Psychology in the Schools, Vol. 45(5), 2008
Published online in Wiley InterScience (www.interscience.wiley.com)

DOI: 10.1002/pits.20303

STUDENT ENGAGEMENT WITH SCHOOL: CRITICAL CONCEPTUAL AND METHODOLOGICAL ISSUES OF THE CONSTRUCT

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Research supports the connection between engagement, achievement, and school behavior across levels of economic and social advantage and disadvantage. Despite increasing interest and scientific findings, a number of interrelated conceptual and methodological issues must be addressed to advance this construct, particularly for designing data-supported interventions that promote school completion and enhanced educational outcomes for all students. Of particular concern is the need to (a) develop consensus on the name of the construct, (b) identify reliable measures of the dimensions of the construct, and (c) complete the construct validation studies needed to move research and intervention forward. © 2008 Wiley Periodicals, Inc.

The importance of student engagement with school is recognized by educators, as is the observation that far too many students are bored, unmotivated, and uninvolved, that is, disengaged from the academic and social aspects of school life. More than 20 years ago, researchers remarked that although attendance at high school was compulsory in the United States, engagement could not be legislated (Mosher & MacGowan, 1985). Laws may regulate the structure of the educational system, but student perspectives and experiences substantially influence academic and social outcomes.

Despite the passage of time, the importance of engaging all students in their education continues to resonate strongly with families, students, educators, and researchers. The purpose of this article is to critically examine how the *engagement* construct has been used by researchers and to propose a way to integrate perspectives that have been used in research. We first identify myriad conceptualizations of engagement and describe definitional similarities and differences. Relevant student engagement research (i.e., behavior and psychological connections with school) is then reviewed, and it is emphasized that engagement is malleable and relevant for predicting and preventing school dropout, as well as facilitating positive educational outcomes for all students. To further clarify the boundaries of the engagement construct, we explicate the motivational theories that are foundational to engagement and provide an explanation of the relationship between the constructs of motivation and engagement. We conclude with a discussion of core conceptual and methodological considerations for advancing the engagement research. Engagement, a potentially important and useful construct, is at a critical crossroads, one in need of conceptual clarity and constancy (Blumenfeld, 2006). This article is intended as a step toward that important end.

Myriad Conceptualizations of Student Engagement

The short, approximately 22-year history of engagement highlights its need for a clear definition. In 1985, a review by Mosher and MacGowan found only two studies that actually used the term "engagement," and one of these studies defined engagement as student participation in school-offered activities, but proceeded to infer it by examining disengagement (Natriello, 1984). Although uses of this

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construct have proliferated, definitional clarity has been elusive. The theoretical and research literatures on engagement generally reflect little consensus about definitions and contain substantial variations in how engagement is operationalized and measured. Fredericks, Blumenfeld, and Paris (2004) discussed the potential of engagement as a metaconstruct, bringing together separate lines of research (e.g., motivation, belonging, school climate) and providing an opportunity to examine how these subsumed constructs interact. However, these and other authors also noted that there is considerable inconsistency in the concepts and terminology used across studies (Fredericks et al., 2004; Furlong et al., 2003; Jimerson, Campos, & Greif, 2003). An example of the varied names for the engagement construct and corresponding definitions frequently used by researchers is provided in Table 1.

Despite this inconsistency, juxtaposition of varied definitions of engagement elucidates themes across groups of researchers. For instance, some definitions contrasted the positive outcome of engagement with the negative result of disaffection, such as disenchantment and alienation (e.g., Connell & Wellborn, 1991; Skinner & Belmont, 1993), whereas others implied that the negative outcome was the absence of engagement itself. Furthermore, some specified contextual fulfillment of fundamental needs as mediators of engagement (Christenson & Anderson, 2002; Connell & Wellborn, 1991; Furlong et al., 2003), whereas others focused on engagement itself with less attention to its precursors. All definitions included behavioral components, and many also contained emotional/psychological components, but far fewer included academic or cognitive components in their definition. Finally, most researchers defined engagement in a general, broad sense with only two who explicitly mentioned an element of reaction to challenge (Klem & Connell, 2004; Skinner, Wellborn, & Connell, 1990); others may have meant to imply such an element.

One constant across the myriad conceptualizations of engagement is that it is multidimensional. Yet, agreement on multidimensionality differs from agreement on the number and types of engagement dimensions, which ranged from two to four.

Engagement as a Multidimensional Construct

Engagement is typically described as having two or three components. Researchers espousing a two-component model often include a *behavioral* (e.g., positive conduct, effort, participation) and an *emotional* or *affective* (e.g., interest, identification, belonging, positive attitude about learning) subtype (Finn, 1989; Marks, 2000; Newmann, Wehlage, & Lamborn, 1992; Willms, 2003), with both subtypes foundational to understanding engagement.

More recent reviews of this literature, however, resulted in a tripartite conceptualization that included a *cognitive* (e.g., self-regulation, learning goals, investment in learning) subtype (Fredericks et al., 2004; Jimerson et al., 2003) and was consistent with theories proposing fundamental needs of autonomy, competence, and relatedness (e.g., Connell & Wellborn, 1991). These theories proposed action (engagement vs. disaffection) and outcome differences resulting from interactions within the social context that determined how well the student perceived the environment to meet his or her fundamental needs of autonomy, competence, and relatedness (Connell & Wellborn, 1991). A simple model of this process (adapted from Skinner et al., 1990, p. 23) would be CONTEXT $\longrightarrow$ SELF $\longrightarrow$ ACTION $\longrightarrow$ OUTCOME.

