Development of School Engagement in Association With Academic Success and Well-Being in Varying Social Contexts

A Review of Empirical Research

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Abstract. This review examines the development of students' engagement with school and how it may contribute to future academic success and individual well-being in different social contexts. The review discusses the two main approaches of school engagement research: one examines students' behavioral, cognitive, and affective engagement (North American approach), while the other examines study-related vigor, absorption, and dedication (European approach). This research shows that a high level of school engagement is positively associated with academic success, and negatively associated with students' ill-being, such as depressive symptoms and burnout. High engagement with school also fosters several aspects of students' well-being, such as positive emotions and life satisfaction. Moreover, several contextual factors, including parental affect, teachers' support, and a mastery-oriented atmosphere in the classroom, promote students' engagement with school.

Keywords: school engagement, academic success, well-being, parenting styles, teachers' support, person-environment fit

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Research on school engagement has a long tradition (Newmann, 1991; Skinner, Wellborn, & Connell, 1990) that reaches back to studies on flow, a state of mind in which the person is so intensively involved in an activity that nothing else seems to matter (Csikszentmihalyi, 1990). The current school engagement research originated from researchers' and educators' concern about students' *disengagement* from school, poor motivation, and lack of involvement in school-related activities (Appleton, Christenson, & Furlong, 2008), and, as a consequence, in the mid-1980s two American research centers on effective schools were established in order to promote students' engagement and in order to assist educators to create schools in which all students could learn (Bullard & Taylor, 1993). Recently, there has been a growing interest in the study of school engagement and its favorable relation to students' feelings of connectedness with their academic surroundings (Furrer & Skinner, 2003; Libbey, 2004; Marks, 2000), values surrounding educational goals (Orthner, Jones-Sanpei, Akos, & Rose, 2013), participation in academic activities, well-being (Li & Lerner, 2011), and academic success (Simons-Morton & Chen, 2009).

Engagement with school has a positive influence on students' adjustment in academic settings (Fredricks, Blumenfeld, & Paris, 2004). Increasing interest in engagement reflects increasing attention given to positive psychology, which focuses on human strengths and optimal functioning rather than on weaknesses and malfunctioning (Schaufeli, Martinez, Pinto, Salanova, & Bakker, 2002; Seligman & Csikzentmihalyi, 2000). High engagement with school can be linked to students' overall success and is of fundamental importance for understanding positive youth development (Li, Bebiroglu, Phelps, Lerner, & Lerner, 2008; Li & Lerner, 2011). Engagement with school is

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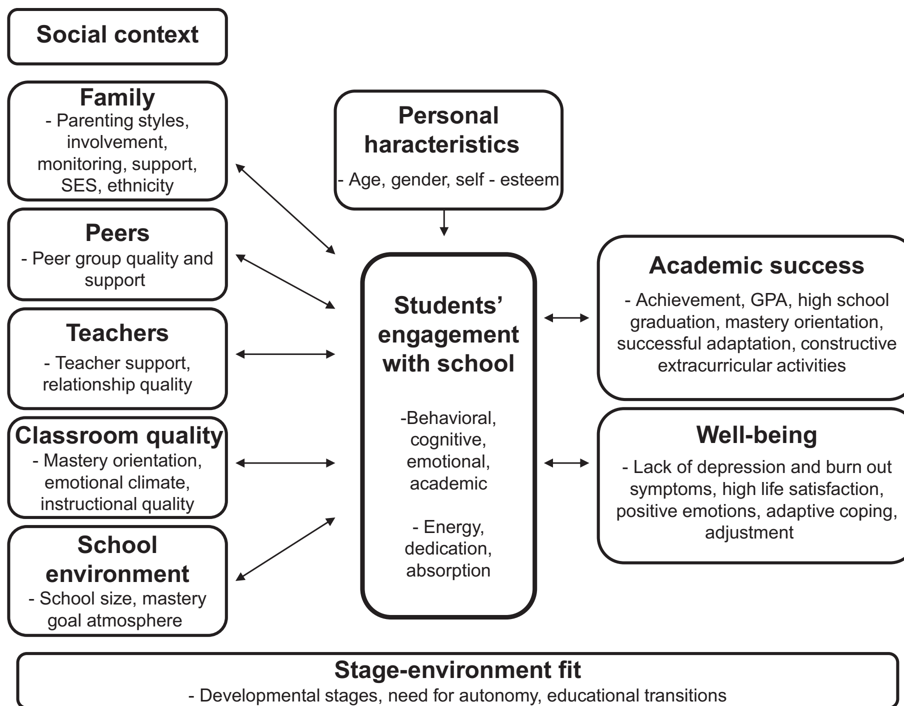

Figure 1. The associations between students' engagement with school, academic success, and well-being in various social contexts.

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characterized by a committed and study-related mindset (Fredricks et al., 2004; Li & Lerner, 2011; Schaufeli, Salanova, Gonzalez-Roma, & Bakker, 2002) which predicts many long-term positive outcomes, such as higher education, better job possibilities (Upaydyaya & Salmela-Aro, 2013), life satisfaction (Lewis, Huebner, Malone, & Valois, 2011), and positive self-perceptions (Linnakylä & Malin, 2008), and facilitates academic success (Annunziata, Hogue, Faw, & Liddle, 2006) and well-being (Salmela-Aro & Upadyaya, 2013). Moreover, various environmental characteristics, such as transitions to school and work, students' relationships with parents, peers, and teachers, and the fit between students' developmental needs and school settings (Eccles & Roeser, 2009), may be reflected in students' engagement, and should be taken into account in school engagement research. Figure 1 presents our model of the components of engagement, its outcomes, and the contextual factors that impact it. Following the framework presented in Figure 1, this review aims to define positive school engagement from multiple perspectives, as well as to illuminate the interplay between school engagement, academic success, and well-being, and to describe various social contexts typically influencing school engagement.

Components of School Engagement: Two Lines of Research

Using the term "engagement" to describe students' participation at school stabilized in North American research in the late 1980s. The term included substantial variation in multiple characteristics that were also related to it (Appleton, Christenson, Kim, & Reschly, 2006). Since then the topic has gained the growing interest of researchers. For instance, a recent 2012 search of PsycINFO showed 1,100 hits for studies on school engagement. While the definitions and characteristics of school engagement still vary in the current literature, in one line of research school engagement is typically described as a multidimensional construct that unites different psychological, academic, behavioral, cognitive, and affective components (Appleton et al., 2006, 2008; Finn & Voelkl, 1993; Fredricks et al., 2004) of which the last three have been studied the most (Jimerson, Campos, & Greif, 2003; Figure 1). *Psychological* engagement describes students' sense of belonging, identification with school, and sense of relatedness, whereas *academic* engagement refers to time on task, earned credits, and homework completion (Appleton et al., 2006, 2008). The *affective* or *emotional* component refers to students' enjoyment and interest in school-related challenges, positive and negative reactions to teachers and classmates, and willingness to do one's schoolwork (Appleton et al., 2008; Finn, 1989; Fredricks et al., 2004; Jimerson et al., 2003). The *cognitive* component, in turn, refers to students' investment in schoolwork, as well as their thoughtfulness and willingness to learn and exert the necessary effort while studying (Appleton et al., 2008; Fredricks et al., 2004; Jimerson et al., 2003). Finally, the *behavioral* component is described in terms of involvement: being present at school and complying with school discipline rules (Appleton et al., 2008; Finn & Voelkl, 1993; Fredricks et al., 2004; Jimerson et al., 2003). These components describe different aspects

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of school engagement and are positively associated with each other (Fredricks et al., 2004).

The concepts of behavioral, emotional, and cognitive engagement partly overlap some constructs used in the motivation research (e.g., attitudes toward school, interest, effort). However, the three school engagement dimensions also describe students' participation, commitment, positive and negative emotions, investment, and willingness to exert effort in one's schoolwork, all of which refer to patterns rather than causes behind one's actions. Thus, school engagement can be described as a multidimensional, developing, and malleable construct including students' behaviors, emotions, and cognitions while studying (Carter, Reschly, Lovelace, Appleton, & Thompson, 2012; Fredricks et al., 2004).

One of the limitations in this line of research has been the fact that several studies have examined school engagement as a general index for the underlying components without taking into account the different aspects of engagement. This has led researchers to oversimplify student behavior, when in reality, the components of school engagement are composed of dynamic processes in students' attitudes, behaviors, and feelings toward school. Indeed, some studies have examined one component (i.e., behavioral, cognitive, or emotional engagement), or a combination of two components, yet only a few studies have included all three (Fredricks, Blumenfeld, Friedel, & Paris, 2005). While studying engagement aspects separately does provide insight into the development, antecedents, and consequences of these separate constructs, all of which can show up in students' school-related behavior and attitudes in differing ways (Li & Lerner, 2011), it is important to examine all three engagement components together in order to fully explain students' behavior and attitudes toward school (Wang, Willet, & Eccles, 2011). The studies that have addressed school engagement multidimensionally, including all components in a single study, have been able to provide a much richer picture of this dynamic concept (Appleton et al., 2006; Jimerson et al., 2003). For example, there are students who experience a high level of behavioral or emotional engagement but at the same time score low in the two remaining aspects of engagement (Fredricks, 2011). Students scoring high only in behavioral engagement typically participate and follow the rules at school but feel bored and not interested in learning, whereas students scoring high only in emotional engagement may feel highly connected but participate less in learning tasks (Fredricks, 2011).

The above North American approach has been applied in Europe to some extent (Gonida, Kiosseogloy, & Vouala, 2007; Gonida, Vouala, & Kiosseoglou, 2009; Linnakylä & Malin, 2008), however, more recently another line of research has examined school engagement in Europe in terms of three dimensions: energy, dedication, and absorption (Salmela-Aro & Upadyaya, 2012, 2013; Schaufeli, Salanova, et al., 2002; Figure 1), which are typically used in studies on work-related engagement (Hakanen, Bakker, & Schaufeli, 2006; Salanova, Agut, & Peiro, 2005; Schaufeli, Bakker, & Salanova, 2006). This is similar to flow, for example, an experience which itself is so enjoyable that people tend to desire it, even at great cost, purely for the sake of the experience (Csikszentmihalyi, 1990). The main difference between the concepts of school engagement and flow is that flow refers to a short-term peak experience that is unlikely to occur in school, whereas engagement is a more persistent state of mind.

Because of its closeness to work-related engagement, the term "schoolwork engagement" has been applied in the European line of research (Salmela-Aro & Upadyaya, 2012), which describes students' psychological engagement similar to flow in greater detail. Of the three dimensions, *energy* refers to high mental resilience while studying, a willingness to invest effort in one's schoolwork, and a positive approach (Salmela-Aro & Upadyaya, 2012; Schaufeli, Salanova, et al., 2002). *Dedication*, in turn, is characterized by a sense of significance, enthusiasm, pride, identification, and inspiration regarding school, as well as perceiving schoolwork as meaningful (Salmela-Aro & Upadyaya, 2012; Schaufeli, Salanova, et al., 2002). *Absorption* is characterized by behavioral accomplishments and flow-like experiences, such as being fully concentrated and happily engrossed in one's studying so that time passes quickly (Salmela-Aro & Upadyaya, 2012; Schaufeli, Salanova, et al., 2002). These three dimensions are separate constructs of school engagement and correlate highly with each other (Salmela-Aro & Upadyaya, 2012; Schaufeli, Salanova, et al., 2002).

As the new line of engagement research in Europe has been only recently expanded to the school context, it has received very little criticism until now. One limitation and the main difference from the earlier line of research is that vigor, dedication, and absorption describe students' psychological engagement similar to flow rather than their behavior at school. Thus, the European approach lacks information concerning students' attendance at school, respect for teachers, or adherence to school rules. Moreover, the emotional aspect in this approach concerns only the students' feelings about studying and does not reveal their feelings toward peers, teachers, and the school environment. However, since the students' own psychological engagement is described in great detail, this line of research provides new information to researchers. The European approach has also made it possible to examine the continuum of engagement during the transition from post-comprehensive studies to working life which has not been studied previously (Upadyaya & Salmela-Aro, in press). Nevertheless, even though the results of this new engagement measure have been promising, there is a need to test the schoolwork engagement procedure in various countries and on different school levels to support its validity.

Both approaches to school engagement measure various observed characteristics of students' underlying school engagement, and have provided tools to examine the associations between school engagement, academic success, and individual well-being. Despite their differences, some similarities can be found between the dimensions of the two approaches. Within the European framework, students' dedication toward schoolwork includes items such as inspiration and enthusiasm toward studying, which come close to the cognitive component in the North American

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framework describing students' investment in schoolwork and willingness to learn. Energy, in turn, describes students' positive approach to schoolwork, which is similar to the affective component comprising enjoyment and positive feelings about school. Absorption shares similar characteristics with the behavioral component and involvement in school as it describes students' behavioral accomplishments and total concentration on studies.

However, most of the previous research on school engagement has been conducted in North America, where the school systems may be quite different from European schools. Therefore, a need exists for more research on school engagement among European students and in a variety of school settings. For example, research within the European framework has typically focused on older students, whereas more studies would be needed to illuminate primary- and middle-school students' experiences of energy, absorption, and dedication at school. More studies would be needed on daily experiences of engagement and on short-term (e.g., school achievement, concurrent motivation) and on long-term (e.g., well-being, adjustment) outcomes of engagement. In addition, future studies should examine how various environmental factors, such as school size, different tracking systems and timing of the tracking, classroom atmosphere, and staying with the same classroom teacher over a year, are reflected in students' engagement. Finally, some North American studies have examined students' engagement in terms of flow experiences (Shernoff, Csikszentmihalyi, Schneider, & Shernoff, 2003) and captured engagement aspects similar to the European approach, however, more elaboration and comparisons would be needed between the North American and European school engagement perspectives.

Developmental Changes in Students' Engagement With School

While the majority of research on school engagement has been cross-sectional (Fredricks et al., 2004), a few longitudinal studies have shown that during middle-school engagement generally decreases (Simons-Morton & Crump, 2003; Wang & Eccles, 2012) along with students' academic motivation (Jacobs, Lanza, Osgood, Eccles, & Wigfield, 2002), and similarly among boys and girls and among children from different ethnic backgrounds (Simons-Morton & Crump, 2003).

A more recent trend in Europe and North America has been to adopt a person-oriented approach instead of a variable-oriented approach (Bergman & Andersson, 2010) to examine students' engagement with school, making it possible to examine the individual differences among students instead of focusing on the mean level of students' engagement with school. These studies have identified several school engagement trajectories of various homogeneous student groups (Archambault, Janosz, Morizot, & Pagani, 2009; Janosz, Archambault, Morizot, & Pagani, 2008; Li & Lerner, 2011; Upadyaya & Salmela-Aro, in press). The results show that students' engagement with school does not necessarily decrease across school years, but rather that different subgroups of students with varying levels and developmental trends of school engagement can be identified (Janosz et al., 2008; Li & Lerner, 2011; Upadyaya & Salmela-Aro, in press). For example, Janosz et al. (2008) identified several moderate to high stable trajectories of school engagement that described developmentally normative pathways of the 12–16-year-old students' overall engagement. Most of the students belonged to stable engagement groups that were also beneficial for future academic success and prevented dropping out from school (Janosz et al., 2008).

The study done by Li and Lerner (2011), in turn, showed that middle-school students who belonged to groups of higher levels of behavioral and emotional engagement demonstrated overall better academic outcomes and well-being than students with less favorable trajectories. European studies on schoolwork engagement have indicated that even though the level of overall engagement might be low during post-comprehensive education, it may increase after the transition to higher education or work (Upadyaya & Salmela-Aro, in press) because the new study or work environment may provide a better person-environment fit for some young adults (Eccles & Midgley, 1989; Eccles & Roeser, 2009).

Developmental changes occur also in the composition of engagement dimensions (Salmela-Aro & Upadyaya, 2012). At the beginning of post-comprehensive education, when students have experienced a transition to high school (e.g., academic track) or vocational school (e.g., vocational track) students' engagement is better described as overall engagement with school, whereas later on, among post-comprehensive education and university students, engagement is characterized by the separate dimensions of energy, dedication, and absorption (Salmela-Aro & Upadyaya, 2012; Schaufeli, Martinez, et al., 2002). These changes may be due to the closeness of the transition to working life, a time when students become more oriented toward work and the new demands of working life. This is when students' schoolwork engagement becomes more differentiated and similar to work engagement (Salmela-Aro & Upadyaya, 2012).

Even though it is challenging to compare findings from research using process- and person-centered methods, these studies speak to the importance of capturing the developmental processes and the richness of longitudinal designs in future school engagement research.

School Engagement, Academic Success and Well-Being

School success has typically been measured with achievement test scores, academic grades, and on-time graduation rates (Annunziata et al., 2006; Finn & Rock, 1997). Academic success and engagement usually form a continuum (Figure 1): students with high academic performance

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typically exhibit high behavioral, emotional (Li & Lerner, 2011), and overall schoolwork engagement (Salmela-Aro & Upadyaya, 2012), which, in turn, supports one's future academic achievement (effect size $r = 0.13–0.37$) (Ladd & Dinella, 2009; Li, Lerner, & Lerner, 2010; Sirin & Rogers-Sirin, 2004) and promotes high engagement in subsequent studies and work (Upadyaya & Salmela-Aro, in press). Similarly, research using experience sampling method (ESM) has shown that students' experiences of high challenge and competence are positively associated with engagement (Park, Holloway, Arendtsz, Bempechat, & Li, 2012; Shernoff et al., 2003).

European studies have shown that maintaining high levels of energy is important especially among university students. Vigorous students pass their examinations more often than their peers who feel less energetic ($r = 0.10–0.23$) (Schaufeli, Martinez, et al., 2002). They also feel more efficient (Schaufeli, Martinez, et al., 2002), and perhaps simply know how better to maintain and direct high energy in their studies, which results as better outcomes.

Similarly, North American studies have shown that students' high behavioral and emotional engagement across the school years shows as high academic performance (Dotterer & Lowe, 2012; Li & Lerner, 2011), whereas cognitive engagement promotes students' in-depth understanding (Fredricks et al., 2004). Thus, all three engagement components are important for academic success. Behavioral involvement in school alone is not necessarily enough to ensure that students are fully engaged in school-related activities and studying. It is equally important that students feel emotionally connected to school and are willing to invest in their studies (Fredricks, 2011; Fredricks et al., 2004; Li & Lerner, 2011).

Students' personal characteristics, family background, and classroom quality (Figure 1) can be reflected in the associations between school engagement and academic success or dropout. For example, girls often exhibit higher levels of behavioral, emotional, and overall school engagement than boys (Li, Lynch, Kalvin, Liu, & Lerner, 2011; Marks, 2000; Salmela-Aro & Upadyaya, 2012; Wang & Eccles, 2012), which may be related to girls' tendency to perform better at school (Pomerantz, Altermatt, & Saxon, 2002) and to attribute greater importance to academic achievement than boys (Berndt & Miller, 1990). Boys and students from lower income families, in turn, are more likely than girls and higher socioeconomic status students to experience rapid decreases and to follow unstable school engagement trajectories often leading to school dropouts (Archambault et al., 2009; Janosz et al., 2008; Li & Lerner, 2011). Moreover, students' engagement with school mediates the positive influence of classroom context (e.g., instructional quality, classroom emotional climate, and teacher-student conflict) on academic achievement (Dotterer & Lowe, 2012).

Further, motivation goal theorists commonly argue that a mastery orientation sustains school engagement better than a performance orientation (e.g., Gonida et al., 2009; Midgley, 2002). Because prior studies show that avoidance-oriented students' academic achievement is relatively low (Tuominen-Soini, Salmela-Aro, & Niemivirta, 2011), and low academic achievement and low schoolwork engagement are related to feelings of cynicism and a sense of inadequacy (Salmela-Aro, Kiuru, Leskinen, & Nurmi, 2009), it is clear that this motivation and belief pattern indicates a risk of inferior academic success.

School success can also be described in terms of resilience and successful adaptation in the face of social disadvantage. In their study on minority students from low-income homes, Finn and Rock (1997) found that those students who showed high resilience also scored higher in their level of school engagement, effort, and school attendance. In addition, students who involve themselves in positive, constructive outside-of-school activities, such as family dinner and civic activities, are more likely to be emotionally engaged with school than students who are less involved in such activities (Li et al., 2008). Constructive outside-of-school activities may predict students' behavior and engagement with school, which may then lead to academic success (Li et al., 2008).

Further, a positive continuum can be found between school engagement and well-being (Figure 1): students who are highly satisfied with their lives value their education more and experience high levels of cognitive engagement ($r = 0.09$; Lewis et al., 2011). Students with high level of school engagement, in turn, seldom suffer from depressive symptoms (Li & Lerner, 2011) and often experience high life satisfaction ($r = 0.12$; Lewis et al., 2011) even 2 years after their post-comprehensive education ($r = 0.10$) (Salmela-Aro & Upadyaya, 2013). In addition, high level of school engagement is often associated with positive emotions, adaptive coping (Reschly, Huebner, Appleton, & Antaramian, 2008), and students' subsequent high adjustment to school ($r = 0.12$) (Simons-Morton & Crump, 2003), which can all reflect a strong sense of well-being.

Sometimes students suffer school-related burnout, which affects their overall well-being and adjustment. Burnout symptoms can be described as exhaustion, cynicism, and a sense of inadequacy with regard to school (Salmela-Aro et al., 2009), all of which negatively predict adolescents' subsequent schoolwork engagement (Salmela-Aro & Upadyaya, 2012). Similarly, lack of burnout symptoms shows as an increase in subsequent schoolwork engagement (Salmela-Aro & Upadyaya, 2013). The demands and resources model, typically applied to studies on work engagement, further suggests that high engagement in school protects against burnout and promotes students' subsequent well-being, life satisfaction, personal growth, and learning (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Hakanen et al., 2006; Salmela-Aro & Upadyaya, 2013).

Moreover, according to the demands and resources model, several resources such as high self-esteem and efficacy, and demands such as work or study challenges and overload promote or hinder one's engagement over the school years (Demerouti et al., 2001; Hakanen et al., 2006; Salmela-Aro & Upadyaya, 2013). These processes can be described as motivational or energy-consuming processes, depending on the level of demands, resources, experienced engagement, burnout symptoms, and well-being (Hakanen et al., 2006).

As a whole, students who are highly engaged with school typically follow an overall positive youth development trajectory. They produce high academic outcomes, possess a mastery-oriented approach to studying, seldom drop out of school, adapt better to challenging situations, spend their time out of school in constructive activities, and experience overall better well-being.

School Engagement in Varying Social Contexts

Students' school-related behaviors always occur in a larger social context that includes parents, peers, teachers, and school environment (Figure 1; Finn & Rock, 1997; Finn & Voelkl, 1993; Furlong et al., 2003; Gonida et al., 2009; Eccles & Roeser, 2009, 2011). Recently, a growing number of researchers have focused their attention on understanding how supportive relationships with parents and teachers may promote students' adjustment and engagement with school (Murray, 2009). Both North American and European studies have shown that several family characteristics, such as parental involvement, affection, monitoring, and support, positively predict students' engagement with school at all grade levels (Englund, Engeland, & Collins, 2008; Garcia-Reid, Reid, & Peterson, 2005; Li et al., 2010; Marks, 2000; Murray, 2009; Simons-Morton & Crump, 2003; Upadyaya & Salmela-Aro, in press; Wang & Eccles, 2012). When students have a good relationship with their parents, who are also highly involved in their children's academic studies and hold mastery-oriented goals, it is more probable that students feel highly engaged with their studies (Gonida et al., 2007, 2009; Murray, 2009), later graduate from high school (Englund et al., 2008), and complete a successful transition to higher education or work (Upadyaya & Salmela-Aro, in press; Vasalampi, Salmela-Aro, & Nurmi, 2009). Moreover, authoritative parenting and parental involvement have long-term positive influences on school engagement, foster school adjustment, and protect adolescent students from affiliation to problem behaving peers (Simons-Morton & Chen, 2009). On the other hand, students who have a poor relationship with their parents and experience unclear familial expectations feel less engaged with school (Murray, 2009) and are more likely to drop out of high school even if they are doing well academically (Englund et al., 2008). Thus, a good relationship with parents characterized by significant support is an important resource for school engagement and continued educational and vocational success (Englund et al., 2008; Upadyaya & Salmela-Aro, in press; Wang & Eccles, 2012).

