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## Engagement and Disaffection as Organizational Constructs in the Dynamics of Motivational Development

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The study of children's motivation in school is a vibrant area of research, replete with rich theories and complex constructs (Eccles, Wigfield, & Schiefele, 1998; Wigfield, Eccles, Schiefele, Roeser, & Davis-Kean., 2006). The lion's share of this work focuses on individual differences, attempting to identify the forces, originating from many levels, that shape student motivation. A wide array of factors have been identified (Deci, 1992; Eccles et al., 1998; Heckhausen, 1991; Pintrich, 2003; Pintrich & Schunk, 2003; Reeve, 2005; Weiner, 1986), including individual factors such as self-efficacy, values, achievement goals, self-regulatory style, identification, and feelings of belonging. Moreover, factors outside the person, from their social contexts, have also been found to shape motivation, factors such as contingencies, rewards, goal structures, the nature of academic tasks, autonomy support, involvement of authority figures and peers, school climate, warmth, structure, psychological control, and relationship style. General process models have guided the study of how subsets of these factors are linked to each other, examining their unique and interactive effects and exploring how they mediate each other in predicting academic success.

This work has a strong developmental bent, with the expressed goal of documenting age differences and changes in motivation itself and in each of the contributing factors, tracing their trajectories across a student's entire academic career (Eccles & Wigfield, 2002; Wigfield et al., 2006). The resulting picture is clear but not encouraging. Research reveals that children's interest, enthusiasm, and intrinsic motivation for learning in school deteriorate continuously from their entry into kindergarten until they complete high school (or drop-out), with striking losses during the transitions to middle school and high school (for reviews, see Eccles et al., 1998; Wigfield et al., 2006). The erosion of motivation is especially severe for boys and for students from low socioeconomic, minority, and immigrant backgrounds (Finn, 1989; Meece & Kurtz-Costes, 2001; Spencer, 2006; Taylor, Casten, Flickinger, Roberts, & Fulmore, 1994; Wigfield et al., 2006; Wooley & Bowen, 2007).





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Researchers have succeeded in identifying many of the factors responsible for these developments. They appear to reflect normative age changes (e.g., puberty, cognitive developments, increasing interest in other activities, such as peers and romantic relationships) as well as social institutional decisions (e.g., changes in schools so that they become more bureaucratic, impersonal, and controlling). The most complete accounts are provided by explanatory theories of stage-environment fit, in which it is argued that systemic social changes in schools, especially during middle school and high school, are in direct opposition to changing developmental needs of youth for increasing autonomy, self-regulation, and connection (Eccles, 2004; Jackson & Davis, 2000; National Research Council, 2004; Wigfield et al., 2006).

Implicit in much of this work is the idea that academic motivation is not a reflection of a fixed characteristic of the child, but instead is a product of the interaction among a host of internal and external factors, many of which are changing across time (Dornyei, 2000; Ford, 1992). In other words, it may be useful to consider these elements part of a motivational system, which gives rise to the quality of a student's academic beliefs, values, and actions in school. The goal of this chapter is to bring into focus a view of the motivational system as dynamic, iterative, and changing over time. To do so, we argue that the constructs of *engagement and disaffection* must be more fully articulated and integrated into theories of motivational development, because they play a critical role in organizing the dynamics of the system.

We make our case in three sections. First, we present a motivational conceptualization grounded in action theory that depicts engagement and disaffection as a set of proximal processes (Bronfenbrenner & Morris, 1998) describing the quality of children's interactions with academic activities. We identify the defining features of engagement and disaffection, and argue that they represent the outward manifestation of motivation. Second, to support the argument that engagement and disaffection are central to an understanding of motivation, we briefly review major theories of motivation and point out that every one of them contains constructs corresponding to engagement. Third, we show how engagement itself, because of its reciprocal relations with the intrapsychic and interpersonal factors that shape motivation, organizes the motivational system and is responsible for the dynamics of its differential development. We explore how key motivational resources and vulnerabilities may emerge from these dynamics at different points in development, and conclude by enumerating the challenges to studying and promoting the development of the entire motivational system.

As subtext throughout this chapter is the conviction that a focus on engagement offers researchers the opportunity to construct a comprehensive conceptualization of motivation which integrates the many individual and interpersonal factors studied to date. We believe that the explicit inclusion of engagement has the potential to move the field forward: to move beyond theories and research implying that motivation is the product of static (mostly intrapsychic) characteristics, such as self-perceptions, and toward conceptualizations that have the potential to begin integrating individual difference, process, and developmental views of motivation, eventually leading to studies that explicitly investigate their dynamics.

### **A Motivational Perspective on Engagement and Disaffection**

There is, of course, no single correct definition of *engagement*. In recent years, the concept has emerged as a leitmotif in research attempting to identify the factors that promote academic achievement and resilience, and protect adolescents from drop-out and delinquency (Fredricks, Blumenfeld, & Paris, 2004; Jimerson, Campos, & Greif, 2003; Maddox & Prinz, 2003). For edu-





cational psychologists, a focus on engagement represents a shift away from research showing that the personal status characteristics of students (such as ethnicity or socioeconomic status) are the primary predictors of their achievement and school completion, and towards the investigation of potentially malleable processes that schools can target in interventions (Finn & Voelkl, 1993; Newmann, Wehlage, & Lamborn, 1992). As underscored by Sinclair, Christenson, Lehr, and Anderson (2003), “engagement is not conceptualized as an attribute of the student, but rather as a state of being that is highly influenced by contextual factors, such as policies and practices of the school and family or peer interactions” (p. 31).

### *Engagement as a Motivational Construct*

Of most interest to motivational researchers are conceptualizations that target the core features of motivation. The study of motivation is most fundamentally concerned with psychological processes that underlie the energy (vigor, intensity, arousal), purpose (initiation, direction, channeling, choice), and durability (persistence, maintenance, endurance, sustenance) of human activity. Hence, motivational conceptualizations of engagement are ones that capture the target definitional manifestations of motivation—namely, energized, directed, and sustained action. A core argument of this chapter is that “action” is the reflection of human motivation, with engagement versus disaffection perhaps the central manifestations of ongoing motivated actions (Wellborn, 1991). That is why constructs of engagement and disaffection should be (and always have been) central to theories of motivation.

### *The Concept of Action*

In asserting that engagement, and “actions” more generally, are a reflection of human motivation and are energized and directed by motivational processes, the term “action” does not refer to its common language usage, as a synonym for “behavior.” Instead, it refers to the notion of “action schema” from the long European theoretical tradition of action theories (Boesch, 1976; Brandstädter, 1998; Chapman, 1984; Frese & Sabini, 1985). Compared to behavior, “action” is a more complex construct: It incorporates behavior (or physical gestures), but also requires simultaneous consideration of emotions, attention, and goals. Actions are goal-directed and the same behavior is part of different actions if it is deployed in the service of different goals. For example, the behavior of clapping, depending on the intention, can be part of “expressing appreciation,” “a request for silence,” or “getting rid of a mosquito.” By the same token, very different behaviors, if they serve the same function, can belong to the same type of action. For example, breathing deeply, counting to 10, and taking a walk, since they all exert a calming function, can be considered part of the same action category.

Action theories are based on the idea that the natural unit of analysis for conceptualizing transactions between people and their social contexts is not “behavior” but “action.” The main idea is that goals and emotions energize and direct attention and behavior, and it is this amalgam that reflects an individual’s motivation. Action theories deal with motivated actions that are not expressed overtly by using the concept of “action tendencies” or “action readiness;” these are defined as desires, urges, or wishes to act, that unless constrained by internal or external regulatory forces, will be expressed as actions. Actions are available to many levels of regulation, from automatized action tendencies to reflective conscious voluntary processes.

A key tenet of action theories is that actions (and not behaviors) are the features of individuals





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to which the social context responds (Brandtstädter, 1998). For example, perceivers infer actor's intentions in order to distinguish actions that are "accidents" from those that are "on purpose." Likewise, teachers and parents respond differently to willing versus unwilling compliance with requests (Kochanska, Aksan, & Carlson, 2005), favoring, of course, willing cooperation. Passivity based on fear and anxiety is treated differently than passivity based on defiance or boredom (Furrer, Kelly, & Skinner, 2003). Even homework assignments "respond" differently to efforts that are fully-focused versus half-hearted. Basing conceptualizations of engagement in action theories allows the integration of intensity of behavior with emotion, attention, and intention as constitutive elements of the qualities of motivation.

### *Motivational Conceptualizations of Engagement*

From these definitional features of action follow the idea that motivational constructs of engagement should include not only behavior, but also attention and emotions; that engagement should describe an individual's interactions with important features of the environment; and that engagement should include both the initiation of motivated action and its durability in the face of obstacles or difficulties. Hence, for motivational theorists, of most interest are conceptualizations of engagement that have at their core definitions that encompass students' constructive, enthusiastic, willing, cognitively-focused participation in learning activities. From this perspective, the behavioral dimension of engagement includes effort, intensity, persistence, determination, and perseverance in the face of obstacles and difficulties; emotional or affective engagement includes enthusiasm, enjoyment, fun, and satisfaction; and cognitive engagement encompasses attention, focus, "heads-on" participation, and willingness to go beyond what is required (see Table 11.1).

### *The Opposite of Engagement*

Motivational conceptualizations sometimes incorporate the opposite of engagement, which is variously referred to as disengagement, alienation, helplessness, passivity, or disaffection (Miceli & Castelfranchi, 2000). The link to motivation is most clear in theories that refer to this state as "amotivation" (Vallerand et al., 1993). Conceptually, the opposite of engagement is *disengagement*, which implies the *absence* of engagement, including the absence of effort or persistence. Hence, disengagement is typically operationalized as passivity, lack of initiation, and giving up, sometimes accompanied by the emotions of dejection, discouragement, or apathy. The best known account of these actions is contained in theories of learned helplessness (e.g., Peterson, Maier, & Seligman, 1993).

However, there are other pathways to disengagement besides helplessness. For example, *alienation* has been used loosely to refer to students' lack of belonging in school. It has also been used more specifically to refer to "low motivation for schooling," which is characterized by low effort and persistence in the classroom, inattention, truancy, and behavioral problems (Murdock, 1999). Theories of self-determination posit that controlling social contexts can also lead people toward opposition, which is a nonautonomous form of withdrawing participation from an activity (Deci & Ryan, 1985). Theories of interest imply that boredom may also be a sufficient condition for lack of effortful involvement. Moreover, sociological theories (Merton, 1953) point out that the experience of being excluded from important realms of participation does not simply produce disengagement or passivity, it results in frustration and alienation (Newmann, 1991). Hence, a full account of engagement deserves a broader conceptualization of its opposite than simply absence





**Table 11.1** A Motivational Conceptualization of Engagement and Disaffection.

	<b>Engagement</b>	<b>Disaffection</b>
<b>Behavior</b>	Action initiation	Passivity, Procrastination
Initiation	Effort, Exertion	Giving up, Withdrawal
Ongoing participation	Working hard	Restlessness
Re-engagement	Attempts	Half-hearted
	Persistence	Unfocused, Inattentive
	Intensity	Distracted
	Focus, Attention	Mentally disengaged
	Concentration	Burned out
	Absorption	Unprepared
	Involvement	Absent
<b>Emotion</b>	Enthusiasm	Boredom
Initiation	Interest	Disinterest
Ongoing participation	Enjoyment	Frustration/anger
Re-engagement	Satisfaction	Sadness
	Pride	Worry/anxiety
	Vitality	Shame
	Zest	Self-blame
<b>Cognitive Orientation</b>	Purposeful	Aimless
Initiation	Approach	Helpless
Ongoing participation	Goal strivings	Resigned
Re-engagement	Strategy search	Unwilling
	Willing participation	Opposition
	Preference for challenge	Avoidance
	Mastery	Apathy
	Follow-through, care	Hopeless
	Thoroughness	Pressured

of engagement. We use the term “disaffection,” which contains a wider range of reactions and includes those stemming from exclusion, helplessness, boredom, and coercion (see Table 11.1; Connell & Wellborn, 1991; Finn, Pannozzo & Voelkl, 1995; Newmann, 1991).

### Summary

An action-theoretical account of motivation conceptualizes engagement as the quality of participation with academic activities. Its positive pole encompasses enthusiastic willing effortful exertion, interest, concentrated attention, and persistence in the face of difficulties and challenge, sometimes referred to as active “hands-on” and “heads-on” learning. Motivational conceptualizations of disaffection depict ways in which students’ withdraw their involvement from learning activities, including physical withdrawal of effort, such as passivity, lack of exertion, simply going through the motions, or avoidance as well as their mental counterparts, such as inattention, lack of concentration, apathy, or daydreaming. Emotional reactions are critical to descriptions of disaffection, because patterns of action differ depending on whether withdrawal is based on anxiety, boredom, shame, frustration, or sadness.

### Engagement and Disaffection as Common Constructs among Motivational Theories

A central argument of this chapter is that all major theories of motivation include as a target some facet of engagement or disaffection. Perhaps surprisingly, however, these constructs are rarely in





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the theoretical foreground (Murphy & Alexander, 2000). Although extensive efforts have been devoted to differentiating the factors that *influence* human motivation, much less attention has been paid to explicitly identifying the factors that *reflect* human motivation. However, each framework has its own set of preferred motivational outcomes, and we argue that, because all theories focus on motivation, every set includes descriptors of the kind of durable, energized, and directed actions that can be described as engaged. Although a review of each of these theories is beyond the scope of this chapter (see Eccles & Wigfield, 2002; Heckhausen, 1991; Pintrich & Schunk, 2003; Reeve, 2005; Weiner, 1986; or Wigfield, et al., 2006), brief descriptions of the features that correspond most closely to engagement and disaffection are highlighted for a selection of major theories. Examples are provided in Table 11.2.

### *Perceived Control, Efficacy, and Causal Attributions*

Motivational theories organized around constructs of control, include theories of self-efficacy, perceived control, and causal attributions (for overviews, see Elliot & Dweck, 2005; Skinner, 1996). These theories have as their goal to predict intentional behavior and affect, most especially action initiation and goal strivings, including active attempts, effort, attention, concentration, and persistence in the face of obstacles versus passivity, giving up, and withdrawal of effort. For example, the major behavioral outcomes of attribution theory are effort and persistence, and causal attributions are considered important predictors of emotions, such as anger and shame (Weiner, 1985, 2005). The primary outcomes of self-efficacy are initiation of action, expenditure of effort, and performance attempts (Bandura, 1977, 1997; Schunk & Pajares, 2005). High perceived control predicts enjoyment, interest, and enthusiasm (Patrick, Skinner, & Connell, 1993) whereas low self-efficacy predicts anxiety and resignation (Bandura, 1977, 1997).

### *Learned Helplessness*

Theories of learned helplessness (Abramson, Seligman, & Teasdale, 1978; Seligman, 1975) have as a major goal to examine the role of expectancies and attributions in the creation of motivational deficits, including passivity, apathy, avoidance, giving up, and failure to respond. The emotional consequences of perceived noncontingency, including sadness and hopelessness, are also defining features of the syndrome of learned helplessness (Peterson et al., 1993). The concept of mastery, as the opposite of learned helplessness (Dweck, 1975, 1999, 2002; Dweck & Molden, 2005), includes effort, persistence, concentration, enthusiasm, and enjoyment.

### *Achievement Expectancies and Value*

Expectancy-value models of achievement (Eccles et al., 1983; Eccles & Wigfield, 1995, 2002; Wigfield & Eccles, 2000, 2002) focus on social psychological influences on achievement strivings, most especially effort, choice, and persistence. Much of this work has focused on elaborating and refining the proximal predictors of motivation, specifically, expectancies for success and task value, to incorporate task-specific beliefs, ability beliefs, and different components of task value. Researchers using these models have been particularly interested in predicting individuals' decision-making and choice (e.g., about what activities to pursue, courses to select, careers to seek).





**Table 11.2** Motivational Theories and Examples of the Constructs that Correspond to Engagement and Disaffection

Motivational Theory (in alphabetical order)	Examples of Behavioral Engagement	Examples of Emotional Engagement	Examples of Engaged Orientation
<b>Achievement Goal Orientations</b> (Elliot, 2005; Meece et al., 2006)	Effort, Exertion, Persistence, Task involvement, Procrastination	Enthusiasm, Enjoyment Anxiety	Selection of challenging tasks
<b>Causal attributions</b> (Weiner, 1985, 2005)	Effort, Persistence Vs. Giving up, Withdrawal	Joy, Anger, Pride, Shame, Guilt	
<b>Effectance motivation</b> (Harter, 1978; White, 1959)	Energized participation	Enthusiasm Joy	Preference for challenge
<b>Engagement in Academic Work</b> (Newmann et al., 1992)	Effort to learn, Active involvement, Participation	Enthusiasm Interest	Concentrated attention Psychological investment
<b>Flow</b> (Shernoff et al., 2003)		Enjoyment Interest	Concentration Absorption
<b>Intrinsic Motivation</b> (Gottfried, 1985; Gottfried et al., 2001)	Task involvement Persistence	Enjoyment Interest	Curiosity Preference for challenging, difficult, novel tasks
<b>Learned helplessness</b> (Abramson et al. 1978; Peterson et al., 1993; Seligman, 1977)	Passivity, Apathy Avoidance Giving up, Failure to respond	Sadness Dejection	Hopelessness
<b>Mastery</b> (Dweck, 1975, 1999, 2002; Dweck & Molden, 2005)	Effort, Persistence Concentration Determination	Enthusiasm Enjoyment	Preference for challenge, Hypothesis testing, Optimism
<b>Participation/Identification</b> (Finn, 1989)	Active behavioral involvement Time and effort expended Initiate interactions	Display of enthusiasm	Expending more time and effort than required
<b>Perceived control</b> (Skinner et al., 1990, 1998)	Initiation of action, Effort, Determination, Persistence	Enjoyment, Interest Enthusiasm	Attention
<b>Self-determination</b> (Deci, 1975; Deci & Ryan, 1985, 2000; Deci et al., 1999)	Participation Persistence Vs. Withdrawal	Enthusiastic, Joyful, Energetic Vs. Anxious, