the school are, imagine the school if it was the

best it could be, identify core elements that could bring such a vision about and create a strategy for turning that vision into reality (see Waters & White, 2015 and https://appreciativeinquiry.champlain.edu for various examples).

10.2 School Policies

Beyond the values and missions of the school, policies and how those policies are enforced, shape both the implicit and explicit culture of a school. Policies turn the vision of the school into practical processes for daily functioning. Most schools have policies that describe student and staff safety, discipline and fairness, and these policies often create the foundation for developing rules, consequences and boundaries for expected behaviour.

Just as it can be beneficial to incorporate multiple stakeholders in developing and updating the vision of the school, it may be useful for policymakers within a school to seek input from students, parents, staff, and community members in developing and refining policies. These groups represent key stakeholders in the school and may be more likely to support and follow policies if they have had some ownership over the process of its development. They may also be more able to identify what needs and issues may arise given that they are at the coalface of school life.

Policies provide guidance on what activities are and are not acceptable. School leaders should consider how policies might be used not only to deal with negative behaviours but also proactively promote mental health and belonging. For instance, some schools have incorporated merit-based systems. Both infractions and good behaviour are monitored, rewarding positive behaviours. Such policies provide guidance not only around how *not* to behave, but also on appropriate ways *to* behave.

In addition, we suggest that school leaders consider creating policies and practices that support staff well-being and connectedness. While it is true that students are the core business of education, teachers who feel and good function better are better at building relationships with students and are more committed to the school. One example is the Positive Educational Practices (PEPS) Framework (Noble & McGrath, 2008), which applies an optimistic approach to educational planning for school-wide well-being. Concepts such as positive emotions for students and teachers, social–emotional learning, focusing on ideal characteristics and strengths, and developing a sense of meaning are emphasised.

While having policies and practices that support belonging for the whole school is important as an explicit statement about the school's vision, action needs to follow. What actually happens at the school? What are the norms and traditions? Leaders can be disconnected from the everyday realities of both students and staff within the school. For instance, over the past 5 years, a school in South Australia incorporated well-being directly into their mission statement, and developed policies that support training and application in non-cognitive skills within curriculum, co-curricular activities, measurement, staff hiring and training, and pastoral care (for

more details, see http://www.stpeters.sa.edu.au/wellbeing/). Still, some students noted concerns around teachers having favourite students, a lack of inclusion of minorities and bullying that still occurs. Similarly, a policy might state that it promotes staff well-being, but then places so many demands and pressures on the teachers' time and energy that everyone feels overwhelmed and exhausted, increasing risk for burnout. Developing policies that support school belonging is a good first step, but leaders also need to ensure that those policies are understood, supported by students and staff, and followed. A match between the explicit policies and how things actually work in the school goes a long way in creating a positive culture.

10.3 Language

Another factor that schools might consider is the tone and content of language that is used within the school community. Language both reflects the current culture and can be used to form an organisation's culture. Language enables social interactions and provides a sense of meaning and connection between people.

For example, a secondary school in New South Wales has successfully created positive shifts in the school culture. A decade ago, students called themselves "povo", reflecting their low socioeconomic status and the negative view they held of themselves and their community. Change began in small ways—painting the doors with bright colours and cleaning up rubbish around the school. Words like "povo" were banned. Titles were renamed, explicitly changing the language of the school; "roll call teachers" became "mentors" and the "welfare coordinator" became the "well-being coordinator". Fortnightly student group sessions now help students learn and apply their strengths, develop their relationships, focus their attention, continue toward their learning goals and be mindful. The school is now a thriving place that students and staff are proud to be a part of (For more information: www.mayfieldsanc.catholic.edu.au/student-well-being).

10.4 Staff Professional Development

Professional development (PD) plays an important role in the up skilling of staff, equipping them with tools and strategies to support the vision of a school. The last three chapters of this book presented numerous areas that PD might focus on to enhance a culture of school belonging, such as through building positive student–teacher relationships, fostering a safe and fair classroom, and implementing student-centred pedagogy. Experts can be brought in to up skill staff, and staff members can share their own expertise and experiences with others. Structuring PD days in ways that provide opportunities for connection and bring in positive emotion, while providing useful and actionable information, can help staff members

feel supported, with greater confidence to deal with the challenges inherent to teaching.

As the topics covered in previous chapters are incorporated within schools, awareness of and sensitivity to cultural differences are necessary (Dobia & Roffey, 2017). For example, teachers might believe that social activities and extracurricular activities are an important part of developing the whole child, including personal character and non-cognitive skills. Yet parents from another culture might see the school's purpose as purely for developing academic and cognitive skills, such that social activities are viewed as a loss of valuable time. Students are caught in the middle, seemingly not assimilating into the class when they refuse to participate in social activities, but also feeling stressed that they are not spending enough time studying. There is no easy solution to this problem, but cultural competency training of staff and engaging in conversations with parents to understand their backgrounds and perspectives may shed more understanding and awareness over this issue.

While schools typically have official days set aside for PD, considerable PD occurs *on the job*. New teachers can learn from experienced teachers, and established teachers can learn new ideas for engaging students from others. Mentoring programs have been found to encourage teacher retention, increase job satisfaction, enhance teaching quality, as well as improve student outcomes. Mentoring programs allow teachers to share strategies and techniques, learn from one another and create a positive collaborative environment. Mentoring programs also communicate to teachers that they are supported and valued by school leadership, in turn helping teachers feel more connected and committed to the school.

School leaders should also provide time and encourage teachers to engage in their own professional development, through additional study, exploring new topics and strategies to bring into the school, creating their own interest groups, providing books and other resources and fostering an environment that supports learning, discovery and connection. We often think of schools as learning communities for the students, but education is a lifelong pursuit—for both students and staff. And like students, teacher learning should be personalised to best suit their own unique needs and ambitions.

10.5 Curriculum

We saw in prior chapters the benefits of personal and social factors in supporting school belonging. An ongoing question is how to bring these factors into the daily operations of the school. If school belonging is as important as academic performance, then it may be beneficial to directly incorporate social and emotional skills into the curriculum. A growing number of programs and curricula are being developed, making it easier for teachers to impart non-cognitive skills both as standalone lessons and within the standard curriculum. For example, Geelong Grammar School in Victoria, Australia and St Peter's College—Adelaide in South

Australia have time-tabled classes on positive education, teaching students skills such as emotion regulation, recognising and using strengths, growth mindset, and social skills (Norris, 2015; White & Murray, 2016).

However, for many schools, the curriculum is already over-crowded, making it challenging for teachers to cover the required topics, let alone additional non-cognitive domains. With pressure to achieve in maths and literacy, arts, humanities and mental health topics are pushed aside. Independent schools have considerably more leeway than government schools, which are more constrained by state and national policies, but still struggle to balance many competing interests. If non-cognitive skills are important, which the evidence we have reviewed throughout this book suggests they are, then major consideration of what should actually be in and out of the curriculum is needed. These conversations need to happen within schools, across communities, in government agencies and across public policy.

Given the tight curriculum demands, strategies for incorporating non-cognitive skills within existing lessons are needed. For example, MindMatters is a mental health program designed for Australian schools (Wyn et al., 2000). The program provides lesson plans, age-appropriate activities, and additional teaching resources for including health promotion directly within existing curricula. In addition, consideration might be given toward how to best use extracurricular activities and afterschool programs to fill needs that cannot be met within the classroom.

10.6 Extracurricular Activities

Only a few studies in our review considered the impact of extracurricular activities and school belonging, but it is reasonable to think that activities outside of the classroom may help support a sense of community. Sporting teams, musical groups and clubs provide opportunities for students to connect with others with common interests. Study groups, homework clubs and peer mentoring groups create social connections while also supporting academic progress.

While students might be encouraged to participate in activities, consideration needs to be given toward the time and level of involvement, for both students and staff. Good students often commit to multiple groups, taking on leadership roles. While this can provide a diverse portfolio and look good on university applications, there is a point of diminishing return—more is not necessarily better, especially with other pressures in the mix (e.g., part-time work, studying). Students who are already at risk for disconnecting from the school are less likely to be a part of such groups, or find groups that lead them farther astray (e.g., gangs, drug groups). The ideal number of activities and time spent on extracurricular activities most likely depends on the individual student or staff members. The school might offer a variety of activities for students to be involved in, but also monitor involvement, reaching out to students who are not involved in activities, and being cognizant of students who might be overcommitted.

10.7 Summary

The strategies suggested in this chapter focus on the broader ecological levels of a school. To create a positive culture that supports a sense of belonging, school leadership plays an important role in creating supportive structures. We have identified some of the levers, or places to intervene in the system, that school leaders might consider. It is important to keep in mind that change does not happen overnight. Pushing key levers can be powerful, but takes time.

Creating a positive culture also takes continued effort. The culture of a school is constantly evolving, as shifts in school leadership, policies, staff, students and curriculum as well as the values, interests and needs of the broader community continually occur. The core values of a school need to be continually revisited to ensure that the desired culture is created or maintained and eventually embedded in the social fabric of the school. Creating a positive school culture that supports school belonging is a challenging journey. But we would suggest that it is a worthwhile endeavour, both for current and future generations.

Part IV
Conclusion

Chapter 11
Putting It All in Perspective

Abstract It is vital for schools to be aware of the importance of school belonging for young people. A greater understanding of school belonging can occur by redefining school belonging to more accurately reflect the ecological landscape in which the construct resides. Through this book, we have conducted a detailed investigation into the school belonging literature. We considered what school belonging is, a variety of factors that are correlated with belonging, and brought order to the scattered literature through a critical review and meta-analysis. We then considered practical approaches for supporting school belonging at the individual, social and ecological levels. In this final chapter, we bring things together. We reconceptualise school belonging and discuss the implications of school belonging research for future practice. We hope that the combination of empirical evidence, an organising framework, and practical strategies for application provide a starting place for schools and educators to help students thrive.

Keywords School belonging · Socio-ecological · Belonging · Well-being

The advancement of school belonging research is important for researchers, educators, schools and policy makers who want to advocate for primary preventative measures to foster student well-being. Throughout preceding chapters, we have provided evidence that a sense of belonging is important as it contributes to desirable physical, psychological, social and academic outcomes, and suggested a variety of practices and strategies that might be used to support a sense of school belonging. In this final chapter, we provide a refined definition of school belonging, consider several implications and bring our investigation of school belonging to a close.

11.1 Reconceptualising School Belonging

In Chap. 2, we provided a working definition of school belonging, based on work by Goodenow and Grady (1993, p. 80):

> the extent to which students feel personally accepted, respected, included, and supported by others in the school social environment.

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This definition has been used widely across theory and research in this area. It captures the importance of personal factors (acceptance, respect) and social aspects. However, our synthesis of the literature suggests that there are also broader influences on school belonging. It is not just about how the student feels, but how they feel in relation to their environment and their interactions with people and structures within that environment.

We suggest that an alternative framework and definition of school belonging is needed, which is broader in nature the **bio-psycho-socio-ecological model of school belonging (BPSEM)**. There is no one simple determinant of school belonging, but rather it is a mix of internal **biological** and **psychological** qualities of the young person combined with their dynamic **social** interactions with people across the **ecological** environments and contexts through which they experience the world. Each of these influences dynamically interacts with one another to impact upon how connected the young person feels to their school.

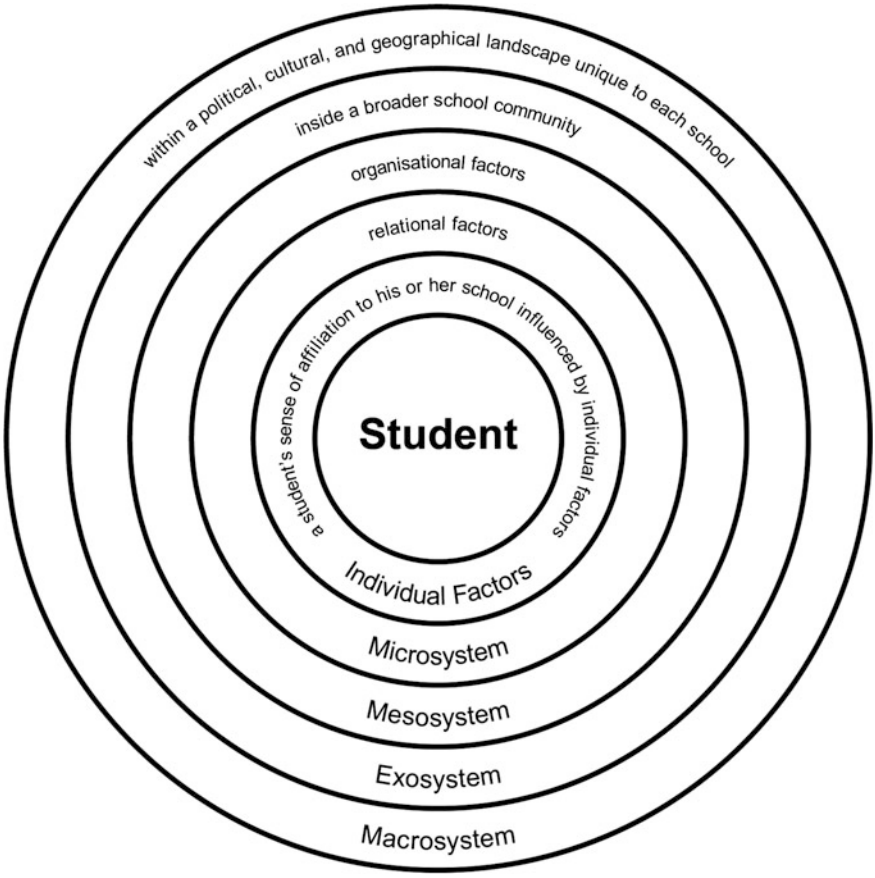

Fig. 11.1 An alternative definition of school belonging conceptualised within the BPSEM framework

A refined definition of belonging, then, must acknowledge the systemic and dynamic aspects of how a young person interacts with and experiences their world. As illustrated in Fig. 11.1, we suggest that school belonging is a student's sense of affiliation to his or her school, influenced by individual, relational and organisational factors inside a broader school community and within a political, cultural and geographical landscape unique to each school. Put simply, school belonging is one's feeling of being connected to a school within a school social system.

11.2 Implications

The refined framework of school belonging brings several significant implications for research and practice in this area. In Part IV, we presented strategies and practices that might be trialed at different levels to create environments that support a sense of belonging, help make external resources available, and develop the internal capacities of young people, all informed by the research literature. However, what these strategies and practices look like within different schools environments is unknown. There are no best practice guidelines that will guarantee that students have a strong sense of belonging. Indeed, the broad and diverse nature of the BPSEM implies that any such guidelines would be overly prescriptive. Each student arrives at the school with their unique personality, set of experiences, and perceptions of and interpretations about those experiences. As such, different strategies might be best for different students and in different schools and communities.

Policy makers and school leaders play a role in setting the expectations for schools under their jurisdiction. While academic performance is core business for education, we should also be equipping our young people to be productive, functional citizens in the world. Overcrowded curricula make it challenging for schools to prioritise school belonging, even if they desire to do so. Change agents within governments and schools need to highlight the value of school belonging for psychosocial functioning and academic outcomes (Lonczak et al., 2002; Nutbrown & Clough, 2009; Sari, 2012), and proactively develop policies and structures that explicitly value *both* academic performance *and* wellbeing.

Schools have the opportunity to create a climate and culture that is supportive of belonging. Educators and school psychologists should take into account the unique cultural makeup of the school. Schools should not undermine the importance of student–teacher relationships (Hattie, 2009). Structures need to be in place that give teachers time and energy to connect with their students, and teachers need to be committed to being supportive of those within their care.

Young people can further benefit from learning strategies and practices that encourage them to take responsibility for their own school experiences and do their part in connecting with the school, as well as helping other students to feel a sense of connection. Such skills might be taught in specific classes, through co-curricular activities and groups, or incorporated into lessons. They can happen through

mentorship relationships, and in implicit and explicit ways. Even those adolescents that disconnect from parents may still benefit from supportive relationships at home, and the parents themselves can benefit from learning additional skills and strategies for supporting their child.

The BPSEM demonstrates how school leaders and educators can be encouraged to foster students' sense of belonging by building qualities within the students *and* by changing school systems and processes. The framework is also a reminder of the importance of intervention at a governmental, organisational, relational and individual level. Schools have an important role in building school belonging for individuals and ensuring that school belonging is prioritised as a guiding principle in education.

11.3 Finale

School belonging matters for each member of an educational community. A sense of belonging relates to good outcomes both for the years when students are at the school, and the years that extend well beyond the school gates. It builds a foundation for subsequent life experiences, impacting both current and future generations.

While school belonging is something that students desire, belonging does not simply happen. It needs to be proactively emphasised and encouraged, through multipronged approaches that simultaneously create supportive environments, develop social relationships, and equip young people with mindsets, behaviour, characteristics and skills that help them relate with others around them and perceive their experience in a positive light. Even then, a good sense of belonging is not inevitable. While schools can invest considerable time and effort into supporting their students, some students will still feel lost and disconnected. But if even some students benefit, then it is a worthwhile endeavour, for "to affect the quality of the day, that is the highest of arts" (Henry David Thoreau). School belonging provides a pathway to do so for our young people.

Appendix A
Review Search Terms

School-Belonging variables	Variables potentially related to belonging	
School belonging	Academic motivation	Parent support
School connectedness	Academic outcomes	Parent care
Belonging to school	Academic performance	Peer support
School attachment	Age	Performance
School affiliation	Anxiety	Personal characteristics
Student likes school	Caregivers	Policies
Community	Coping skills	Psychopathology
School bonding	Demographic variables	Psychoticism
School identification	Depression	Race
Social capital	Disposition	Region
Belongingness	Ecological	Regulation
Relatedness	Emotional instability	Resiliency
School membership	Ethnicity	Rules safety
School bond	Extracurricular activities	School
School connection	Friends	Self-concept
School involvement	Gender	Self-efficacy
School engagement	Geography	Self-esteem
School acceptance	Grades	Social identity
	Groups	Social media
	Legislation	Teacher
	Level	Teacher support
	Location	Teacher relationships
	Mental illness	Technology
	Multiple group membership	Temperament
	Online gaming	Year
	Parents	

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Appendix B
Characteristics of Studies Included in the Meta-analysis

Study author(s)	N	Country	Location	Belonging measure	Theme	Independent variable
Anderman (2003)	618	US	Mixed	PSSM	Academic motivation	Academic success expectancy
					Gender	Gender
					Teacher support	Support for mutual respect
Benner et al. (2008)	1120	US	Urban	ESB	Academic motivation	Academic achievement
					Parent support	Family academic support
Blomfield and Barber (2010)	98	Australia	Suburban	Add health	Extracurricular activity	Activity participation
Bonny et al. (2000)	1959	US	Mixed	Add health	Academic motivation	Academic achievement
					Gender	Gender
					Race/ethnicity	Race (Black/White)
Bowen et al. (1998)	167	US	Suburban	SSP	Teacher support	Caring and encouragement
Brewster & Bowen (2004)	699	US	Urban	Meaningfulness (3 items)	Parent support	Parent communication
					Teacher support	Teacher caring and encouraging
Brookmeyer et al. (2006)	6397	US	Mixed	Add health	Parent support	Parent connectedness
Caraway et al. (2003)	123	US	Urban	RAPS	Academic motivation	Goal orientation
					Emotional stability	Fear of failure
					Personal characteristics	Social self-efficacy
Carter et al. (2007)	643	New Zealand	Mixed	YSB	Parent support	Parent caring and communication
Cook et al. (2012)	361	Australia	Urban	SAFS	Race/ethnicity	Race (Black/White)
Cunningham (2007)	517	US	Urban	Bonding scale	Environmental	Bully norms
Dotterer et al. (2007)	140	US	Urban	School bonding (5 items)	Extracurricular activity	Participation in extracurricular activities

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(continued)

Study author(s)	N	Country	Location	Belonging measure	Theme	Independent variable
Frydenberg et al. (2009)	536	Australia	Urban	Connectedness (5 items)	Emotional stability	Negative coping
					Personal characteristics	Coping styles
Galliher et al. (2004)	7613	US	Mixed	School belonging (5 items)	Gender	Gender
Garcia-Reid et al. (2005)	226	Australia	Urban	SSP	Environmental	School safety
					Parent support	Encouragement and appreciation
					Peer support	Trust and closeness with peers
Garcia-Reid et al. (2005)	1458	US	Mixed	SSP	Teacher support	Perceived teacher attitudes & behaviours
Garcia-Reid (2007)	133	US	Urban	SSP	Parent support	Parent encouragement
				PSSM	Peer support	Academic support
Garcia-Reid (2007)	5159	Australia	Mixed	SSP	Teacher support	Perceived teacher attitudes & behaviours
Goodenow & Grady (1993)	198	US	Urban	PSSM	Academic motivation	Motivation
				CHKS	Peer support	Caring relationships
Hallinan (2008)	1458	US	Mixed	Satisfaction (4 items)	Academic motivation	Academic confidence
					Environmental	In-school safety
					Teacher support	Caring praise and fairness by teachers
Heaven et al. (2002)	115	Australia	Suburban	Attitudes (5 items)	Academic motivation	Self-academic rating and education goals
					Emotional stability	Psychoticism
					Parent support	Mother's caring
					Personal characteristics	Conscientiousness
Henrich et al. (2005)	7033	US	Mixed	Add Health	Parent support	Quality of relationship
Holt & Espelage (2003)	504	US	Suburban	PSSM	Emotional stability	Anxiety/Depression scale
					Environmental	Peer victimisation
Jennings (2003)	229	US	Urban	SEI	Peer support	Peer support for learning
Kaminski et al. (2010)	4131	US	Urban	SHSS	Academic motivation	Grades
					Emotional stability	Depression scale

(continued)

(continued)

Study author(s)	N	Country	Location	Belonging measure	Theme	Independent variable
Kelly et al. (2012)	3367	Australia	Mixed	Communities that Care	Emotional stability	Depression
					Parent support	Family relationship quality
Knifsend & Graham (2012)	864	US	Urban	Sense of belonging (3 items)	Extracurricular activity	Activity participation
Kuperminc et al. (2001)	460	US	Urban	YSR	Emotional stability	Depressive experiences
				PSSM	Gender	Gender
Mo & Singh (2008)	1971	US	Mixed	Add Health	Academic motivation	Academic performance
					Parent support	Parent–child relationship
Nichols (2006)	45	US	Urban	PSSM	Gender	Gender
Reschly et al. (2008)	293	US	Rural	SEI	Academic motivation	Future aspirations and goals
				SEI	Emotional stability	Negative affect
				SEI	Parent support	Family support for learning
				CLS	Peer support	Academic/Personal support
				SEI	Personal characteristics	Positive affect
				SEI	Teacher support	Teacher–student relationships
Roche & Kuperminc (2012)	199	US	Urban	PSSM	Emotional stability	Acculturative stress
Rostosky et al. (2003)	1725	US	Rural	Belonging (4 items)	Academic motivation	Perceived GPA
Ryan et al. (1994)	606	US	Suburban	Utilisation	Personal characteristics	Self-esteem
Ryzin et al. (2009)	283	US	Rural	CLS	Academic motivation	Academic self-regulation
				PSSM	Peer support	Acceptance
				CLS	Personal characteristics	Hope
	317	US	Mixed	CLS	Teacher support	Academic/Personal support
Sakiz et al. (2012)	171	Australia	Suburban	SBS	Teacher support	Fairness and friendliness
Sanchez et al. (2005)	143	US	Urban	PSSM	Gender	Gender
Shochet et al. (2006)	2022	Australia	Mixed	PSSM	Emotional stability	Depression inventory

(continued)

(continued)

Study author(s)	N	Country	Location	Belonging measure	Theme	Independent variable
Shochet et al. (2007)	171	Australia	Suburban	PSSM	Environmental	School environment
				PSSM	Extracurricular activity	School activity involvement
				PSSM	Parent support	Parent–adolescent attachment
	699	US	Urban	PSSM	Teacher support	Teacher likability
Shochet et al. (2011)	504	Australia	Mixed	PSSM	Emotional stability	Depressive symptoms
				PSSM	Gender	Gender
Simons-Morton et al. (1999)	4263	US	Suburban	Bonding (6 items)	Personal characteristics	Adjustment to school
Sirin and Rogers-Sirin (2005)	499	US	Mixed	Add Health	Gender	Gender
Sirin and Sirin-Rogers-Sirin (2004)	336	US	Mixed	Add Health	Academic motivation	Academic performance
				Add Health	Parent support	Parent–adolescent relationship
				Add Health	Personal characteristics	Self-esteem
Sirin and Sirin-Rogers-Sirin (2005)	499	US	Mixed	Add Health	Academic motivation	Academic performance
Stoddard et al. (2011)	164	US	Urban	Connectedness (10 items)	Parent support	Closeness to parents and family
				Connectedness (10 items)	Personal characteristics	Hopefulness
Voelkl (1997)	1335	US	Mixed	IWS	Academic motivation	Academic effort in class
				IWS	Gender	Gender
				IWS	Race/Ethnicity	Race (African American/ White)
Walker (2012)	227	US	Urban	PSSM	Academic motivation	Perceived instrumentality
Wang & Eccles (2012)	1479	US	Mixed	Engagement (19 items)	Parent support	Social support from parent
				Engagement (19 items)	Peer support	Acceptance/social support
	226	Australia	Urban	Engagement (19 items)	Teacher support	Social support from teacher
Waters et al. (2010)	5159	Australia	Mixed	Add Health	Academic motivation	Perceived low academic achievement
				Connectedness (5 items)	Emotional stability	Emotional problems
				Connectedness (5 items)	Extracurricular activity	Extracurricular participation
				Connectedness (5 items)	Parent support	Parent connectedness

(continued)

(continued)

Study author(s)	N	Country	Location	Belonging measure	Theme	Independent variable
				Connectedness (5 items)	Peer support	Acceptance/Social support
	133	US	Urban	Add Health	Teacher support	Teacher connectedness
Wentzel (1998)	167	US	Suburban	School Motivation	Academic motivation	Mastery goal orientation
				School Motivation	Emotional stability	Emotional distress
				School Motivation	Parent support	Family cohesion
				School Motivation	Peer support	Social and academic support
				School Motivation	Personal characteristics	Pro-social goal pursuit
	324	Australia	Suburban	School Motivation	Teacher support	Social and academic support
Whitlock (2006)	305	US	Suburban	Connectedness (7 items)	Academic motivation	Valuing academics
				Connectedness (7 items)	Environmental	Feels safe at school
				Connectedness (7 items)	Gender	Gender
				Connectedness (7 items)	Parent support	Close parental relationships
				Connectedness (7 items)	Peer support	Having friends at school
				Connectedness (7 items)	Race/Ethnicity	Ethnicity
Wilkinson-Lee et al. (2011)	4198	US	Mixed	Connectedness (10 items)	Academic motivation	Academic achievement
				Connectedness (10 items)	Emotional stability	Emotional distress
				Connectedness (10 items)	Gender	
Zimmer-Gembeck et al. (2006)	324	Australia	Suburban	Engagement (18 items)	Peer support	Perception of relationships
				Engagement (18 items)	Personal characteristics	Relatedness and closeness
	283	US	Rural	Engagement (18 items)	Teacher support	Autonomy support and involvement

Note CHKS = California Healthy Kids Survey, CLS = Classroom Life Scale, IWS = Identification with School Questionnaire, PSSM = Psychological Sense of School Membership Survey, RAPS = Research Assessment Package for Schools, SAFS= Social and Academic Fit Scale, SBS = Sense of Belonging Scale, SEI = Student Engagement Instrument, SHSS = School Health and Safety Survey, SSP = School Success Profile, YSR = Youth Self Report

Appendix C
Resources

These are some of the many websites, books and programs relevant to school belonging and building and supporting the ten areas identified.

Websites

CASEL

The Collaborative for Academic, Social and Emotional Learning (CASEL) provides information, guidance and resources on SEL.
www.casel.org

Oxford Mindfulness Centre

Provides current research on mindfulness.
www.oxfordmindfulness.org

The University of Melbourne's Centre for Positive Psychology

Provides research and training focused on positive psychology and positive education.
http://education.unimelb.edu.au/cpp

University of Pennsylvania's Positive Psychology Centre

Promotes research, training and education concerned with positive psychology.
www.positivepsychology.org

Building Resilience: A Model to Support Children and Young People

Provides an outline and resources for schools to develop skills for students to develop into happy adults. http://www.education.vic.gov.au/about/department/Pages/resiliencefframework.aspx