The sense of engagement students experience at school can also be shared by other students in the same peer group, as shown in recent North American and European research on adolescents (Kinderman, 2007; Kiuru, Nurmi, Aunola, & Salmela-Aro, 2009; Figure 1). Even if the initial group members change during the school year, the level of school engagement remains the same within the group, probably because in highly engaged peer groups other students' enthusiastic participation makes schoolwork more fun and enjoyable for peer group members (Kinderman, 2007). Similarly, peer support predicts students' emotional and behavioral engagement (Li et al., 2010, 2011). However, when the other members of the peer group have a lower level of school engagement or show high problem behavior at school, they may discourage their peers from becoming involved in academic activities because they are perceived as less "cool" (Kinderman, 2007; Li et al., 2011). Peer groups' influence on school engagement also increases with age because during adolescence peers become more significant and friendships more complex than earlier (Li et al., 2011). Moreover, a high level of school engagement is shared especially among tight peer groups of girls, probably because girls in highly cohesive peer groups experience a higher sense of belonging, which is typically related to school engagement (Kiuru et al., 2009).

Person-environment fit (Eccles & Midgley, 1989; Eccles & Roeser, 2009) and students' psychological needs (Deci, Vallerand, Pelletier, & Ryan, 1991) in different developmental stages and grade levels effect the associations between teachers-student interaction and student engagement (Figure 1). Especially among elementary school children, teacher contingency and involvement play a role in supporting children's engagement with learning (Skinner et al., 1990), whereas during adolescence, when relationships with adults other than parents become more important, teachers' support and close relationship with their students are of great importance fostering students' sense of engagement (Murray, 2009; Wang & Eccles, 2012) and school meaningfulness (Brewster & Bowen, 2004; Ryan & Patrick, 2001). In high school, support for student autonomy (Reeve, Jang, Carrell, Jeon, & Barch, 2004) and feelings of relatedness becomes especially significant for students' school engagement because during this time adolescents have an increasing need for autonomy and being connected to significant others (Park et al., 2012). Teachers can also model engagement to students by demonstrating their own enthusiasm and valuing of different topic areas (Fredricks, 2011).

Naturally, also the classroom social environment and students' perceptions of school characteristics effect students' engagement with school (Ryan & Patrick, 2001). That is, students' engagement is greater in smaller schools with warmer and more supportive atmosphere (Finn & Voelkl, 1993) and in schools (Gonida et al., 2009) and classrooms (Wang & Holcombe, 2010) with a mastery-oriented structure as opposed to performance goal orientation. A focus on mastery goals fosters students' sense of competency and internal motivation, and reduces competition among students which provides students with more opportunities to feel successful, whereas a focus on performance easily fosters comparison of abilities and competition among students which further shows as a decrease in their engagement (Linnenbrink & Pintrich, 2002; Wang & Holcombe, 2010). Moreover, students' behavioral engagement is high in classrooms characterized by high instructional quality, positive social/emotional climate, and low teacher-student conflict which all make study

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environment more enriching, supportive, and enjoyable for the students (Dotterer & Lowe, 2012).

Another environmental characteristic that may contribute to students' engagement in school are educational transitions, during which the fit between the person (young adult) and the environment (school) is a crucial factor affecting one's adjustment and well-being (Anderman & Anderman, 1999; Isakson & Jarvis, 1999; Roeser, Eccles, & Freedman-Doan, 1999; Rudolph, Lambert, Clark, & Kurlakowsky, 2001; Wigfield, Eccles, Schiefele, Roeser, & Davis-Kean, 2006). As parallel changes occur in both the individual and the context (see Eccles & Roeser, 2009), the stage-environment fit (Eccles & Midgley, 1989) can become unbalanced and is repeatedly reassessed, which often shows as changes in one's engagement and motivation.

The undermining of motivation and engagement is most pronounced right after a transition and tends to continue thereafter (Wigfield & Eccles, 2000). According to the stage-environment fit theory (Eccles & Midgley, 1989), this might be due to the fact that many of the changes associated with educational transitions are at odds with the developmental needs of adolescents (e.g., increased emphasis on grades and competition, decline in adolescents' perception of emotional support from teachers, and a sense of belonging in their classrooms). If schools do not provide developmentally appropriate educational environments for adolescents, they do not offer the kind of social context that continues to motivate students' interest and engagement and, consequently, negative developmental changes may result. A negative developmental fit can lead to alienation from school and produce cynicism. Yet when the context is a good fit with students' interests, goals, and psychological needs, the end result should be high engagement, adaptive motivation, and well-being (Figure 1; see Eccles & Midgley, 1989; Salmela-Aro, Kiuru, & Nurmi, 2008). This scenario may also occur after the transition to higher education or work (Upadyaya & Salmela-Aro, in press).

Future Directions

Several issues concerning school engagement research would be important to take into account in future research. First, only recently has the development of various school engagement components been investigated separately (Li & Lerner, 2011; Wang & Eccles, 2012). Less is also known about the extent to which the separate components of school engagement predict one another over the school years. For example, it is possible that behavioral and cognitive aspects of school engagement form strong cross-lagged associations over the school years, since they are both typically associated with higher levels of academic achievement (Fredricks et al., 2004). Moreover, some types of engagement might be displayed more at different grade levels (Fredricks et al., 2004), and in the earlier grades engagement with school can be uni-dimensional, as suggested in European research (Salmela-Aro & Upadyaya, 2012). In addition, it is possible that students differ in their experiences of the engagement subscales, and students with varying engagement profiles may benefit from diverse support and interventions. For example, students with high behavioral but low emotional and cognitive engagement may benefit from increasing the meaningfulness of their learning tasks, whereas students scoring high only in emotional engagement might benefit from encouraging them to participate more in the classroom (see also Fredricks, 2011).

The antecedents and consequences of the different engagement dimensions may also vary. For example, maternal warmth and peer support predict students' emotional engagement in primary school but have no effect on their behavioral engagement (Li et al., 2010). Relatedness to parents, in turn, supports middle-school students' emotional and behavioral engagement (Furrer & Skinner, 2003), whereas high life satisfaction contributes to adolescent students' cognitive engagement and vice versa (Lewis et al., 2011). Thus, both among the North American and European approaches more research will be essential to examine the development and interrelations of the separate school engagement dimensions, as well as their varying predictors and outcomes at different stages of students' development (Glanville & Wildhagen, 2007; Ladd & Dinella, 2009).

Another topic of the future research would be examining students' engagement in different domains, which would help in understanding the extent to which engagement is content or student specific (Fredricks et al., 2004). Moreover, increasing knowledge about domain-specific engagement might help in promoting students' engagement in science, technology, engineering, and math (STEM)-related education which has been a recent topic in educational research (Gasiewski, Eagan, Garcia, Hurtado, & Chang, 2012; Tytler, Osborne, Williams, Tytler, & Cripps Clark, 2008). Further, linking engagement in school with engagement in organized outside-of-school activities would provide researchers more knowledge about the nature of academic engagement in different settings. For example, some studies have shown that students report more frequent experiences of flow and engagement in organized out-of-school activities (Csikszentmihalyi & Larson, 1984; see also Fredricks, 2011) and in non-academic subjects (Shernof et al., 2003) than during regular classroom hours. Similarly, using multiple methods (Dotterer & Lowe, 2011), such as diary studies, ESM (Park et al., 2012; Shernoff et al., 2003), and person-oriented (Janosz et al., 2008) or qualitative approach (Li et al., 2010), would give researchers more knowledge about the nature of school engagement (e.g., daily fluctuation of engagement, situational factors affecting engagement, varying subgroups, and trajectories of engagement).

Third, it would be important to study the significance of several contextual characteristics in students' school engagement in greater detail. For example, school and classroom environments may vary in different grade levels and age-related differences may occur in the ways teachers', parents', and peers' roles contribute to students' engagement. Furthermore, parents' and teachers' support may counteract the possible negative influence of peers

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on students' engagement with school (Simons-Morton & Chen, 2009), serve as a motivational resource, and help students in adjusting to various school transitions (Furrer & Skinner, 2003). Moreover, school systems and contexts may vary greatly between countries. For example, differences exist between countries according to the time spent with one classroom teacher, timings of the school transitions, and type of academic tracking. Thus, in the future it will be important to examine the impact of diverse sources of support and other school- and classroom characteristics on students' engagement at varying age-levels, developmental stages, and cultural contexts. This research would also provide opportunities for several interventions, such as increasing the amount of positive reinforcement to students (Caraway, Tucker, Reinke, & Hall, 2003), enhancing students' relationships with several sources of support, providing students tools for problem solving, and giving students frequent feedback concerning their educational progress (Sinclair, Christenson, Evelo, & Hurley, 1998).

Similarly, researchers should take into account how several less studied familial and teacher-related characteristics interact with students' engagement with school (Jimerson et al., 2003). For example, less is known about the extent to which various parents' and teachers' beliefs, expectations, values, and child-rearing goals are exhibited during parent-child and teacher-student interaction further influence students' engagement with school.

Future research should also better address the possible clustering effects in student's engagement with school. The level of engagement may vary between schools (Lynch, Lerner, & Leventhal, 2013) and classrooms (Curby, Grimm, Poniz, & Rimm-Kaufman, 2009; Marks, 2000) and more research would be needed to capture these differences. Moreover, even though the literature consistently shows that children in high-quality peer groups tend to do better in school, it is less clear whether peers actually support each other's performance or if high achieving students tend to choose similar peers (Kinderman, 2007). It is also possible that children in high-quality peer groups share a similar third factor – high parental or teachers' support for example (Kinderman, 2007). Future research should also consider the possible impact of peer group dynamics, acceptance, and other characteristics on students' school engagement (Jimerson et al., 2003).

Additionally, future studies should explore how the effects of diverse social contexts manifest in the school engagement of various subgroups. School engagement may be an especially significant factor for at-risk youth and students in ethnic minority groups who are generally more vulnerable to delinquency, problem behavior, and school drop-out (Annunziata et al., 2006). For example, both African-American and Latino students are more likely than other students to experience lower levels of behavioral or emotional school engagement in the US (Li & Lerner, 2011). The role of social support of peers, parents, and teachers is usually highlighted among minority students, and a lack of such support might have severe consequences for their school engagement (Finn & Rock, 1997; Garcia-Reid et al., 2005; Hughes & Kwok, 2007; Li & Lerner, 2011). Moreover, classroom context predicts students' engagement differently among low and high achieving students, and future research should explore the impact of various classroom aspects, such as instructional methods, in at-risk students' engagement (Dotterer & Lowe, 2012).

Engagement and school success may additionally predict many positive long-term outcomes such as completion of higher education, better job possibilities (Upaydyaya & Salmela-Aro, 2013), well-being, life satisfaction (Lewis et al., 2011; Salmela-Aro & Upadyaya, 2013), and positive self-perception (Linnakylä & Malin, 2008). More studies, however, are needed to examine the development of school engagement and the characteristics of separate engagement trajectories in order to better understand the underlying processes of engagement during school- and work transitions, how the transitions are connected to one's engagement with school and work, and how we could better support the continuation of successful youth and young adult development. Moreover, although these transitions may include several risk factors for students' engagement, they also offer opportunities for change and possible interventions. One possibility would be providing students more information concerning further education and career opportunities prior to the transitions to vocational studies, higher education, or work. This would enhance students' subsequent engagement, valuing of educational goals, and help in adjusting to the upcoming transitions (see also Orthner et al., 2013; Rose, Woolley, Orthner, Akos, & Jones-Sanpei, 2012; Vuori, Koivisto, Mutanen, Jokisaari, & Salmela-Aro, 2008).

Conclusions

Taken together, the results of the previous studies show that students' engagement with school has several positive consequences for students' well-being, academic achievement, and future academic and vocational success. It is also reasonable to recall that past studies show that most adolescents do well in school and follow positive pathways of youth development, while various smaller groups of students with poorer stage-environment fit (Eccles & Midgley, 1989; Eccles & Roeser, 2009) and engagement with school are typically identified. Following these less benevolent pathways may increase students' risk for school drop-out and later ill-being. However, in some cases, the transition to higher education or work may offer a new start and a better fit, and lead students to return to a more benevolent pathway of youth and young adult development (Upadyaya & Salmela-Aro, in press). Future research should examine these processes in greater detail to increase our understanding of students' continued engagement with school, well-being, and future success.

The present research has also indicated a need for better methodology in studies on school engagement. First, clarifying the dimensions of school engagement and the possible associations with other related characteristics would help researchers and educators to better understand the underlying constructs of students' engagement (Jimerson

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et al., 2003). Second, it is possible that domain-specific differences occur in students' engagement, and more studies are needed to clarify these differences. For example, some students might feel highly engaged with math and sciences but lack engagement with the arts and languages. In addition, future studies should examine the developmental aspect of school engagement and how it is related to future study and career success, transition to higher education, and work. Age-related differences may manifest in students' school engagement (Jimerson et al., 2003), and changes in students' school engagement may be related to changes in their academic motivation (Jacobs et al., 2002). Moreover, from a theoretical point of view, the person-environment fit, students' developmental stages, and the need for autonomy are all especially important during adolescence (Eccles & Roeser, 2009, 2011; Reschly & Christenson, 2006). Finally, researchers must remember that students' school-related behaviors always occur in a larger social context, which includes parents, peers, teachers, and school environment, all of which may further affect students' engagement with school (Finn & Rock, 1997; Finn & Voelkl, 1993).

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