In addition to the two- and three-component models, researchers have proposed an engagement taxonomy with four subtypes: academic, behavioral, cognitive, and psychological (Reschly & Christenson, 2006a, 2006b). This taxonomy integrates the theoretical work of Finn (1989), Connell (Connell, 1990; Connell & Wellborn, 1991), and McPartland (1994) and the implementation of the Check & Connect intervention model (http://ici.umn.edu/checkandconnect/) over 13 years; it purports to provide understanding of student levels of engagement and to recognize the goodness of fit between the student, the learning environment, and the factors that influence their fit (Reschly

Table 1
Definitional Variations Across Conceptualizations of Engagement

Name	Research Citation[a]	Construct Definition
Engagement	A. Audas & Willms, 2001	A. Extent to which students *participate* in academic and nonacademic activities and *identify with* and *value* the goals of schooling.
	B. Connell & Wellborn, 1991	B. When *psychological needs* (i.e., autonomy, belonging, competence) *are met* within cultural enterprises such as family, school, and work, engagement occurs and is exhibited in *affect*, *behavior,* and *cognition* (if not, disaffection occurs).
	C. Russell, Ainley, & Frydenberg, 2005	C. *Energy in action*, the connection between person and activity; consisting of three forms: *behavioral*, *emotional,* and *cognitive.*
	D. Skinner & Belmont, 1993	D. Sustained *behavioral involvement* in learning activities accompanied by *positive emotional tone* (vs. disaffection).
	E. Skinner, Wellborn, & Connell, 1990	E. Initiation of *action, effort,* and *persistence with schoolwork* and ambient *emotional states* during learning activities.
Engagement in schoolwork	F. National Research Council/Institute of Medicine (2004)	F. Involves both *behaviors* and *emotions* and is mediated by perceptions of competence and control (*I can*), values and goals (*I want to*), and social connectedness (*I belong*).
Academic engagement	G. Libby, 2004	G. Extent to which students are *motivated to learn* and *do well* in school.
School engagement	H. Fredericks, Blumenfeld, & Paris, 2004	H. *Emotional* (positive and negative reactions to teachers, classmates, academics, and school), *Behavioral* (participation in school), and *Cognitive* (investment) *Engagement* subtypes.
	I. Furlong et al., 2003	I. *Affective, Behavioral,* and *Cognitive Engagement* subtypes (same as Jimerson et al., 2003) within *student, peer group, classroom,* and *schoolwide contexts*.
	J. Jimerson, Campos, & Greif, 2003	J. *Affective* (feelings about school, teachers, and peers), *Behavioral* (observable actions), and *Cognitive* (perceptions and beliefs) *Engagement* subtypes.
Student engagement	K. Chapman, 2003	K. *Willingness to participate* in routine school activities with subtle *cognitive, behavioral,* and *affective indicators* of student engagement in specific learning tasks.
	L. Natriello, 1984	L. *Student participation* in the activities offered as part of the school program.
	M. Yazzie-Mintz, 2007	M. *Cognitive/Intellectual/Academic* (students' effort, investment, and strategies for learning), *Social/Behavioral/Participatory* (social, extracurricular, and nonacademic school activities; interactions with peers), and *Emotional* (feelings of connection to school, including their performance, school climate, and relationships with others).
Student engagement in academic work	N. Marks, 2000	N. *Psychological process* involving the *attention*, *interest, investment,* and *effort* students expend in the work of learning.
	O. Newmann, Wehlage, & Lamborn, 1992	O. The student's *psychological investment* in and *effort* directed toward learning, understanding, or mastering the knowledge, skills, or crafts that academic work is intended to promote.

(Continued)

Table 1
Continued

Name	Research Citation[a]	Construct Definition
Student engagement in/with school	P. Mosher & MacGowan, 1985	P. *Attitude* leading toward and *participatory behavior* in secondary school's programs (state of mind and way of behaving).
	Q. Klem & Connell, 2004	Q. *Ongoing engagement* (behavioral, emotional, and cognitive components); *reaction to challenge* (ideally engage optimistically).
	R. Christenson & Anderson, 2002	R. *Psychological* (e.g., belonging), *Behavioral* (e.g., participation), *Cognitive* (e.g., self-regulated learning), and *Academic* (e.g., time on task) *Engagement*.
Participation identification[b]	S. Finn, 1989, 1993; Finn & Rock, 1997	S. *Participation* in (at four increasing levels) and *identification* with school (belonging in school and valuing school-related outcomes).

[a]Letters are intended for aligning citations with definitions and not meant to convey a hierarchy.
[b]Although not labeled "engagement," this theory is at the core of many conceptualizations of engagement.

& Christenson, 2006a, 2006b). Variables such as time on task, credits earned toward graduation, and homework completion represented indicators of academic engagement, whereas attendance, suspensions, voluntary classroom participation, and extracurricular participation represented indicators of behavioral engagement. Cognitive and psychological engagement were considered less observable and gauged with more internal indicators, including self-regulation, relevance of schoolwork to future endeavors, value of learning, personal goals and autonomy as indicators of cognitive engagement and feelings of identification or belonging, and relationships with teachers and peers as indicators of psychological engagement.

The addition of academic engagement was foundational to the four-part typology. It honored the strong, consistent finding that high rates of academic learning time are correlated with student achievement for students with and without disabilities (Fisher & Berliner, 1985), aligned with researchers who examined engagement for specific tasks (Marks, 2000), resonated with teachers concerned about time on task and work completion, and responded to comments from Check & Connect students (Sinclair, Christenson, & Thurlow, 2005). The dimensions of engagement used in the High School Survey of Student Engagement (HSSSE) at the Center for Evaluation & Education Policy, Indiana University, also included academic engagement; however, they conceptualized three dimensions: cognitive/intellectual/academic (i.e., engagement of the mind), social/behavioral/participatory (i.e., engagement in the life of school), and emotional (i.e., engagement of the heart) (Yazzie-Mintz, 2007).

Student Engagement—Relevance for School Completion

Engagement is considered the primary theoretical model for understanding dropout and is necessary to promote school completion, defined as graduation from high school with sufficient academic and social skills to partake in postsecondary enrollment options and/or the world of work (Christenson et al., 2008; Finn, 2006). Sufficient engagement with school, however, does not occur for far too many students. Data from 2003 indicated that 3.5 million youth and young adults (16–25 years old) had not earned a high school diploma and were not currently enrolled in school (Barton, 2004). Many dropouts, by ages 16 to 24, are not employed (45% Black, 32% Hispanic,

and 31% White). Moreover, by ages 25 to 34 employed male dropouts average an annual income that rendered a family of five at the poverty threshold ($22,903 in 2002), with the average annual income of employed female dropouts unable to keep a family of four out of poverty ($17,114 in 2002). In addition, the earnings of students who dropped out of school declined 34.7% from 1971 to 2002. Completing school with an appropriate set of skills is vital, and is even more important as work positions with adequate compensation become increasingly less accessible to lower-skilled applicants (Barton, 2004). Furthermore, youth who do not complete high school are more likely to be incarcerated and experience long-term dependency on social services (Christenson, Sinclair, Lehr, & Hurley, 2000). Since peaking at 77.1% in 1969, high school completion rates have declined to estimates as low as 66.1% by 2000 (Barton, 2004).

Given these troubling statistics, much work has gone into efforts to better predict, understand, and proactively intervene on the problem of school dropout (see Doll & Hess, 2001). Dropout theorists have noted that a focus on immutable characteristics not only implies that much of the reason for student dropout is resistant to change (Doll & Hess, 2001), but also obscures factors amenable to educator change efforts (Baker et al., 2001; Barton, 2004; Christenson, Sinclair, Lehr, & Godber, 2001; Hess & Copeland, 2001). Attempts to delineate more alterable influences on dropout have led to a growing interest in engagement (Christenson & Thurlow, 2004; Fredericks et al., 2004; Jimerson et al., 2003).

School Dropout as a Gradual Process

The construct of engagement is useful for capturing the gradual process by which students disconnect from school (Finn, 1989). Consistent with the understanding that dropping out of school is not an instantaneous event, but a process that occurs over time, engagement provides a means to intervene at the earliest signs of students' disconnection with school. Engagement focuses attention on alterable variables to help increase school completion rates (Christenson et al., 2001; Connell, Halpern-Felsher, Clifford, Crichlow, & Usinger, 1995; Doll, Hess, & Ochoa, 2001) and to reform high school experiences to help foster students' achievement motivation (National Research Council & Institute of Medicine, 2004). Empirical results also suggest that correlates of dropping out can be disentangled to identify those that are more amenable to educator interventions from other intractable influences (Barton, 2004; Finn, 1993; Finn & Rock, 1997; Finn & Voelkl, 1992; Rumberger & Thomas, 2000), which has led researchers to focus on student engagement as a critical target for intervention efforts (Christenson et al., 2001).

Two Check & Connect studies highlight the role of student engagement in promoting school completion and demonstrate the usefulness of interventions targeting engagement. For instance, 94 students with learning or emotional/behavioral disabilities in an urban district received the Check & Connect intervention in grades 7 and 8 (Sinclair, Christenson, Evelo, & Hurley, 1998). On entrance to high school, they were randomly assigned to treatment and control groups. Grade 9 posttest results showed that, despite having no favorable pretest advantages, treatment students had a number of advantageous outcomes. They participated significantly more in school (enrolled at the end of the school year and completed course assignments) and performed significantly better than control students on a number of academic indicators (earned more credits during grade 9 and were more highly rated by special and general education teachers for academics or behavior).

A related study involved students from a high-risk district in which less than 50% of students completed high school in 4 years. The sample included 144 ninth-grade students, with 69% of these having a primary label of emotional or behavioral disability (Sinclair et al., 2005). In addition to status risk factors, teacher ratings were well below average for academic competence, social competence, and problem behavior. Four- or 5-year implementations of Check & Connect resulted

in several significant differences between the randomly assigned treatment and control groups. Treatment students had lower cohort dropout rates, attended school more persistently, exhibited more persistent attendance through periods of transition between schools, and participated more in the individualized education plan process with articulated transition goals. Effect sizes ranged from 0.26 to 0.58.

Engagement—Necessity of Behaviors and Psychological Connections

Research demonstrates the critical role of both behavioral and affective components for high rates of student engagement (Christenson et al., 2008; National Research Council and Institute of Medicine, 2004). Furthermore, engagement is a predictor of academic performance.

Behavioral Component. In a seminal article on school dropout, Finn (1989) contrasted the frustration–self-esteem and participation-identification models. The former model illustrates the effect of faulty school practices on unsuccessful school outcomes for a student, resulting in a reduction of self-esteem, ensuing problem behaviors, and, combined with negative peer influences, further unsuccessful school outcomes. The latter focuses directly on alterable variables, most notably, the degree of participation in school activities and quality of instruction. Successful student performance is a result of participation in school activities, the quality of instruction, and student abilities. Successful performance affects identification with school, which, in turn, leads to increased levels of participation in school activities. Both models are cyclical and hold the potential for students to become involved within a pattern of either positive and engaging or negative and disconnecting behaviors. The components of participation and identification support a move beyond the focus on more intractable characteristics of students (e.g., race/ethnicity, home language, family income) in favor of predicting outcomes based on risk factors more amenable to educator change efforts. Functional risk factors, rather than solely demographic risks, become the focus of intervention (Christenson et al., 2008).

Students at high risk for school failure based on status variables such as ethnicity, home language, race, and/or socioeconomic level can be differentiated by their amount of participation in and/or identification with the tasks and activities of the school, *and* these differences are related to important outcomes such as academic achievement and persistence with academic work. Using the nationally representative National Educational Longitudinal Survey: 1988 (NELS: 88) data set, Finn (1993) conducted two studies, with the first examining a national sample of 15,737 eighth-grade, public school students to determine if there was an association between engagement (operationalized as participation) and academic achievement. Using three factors—attendance, classroom behavior, and participation beyond the typical academic program—four participation categories were formed. Finn found a significant linear and quadratic trend, indicating a strong relationship between participation and achievement and larger differences at higher levels of participation than at lower levels. The positive impact was greater for a high degree of participation (vs. a more moderate degree) than it was for a moderate degree of participation (vs. a minimal degree or lack of participation). This finding is consistent with Osterman's (1998) conclusion that engaged students perceive more support from teachers and peers and that this perception leads to a beneficial cycle of increased levels of engagement and increased adult support (see also Furrer, Skinner, Marchand, & Kindermann, 2006). In sum, engagement seems to have a "rich-get-richer" quality, which portends well for effective early intervention for students showing signs of school withdrawal. Given the lack of any interaction between participation and either gender or race/ethnicity, as well as the consistency of these results when socioeconomic level was covaried, Finn's findings appear relevant across gender, socioeconomic levels, and the four categories of race/ethnicity considered in the study.

A second study by Finn (1993) using NELS: 88 data examined 5,945 at-risk (based on race, home language, or socioeconomic level) eighth graders to clarify whether level of participation and classroom and/or emotional engagement explained variations in mathematics and reading achievement tests. Students were categorized as "successful," "passing," and "unsuccessful." Successful students differed from unsuccessful peers by attending class and arriving on time; being prepared for class; taking part in, as opposed to disrupting, the activities of the classroom; completing more homework; and being more active in extracurricular activities. Neither the frequency of school changes prior to eighth grade nor student perception of the school's warmth and supportiveness related significantly to academic performance. Identification related significantly (with moderate to low correlations) to participation within the classroom. These results suggested that (a) identification with school was related to participation, (b) participation was related to achievement, and (c) that levels of participation predicted the variation in reading and math achievement of at-risk students.

Using the NELS: 88 data set, Finn and Rock (1997) conducted a similar study using 1,803 African American and Hispanic students in grades 8 to 12. These students were deemed "at risk" based on minority status and low socioeconomic level. The sample was divided into resilient students, nonresilient completers, and nonresilient dropouts. They found that resilient and nonresilient students (effect sizes of 0.41–0.82) differed both by teacher-reported behavioral engagement differences (favoring resilient students) in student work ethic, regular class attendance, and attentiveness and cooperation in the classroom and by student-reported timely and regular school attendance and reduced frequency of getting into trouble. Significant differences favored resilient over nonresilient students on indices of psychological engagement (self-esteem and locus of control), and locus-of-control differences favored nonresilient completers over dropouts. Higher levels of self-esteem differentiated students who persisted with their schooling despite the setbacks of low grades and/or subpar test scores. These behavioral and psychological engagement differences remained when socioeconomic level and family structure were covaried.

Psychological Component. Research into the importance of affective connections at school has examined students' sense of belonging, identification with school, and sense of relatedness. Baumeister and Leary (1995) examined the importance of affective connections to others by considering the need to belong as a fundamental human motivation. To qualify as a fundamental motivation, they specified that a need must (a) create effects in most conditions by functioning across diverse settings, (b) result in affective outcomes and guide cognitive processing by influencing affect and cognition, (c) result in problematic effects when the need is not met by producing negative effects beyond momentary distress, (d) elicit behavior that is goal directed and intended to satisfy the motivation, (e) apply broadly to diverse people and transcend cultural boundaries, (f) not merely be a derivative of other motivation(s), (g) impact a wide range of behaviors, and (h) relate to outcomes beyond one's immediate psychological functioning. On extensively reviewing the empirical literature, they found support for the majority of these requirements, which supported the belongingness hypothesis. This hypothesis is theorized to have two core aspects: ". . . people seem to need frequent, affectively pleasant or positive interactions with the same individuals, and they need these interactions to occur in a framework of long-term, stable caring, and concern" (p. 520).

Focusing on belonging within a school setting, an examination of 612 predominantly Caucasian, middle-class, suburban students in grades 5 to 8 found that students' sense of belonging increased over time, while their sense of intrinsic value and interest in school declined substantially during the same time period (Goodenow, 1991). In addition, three measures of psychological functioning (belongingness, expectations of academic success, and intrinsic value of school) were significant, low-to-moderate correlates of teacher reports (6 weeks later) of student grades and student effort. Finally, sense of belonging was more closely related to the outcome measures of effort at grade 7

than at other grade levels, suggesting a particular value of belonging and increased vulnerability to experiences of not belonging at that transitional grade level (Goodenow, 1991). This finding is also consistent with Eccles et al.'s (1993) proposal that motivation varied with the fit between the educational context and student developmental needs.

Another examination of sense of belonging involved 301 junior high students attending two diverse schools in a city, which was in the state's bottom quartile for per capita income (Goodenow, 1992). Mean student responses suggested high expectations for success, valuing of academic work, and considerable effort/persistence, whereas mean scores were significantly lower for measures of belonging, support by others, and satisfaction with school. In addition, student sense of belonging was moderately and significantly correlated to the values of one's friends, student expectancies, value of schoolwork, school motivation, and significantly, but only minimally related to effort/persistence with difficult academic work. Results further indicated that the relationship between sense of belonging and school motivation and effort/persistence was robust even when the values of the student's immediate friendship group were controlled. Finally, significant differences existed by gender with girls more likely to (a) report friends who valued doing well in school, (b) show higher levels of overall school motivation and satisfaction, and (c) have a greater sense of belonging. Hispanic students expressed a greater sense of belonging in a school comprised of 75% youth of Hispanic descent. Taken together, these findings support Goodenow's (1991) finding of an important role for student sense of belonging. A notable caveat was that urban students tended to have lower levels of belonging in school. In comparison, higher perceived belonging in school was found for Hispanics where they represented a majority of the student body and for girls when they perceived greater support toward academic ends from their friends.

Another area of research involving student affective connections examined how school warmth influenced academic achievement (Voelkl, 1995) and how students identified (valued and felt they belonged) within their school (Voelkl, 1997). In this research, an important mediating variable, participation, influenced the relationship between school warmth and academic achievement (Voelkl, 1995). Using a NELS: 88 sample of 13,121 eighth graders, significant, moderate correlations between school warmth and measures of reading, mathematics, science, and history achievement were reduced to nonsignificance with participation removed from the model. These findings combined with Goodenow's (1991, 1992) findings, which found an association between belonging and effort/persistence as well as motivation, begin to suggest a way in which the affective connection to school may impact academic achievement.