Australian Research Alliance for Children and Youth (ARACY)

https://www.aracy.org.au/

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Act Belong Commit

Mental health promotion initiative.
http://www.actbelongcommit.org.au/

Books

Frydenberg, E., Martin, A, & Collie, R. (2017). *Social and Emotional Learning in the Australasian Context*. Melb, AU: Springer Social Sciences.
Frydenberg, E. (2010). *Think Positively: A course for developing coping skills in adolescents.* UK: Bloomsbury Academic.
Brandon, C. & Ivens, C. (2009). Thinking Skills for Peak Performance. Melb, AU: Macmillan Education.
Seligman, M. (2011). *Flourish*. New York, NY: Free Press.
Jimerson, S. R. & Furlong, M. J. (Eds.) (2006) *Handbook of school violence and school safety: From research to practice*. Mahwah, NJ: Erlbaum.
Waters, l. (2017). The Strength Switch : H*ow the New Science of Strength-Based Parenting Can Help Your Child and Your Teen to Flourish*. Melbourne, AU: Penguin Books Australia.

Programs and resources

MindMatters

MindMatters is a resource and professional development program supporting Australian secondary schools in promoting and protecting the mental health, social and emotional well-being of all the members of school.
https://www.mindmatters.edu.au/

Mind Matters Plus

A collection of programs, research, resources and case studies to assist teachers in adopting the principles outlined in the MindMatters health initiative.
http://mhws.agca.com.au/

Bodythink

A program that aims to facilitate positive self-esteem, body image and improved media literacy skills in young people.
http://thebutterflyfoundation.org.au/bodythink-program/

MPower Girls

A program that aims to build relationship skills in girls.
http://www.stride.org.au

PATHS

PATHS is a curriculum for Pre-primary to Year 7 students that promotes emotional and social development.
http://bswb.det.wa.edu.au/content/health-and-wellbeing/copy_of_introduction-to-paths

The START Resiliency Training Package

Primary prevention strategies that aim to build belonging and promote well-being in students during their transition to secondary school.
http://www.sofweb.vic.edu.au/edulibrary/public/stratman/Policy/schoolgov/druged/START.pdf

Responsibility

Contains information and resources for teacher educators and students of education, about mental health and well-being.
http://www.responseability.org/site/index.cfm

The Resilience Doughnut

http://www.theresiliencedoughnut.com.au/contact.php
A school-based resilience program with a free online resilience game for students.

Aussie Optimism

Provides teachers, practitioners and parents with strategies and resources for developing children's social competence, self-management and positive thinking in everyday life.
http://psych.curtin.edu.au/research/aussieoptimism/index.htm

Friendly Schools and Families

The Friendly Schools & Families Program provides individual, group, family and school community level actions to address and prevent bullying in its social context.
http://www.friendlyschools.com.au/

Sensibility

A strengths-based resilience program designed for those working with young Australians aged 12–18 years.
https://www.beyondblue.org.au/healthy-places/secondary-schools-and-tertiary/senseability/download-sensibility

kidsmatter

http://www.kidsmatter.edu.au/primary/resources-schools

FUSE

Social and emotional training program sponsored by the Victorian DET.
https://fuse.education.vic.gov.au/

Glossary of Terms

Academic motivation: Academic motivation involves the ability to plan set goals and exhibit academic confidence. Achievement and performance are the behavioural components; thus, for the purpose of this research, academic motivation encompasses performance/achievement, which is based on the definition of motivation as described by Self-Determination Theory (SDT) (Deci & Ryan, 2000)

Case: A case is a measured correlation between school belonging and an independent variable within a study. A study, therefore, may have more than one case if it reported multiple correlations

Emotional instability: Emotional instability can be viewed as a type of psychopathology and defined as a pattern of maladaptive behaviour or states of distress including mental illness (Lemma 1996)

File drawer down problem: The file drawer down problem is the possibility of unpublished articles that may alter the findings of a meta-analysis (DeCoster 2004)

Meta-analysis: Meta-analysis is the quantitative method of combining results from a selection of studies to analyse the statistical significance and effect sizes.

Narrative synthesis: A narrative synthesis is an approach to systematic review where findings from more than one study are summarised through the use of words and text.

Quantitative synthesis: Quantitative synthesis is the analysis comparing measurable quantitative data across two or more studies (e.g. meta-analysis)

Themes: Themes are broad categories representing independent variables contributing to a particular situation or results in this case fostering school belonging (Costa & McCrae, 1992)

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