Longitudinal results (grades 4–8) involving 1,335 African American and Caucasian students from 104 urban, suburban, rural, and inner-city schools also supported the link between participation, identification with school, and student achievement (Voelkl, 1997). This research considered whether teacher-rated participation in the classroom and general academic achievement predicted identification with school over time. Results included significant, low correlations between achievement in grades 4 and 7 and identification with school. When participation in grade 8 was related to identification, a significant moderate correlation emerged. Finally, the significant and moderate correlations between achievement in grades 4 and 7 and participation suggested that previous achievement bolstered future levels of identification. Analyses of gender and racial differences provided further insight into the robustness of that result. Voelkl's (1997) examination of gender differences in identification corroborated Goodenow's (1992) finding that girls have higher levels of belonging with school. Once separated by race, results revealed that previous achievement was significantly related to future levels of identification only for White students (Voelkl, 1997). Findings that persisted across race included the significant relationship of classroom participation and identification. These findings corroborate both the Voelkl (1995) result that affective connections to school may impact achievement through participation and Finn's (1989) participation-identification

theory. Also, for both Black and White students, higher levels of achievement were associated with greater student participation (Voelkl, 1997).

More recently, a sense of relatedness has been examined for its role in student engagement and subsequent academic performance (Furrer & Skinner, 2003). Specifically the following relationships were examined: (a) the association between relatedness and classroom engagement and performance; (b) the role of parents, teachers, and peers on engagement; (c) the influence of age and gender on the relation between relatedness and engagement; and (d) the level of engagement associated with different relatedness profiles (i.e., patterns of relationships with certain social partners). This study involved 641 student in grades 3 to 6 who were from suburban-rural communities and mostly (95%) Caucasian. Results suggested that student- and teacher-reported levels of student behavioral and emotional engagement each mediated the relationship between aggregated relatedness (across parents, teachers, and peers) and student grades. Moreover, student-reported relatedness to parents, peers, and teachers significantly predicted both student- and teacher-reported student engagement beyond student-reported perceived control at one point in time and also across the school year from fall to spring (Furrer & Skinner, 2003). Student feelings of relatedness overlapped moderately across partners (parents, peers, and teachers), yet relatedness with each partner was uniquely important in predicting engagement. Furthermore, although girls indicated higher levels of relatedness, the effect of relatedness (especially with teachers) on engagement (especially student-reported) was more salient for boys—as expected, relatedness to teachers declined with age, yet surprisingly, relatedness was a better predictor with older than younger children. Finally, it was interesting to note that although *high teacher relatedness* (amidst low parent and peer relatedness) and *low peer relatedness* (amidst high parent and teacher relatedness) resulted in significant differences (compared to the all high or all low relatedness groups) in student-reported behavioral and emotional engagement; these differences were not reflected in the perspective of teacher reports of engagement.

Overall, theory and research suggest that a student's psychological connection to school plays an important role in affecting student motivation and participatory behaviors, participating in school-work positively impacts students' affective connections with school, and multiple engagement subtypes and reporters are important for gauging the effects of relatedness on engagement and engagement on academic outcomes. Essentially, the previously described participation and identification aspects of engagement and these affective or psychological aspects of engagement seem mutually reinforcing and synergistic in improving student educational outcomes. These results continue to support the importance of a multidimensional conceptualization of student engagement with school.

Engagement—A Construct Relevant for All Students

Every school irrespective of school level, geographic locale, or demographic characteristics of students has students who are disengaged and engaged. In fact, the student body in schools can be organized along a continuum of marginal-disengaged to member-engaged students. Data from the 2006 HSSSE, based on responses from 81,499 students in grades 9 to 12 from 110 schools in 26 states, illustrates the applicability of the engagement construct to *all* students (Yazzie-Mintz, 2007). It was found that students reported being less engaged across high school years if they were male; if they were from an ethnic group other than White or Asian; if they were lower socioeconomic levels; or if they were in special education rather than vocational, general education, or advanced classes. It is noteworthy that 72% of the students indicated they were engaged in school; thus, more than one fourth of students are not. All schools have students who are uninvolved, apathetic, and/or discouraged learners—even without demographic-related risks. Brophy (2004), a motivational researcher, challenges educators to explicitly instruct and intervene

with students to address motivation, including also self-perceived competence, initiative, autonomy, and relationships—all of which characterize engagement.

The Role of Motivation in Student School Experiences

The concept of motivation is at the core of teaching and learning (Maehr & Meyer, 1997). Motivational research has progressed from (a) perceiving the student "as a machine" attempting to meet basic needs, (b) to viewing the student "as a decision maker" weighing the likelihood of attainment and value of an outcome, and finally (c) to identifying the student "as creator of meaning" considering causal attributions and the value and purpose of pursuing goals. One outcome of this movement toward a view of personal creation of meaning has been renewed general interest in cognitive motives and specific interest in intrinsic motivation. Student investment in education is believed to largely be a function of their perception of task or ability goals of the school culture (Maehr & Midgley, 1996).

Self-determination theory (SDT) provides an important and comprehensive theoretical framework that helps clarify the functioning of the student engagement construct. SDT theorists assert that every person across cultures requires the fulfillment of fundamental needs of autonomy, competence, and relatedness, although the means of fulfilling such needs may vary by culture (Ryan & Deci, 2000). At least two aspects of SDT are especially relevant for educators. The first is that SDT provides an integrated conceptualization for the internalization of external demands. The second is the focus on contextual factors under the control of schools resulting in the provision of specific suggestions for educators on how to improve student motivation, engagement, and subsequent academic performance.

Rather than focusing on intrinsic motivation as the only desired end, SDT acknowledges that the catalyst for behavior in many situations (commonly in education) is external to oneself (Ryan & Deci, 2000). The theory specifies qualitative differences in the level of self-determination associated with extrinsic motivation; situates these levels along a continuum; and contends that external expectations can be internalized, integrated, and result in highly autonomous functioning (Ryan, 1995). This process is described as a move ". . . away from heteronomy toward autonomy, or from external to self-regulation" (p. 405), and it is differentiated across five levels (Ryan, 1995). *Amotivation* processes involve not valuing and incompetence, and are characterized by inaction or the lack of intent to act. *External regulation* processes include compliance or pursuit of rewards, with causality externally located, and where relative autonomy is extremely low. *Introjection* processes include guilt or anxiety with attribution of cause still externally located, and low relative autonomy. *Identification* processes include conscious valuing without integration into the self, the attribution of cause now internally located, and increased levels of autonomy experienced. *Integration* processes include integration and congruence, the locus of causality internal, and a high sense of autonomy. Given that education typically requires students to learn content and accept social values imposed by others, there is potential value to increased understanding of the processes involved in transitioning students from externally regulated compliance to self-regulated collaboration in the pedagogical process.

The second aspect of SDT that is particularly relevant for educators is its careful analysis of context and students' experience of that context. This delineation clarifies the role an educator can serve in increasing students' sense of autonomy and self-regulated behavior. The specification of autonomy, competence, and relatedness as fundamental needs is accompanied by potential methods of capitalizing on these needs to facilitate the integration of extrinsically motivated behaviors (Ryan & Deci, 2000). Educators can facilitate student self-determination with extrinsically motivated tasks by using relationships, setting up students for success in course tasks (via scaffolding of lessons and

attention to developmental level), and orchestrating student opportunities for decision making and other authentically autonomous experiences.

Support for SDT across age levels is found in studies showing that teacher and administrator use of autonomy-supporting methods predict motivational processes and subsequent achievement (Grolnick, Ryan, & Deci, 1991; Guay & Vallerand, 1997). Furthermore, students taught using directed, but noncontrolling methods exhibited greater rote learning, greater interest, and increased conceptual learning, presumably due to increased levels of autonomy (Grolnick & Ryan, 1987). Further support for SDT is indicated in that high-ability students, who were uncertain about their ability or felt externally controlled, reported anxiety and anger toward school; whereas, in contrast, students certain of their ability and experiencing autonomy reported feelings of curiosity and increased persistence with academic tasks (Miserandino, 1996). Finally, consistent with SDT, main effects on test performance, processing depth and persistence, and a synergistic interaction effect for deep processing and test performance were found in expected directions, which were consistent with the intrinsic or extrinsic nature of student goals and level of experienced autonomy (Vansteenkiste, Simons, Lens, Sheldon, & Deci, 2004). Complementary theory and research supports the positive impact of mastery or learning goals versus performance goals on persistence and continued motivation with academic tasks (Maehr & Meyer, 1997; Maehr & Midgley, 1996; Meece, Blumenfeld, & Hoyle, 1988).

Relationship Between Motivation and Engagement

Although interest in engagement has increased recently, its distinction from motivation remains subject to debate. As one conceptualization, motivation has been thought of in terms of the direction, intensity, and quality of one's energies (Maehr & Meyer, 1997), answering the question of "why am I doing this?" for a given behavior. In this regard, motivation is related to underlying psychological processes, including autonomy (e.g., Grolnick & Ryan, 1987; Skinner et al., 1990), relatedness/belonging (e.g., Goodenow, 1993a, 1993b; Goodenow & Grady, 1993), and competence (e.g., Schunk, 1991). In contrast, engagement is described as "*energy in action*, the connection between person and activity" (Russell, Ainley, & Frydenberg, 2005, p. 1). Engagement reflects a person's active involvement in a task or activity (Reeve, Jang, Carrell, Jeon, & Barch, 2004). To illustrate this distinction as it pertains to reading tasks, motivational aspects include (a) perceived reading competency; (b) perceived value of reading in order to obtain larger goals (better grades, parent/teacher praise); and (c) perceived ability to succeed at the reading task, among others (Guthrie & Wigfield, 2000). Engagement aspects include the number of words read or the amount of text that was comprehended with deeper processing of the content. Engagement is about relationships (Sinclair et al., 2005); it is not considered a "solo activity" (Yazzie-Mintz, 2007, p. 1) and demands a person-environment fit (Reschly & Christenson, 2006a, 2006b). Motivation and engagement are separate but not orthogonal—one could be motivated but not actively engaged in a task (Connell & Wellborn, 1991; Furrer & Skinner, 2003). Motivation is thus necessary, but not sufficient for engagement.

Although motivation is central to understanding engagement**,** the latter is a construct worthy of study in its own right. Furrer and colleagues (2006) noted the importance of viewing engagement within a motivational framework because engagement can change via cyclic interactions with contextual variables and influence later academic, behavioral, and social outcomes, which are the products of these context-influenced changes in engagement. Figure 1 represents the cyclical relations among level of engagement, as well as the quality and quantity of support received from the context en route to expected outcomes. This model uses Connell and Wellborn's (1991) framework with student-perceived control (Skinner et al., 1990).

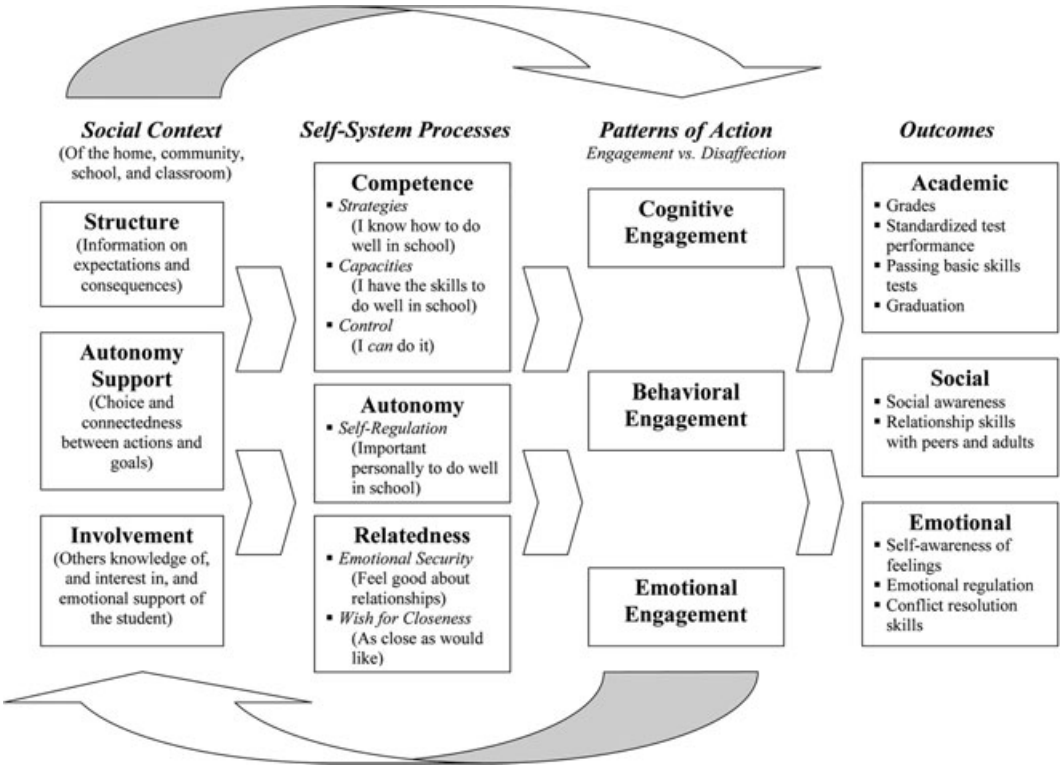

FIGURE 1. Self-processes model applied to educational settings. *Note.* Adapted from Connell & Wellborn (1991, p. 54); Skinner, Wellborn, & Connell (1990); Furrer, Skinner, Marchand, & Kindermann (2006); and Appleton, Christenson, Kim, & Reschly (2006).

CRITICAL CONCEPTUAL AND METHODOLOGICAL CONSIDERATIONS

How student engagement is conceptualized, the importance of multiple engagement subtypes, and its applicability for all students is paramount to advancing the use of this construct and improving academic, social, and emotional learning outcomes for students. The role of contexts in facilitating student engagement also cannot be ignored. First, attention should be paid to the current use of the terms *student engagement* and *school engagement* in recent literature (Appleton, Christenson, Kim, & Reschly, 2006; Christenson et al., 2008; Fredericks et al., 2004). Our position is that the use of the terms *student engagement* is preferred over *school engagement* because schools engage students as learners, and they are engaged to varying degrees. Schools have holding power for students; thus, school policies and practices can (and in some situations must) foster engaging climates, especially for disconnected youth. Also, the use of school engagement may emphasize influences of the school setting while minimizing the focus on family and community/neighborhood influences. An alternative referent, *student engagement with school,* suggests a broader term that could draw attention to academic activities away from the school setting (e.g., mathematics used to build a faster enduro go-kart) and to school-related influences that are more distal to the school setting per se (e.g., a community mentality that "book learning" is less important than learning an industrial trade). In addition, the mandated school years are but one developmental experience, one time period, and one perspective—student engagement is relevant across the life trajectory of an individual (Furlong et al., 2003). Perhaps others use school engagement because although engagement is conceptualized

as an aspect of both the individual and the environment, the educational context is viewed as seminal (Fredricks et al., 2004).

Second, the importance of multiple engagement subtypes is evident across researchers with the work of Fredericks and colleagues (2004) propelling this notion by arguing for its status as a *meta*construct. The factors described previously (i.e., participation, motivation, relatedness) provide useful exemplary components with which to illustrate the potential of student engagement as a metaconstruct. Examining participation, motivation, and relatedness via separate lines of research supports a fine level of specificity of conceptualization and nuanced measurement, yet could sacrifice an understanding of how these constructs interact within the school environment. Part of the potential of a student engagement metaconstruct lies in its capacity to examine how subsumed constructs interact and in determining the outcomes associated with differing patterns of interactions (configurations of types of engagement) (Fredericks et al., 2004). This integrative nature offers promise for intervention design.

Compelling research involving nearly 30,000 students in grades 6 to 8 from 304 Chicago public school provides a poignant example of the necessity of examining components of engagement in combination (Lee & Smith, 1999). Using 1-year achievement gains in mathematics and reading to gauge learning, student level of perceived social support for learning from teachers, parents, peers, and the community, in and of itself, did not relate to student learning. Likewise, the other instrumental variable in this study, academic press (operationalized as teacher perception of the school's focus on challenging students academically and the student's perception of being challenged academically), in and of itself, did not lead to learning. What was related to substantial increases in learning was the *combination* of academic press and social support for learning. Clearly, a very important aspect of the metaconstruct of student engagement is its multidimensionality, with both the more (i.e., academic and behavioral engagement) and less overt (i.e., cognitive and psychological engagement) subtypes relating to important outcomes.

Yet, in examining engagement, the majority of research has focused on more observable indicators that are related to academic and behavioral engagement; in fact, these two engagement subtypes were the primary dependent variables included in the Check & Connect projects (Sinclair et al., 1998, 2005). Although less research has focused on cognitive and psychological subtypes of engagement (in comparison to academic and behavioral indicators), there is evidence suggesting their importance to school performance. For example, a robust relationship was found between cognitive engagement and both personal goal orientation and investment in learning (Greene & Miller, 1996; Greene, Miller, Crowson, Duke & Akey, 2004), which, in turn, was associated with academic achievement (Miller, Greene, Montalvo, Ravindran, & Nichols, 1996). Similarly, psychological engagement was associated with adaptive school behaviors, including task persistence, participation, and attendance (Goodenow, 1993a). In general, students who feel connected to and cared for by their teachers report autonomous reasons for engaging in positive school-related behaviors (Ryan, Stiller, & Lynch, 1994). Given these findings, it would seem necessary to move beyond indicators of academic and behavioral engagement to understanding the underlying cognitive and psychological needs of all students (see National Research Council & Institute of Medicine, 2004, p. 212, for further support).

Third, the relevance of the engagement construct for all students (not merely those at risk of dropping out) is bolstered by high school reform efforts that explicitly underscore students' motivation to learn (Brophy, 2004). Admittedly, a conceptual shift is necessary to increase focus on student engagement, especially in this period of high-stakes school accountability. If dropping out involves a gradual process of disengagement from school, school completion is presumably facilitated by continued, if not increasing, engagement over a student's time in school. Research has emphasized the examination of indicators of more overt subtypes of engagement—academic and

behavioral—even while knowledge of more internal subtypes of student engagement—cognitive and psychological—may enhance timely, effective interventions. Engagement in general, and cognitive and psychological subtypes, specifically, seem especially helpful as a framework for preventing school dropout and promoting school completion, especially for apathetic learners who do not see the relevance or value of school or discouraged learners who have experienced extreme frustration trying to perform better and now lack confidence as a learner. The cyclical nature of engagement implies that both early efforts to engage students, as well as the failure to do so, may have led to drastically different outcomes later in a student's educational career. However, comparing motivation and engagement, they are not the same construct. Engagement fits well as an essential pathway in a process through which motivational and other constructs influence important school-related outcomes. Nonetheless, whether this process should be defined by the constructs at its roots or its vital engagement pathway remains the subject of future debate.

Finally, several researchers posit that engagement is a mediator between contextual influences (i.e., facilitators) and desired learning outcomes such as academic achievement (Appleton et al., 2006; Christenson et al., 2008; Fredericks et al., 2004). Yet, the distinction between indicators of engagement and facilitators of engagement identified among the set of alterable predictors of school completion highlights the role of school, family, and peer contexts in closing any engagement definition gap. *Indicators of engagement* that convey a student's degree or level of connection with school and learning, such as attendance patterns, accrual of credits, and problem behavior, are represented in engagement subtypes. In contrast, *facilitators of engagement* are contextual factors that influence the strength of the connection, such as school discipline practices, parental supervision of homework completion, and peer attitudes toward academic accomplishment. Examining facilitators of engagement has implications for intervention practice and policies, while indicators of engagement can guide identification procedures—initiating referrals at the first signs of withdrawal—and monitor the progress of individual students and programs. Crucial to efforts to monitor the engagement of *all* students is the determination of the most predictive indicators and influential facilitators across *relational contexts* and *over time* (Eccles et al., 1993; Reis, Collins, & Berscheid, 2000). Attention to student development across diverse student subgroups is vital to maintaining a school context with sufficient holding power to engage all students.

As suggested throughout this discussion, the need for definitional clarity is pressing. Although research is increasing, variations of researcher perceptions of the engagement construct are also producing a conceptual blurring and inconsistency in the terms' use across studies (Fredericks et al., 2004; Jimerson et al., 2003). Equally notable is the ease and frequency with which concepts seem to be included as engagement subtypes and the anomalous circumstances under which concepts are excluded with any sort of certainty. Perhaps this is due to the underlying metaconstruct nature of engagement, or perhaps there is a need for a stricter definition. Hinde (1979) once described relationship science as a "conceptual jungle." In its current state, the engagement construct seems to be in such a jungle. Such a research crossroads, although challenging, provides an opportunity to empirically and theoretically refine and clarify this construct.

The number and configuration of engagement subtypes provide another source of inconsistency and conceptual haziness. Engagement has regularly been believed to involve both behavioral (e.g., participation) and affective (e.g., identification with school) components (Audas & Willms, 2001; Finn, 1989, 1993), with some theorists conceptualizing similar components, but labeling "affective" as "psychological" (Newmann et al., 1992; Willms, 2003). Others retain a two-component structure (using "attitude leading to" and "behavior of" participating in the school's programs), but do not clarify whether that attitude is primarily affective or cognitive (Mosher & MacGowan, 1985). Some theorists and reviewers have noted a cognitive aspect in addition to behavioral and affective components (Chapman, 2003; Connell & Wellborn, 1991; Fredericks et al., 2004; Furlong et al.,

2003; Jimerson et al., 2003; Klem & Connell, 2004). Finally, others include behavioral, cognitive, and psychological (affective) subtypes, but further differentiate an "academic" aspect (e.g., accrual of credits toward graduation) (Christenson & Thurlow, 2004; Yazzie-Mintz, 2007). It may be that consensus will only be achieved for the multidimensional aspect of student engagement, and, if so, researchers will need to define clearly their conceptualization in each study. Vagueness can no longer be allowed; the type of engagement must be understood relative to each research finding. We favor a comprehensive conceptualization.

On a positive note, although there are considerable differences in the conceptualization of engagement and its subtypes, Klem and Connell (2004) argued that despite these differences, there is strong empirical support for the connection between engagement, achievement, and school behavior across levels of economic and social advantage and disadvantage. Engaged students tend to earn higher grades, perform better on tests, and drop out at lower rates, while lower levels of engagement place students at risk for negative outcomes such as lack of attendance, disruptive classroom behavior, and leaving school (Klem & Connell, 2004). It is promising that across varied conceptualizations of student engagement with school, there is promising empirical support for the construct's relations with important social, emotional, and academic outcomes.

Yet, growing interest in, and excitement about, the construct must be tempered by the numerous measurement issues that persist with student engagement. Of utmost importance is that there are few instruments to measure student engagement and equate with expected outcomes; two exceptions are the Student Engagement Instrument (Appleton et al., 2006) and the HSSSE (Yazzie-Mintz, 2007). Both measures gather the perspective of the student. Because their perspective is queried rather than inferred, it may be a more valid way to understand students' experiences and meaning in the learning context, especially about students' personal competency beliefs, desire to persist toward goals, and sense of belonging (Appleton et al., 2006; Bronfenbrenner, 1992). The value of consistent use of psychometrically sound measures would help remediate the current situation where the same scale items have been used to represent different subtypes of engagement across studies (Jimerson et al., 2003). Perhaps the most imperative and pressing direction for future research involves establishing construct validity for student engagement. Much work remains to clarify the promising engagement construct and improve consistent measurement across research groups. The constancy of the construct across researchers—in conceptualization and measurement—is vital. Failure to achieve clarification and consistency may obscure a construct of considerable potential within a proliferation of competing conceptualizations.

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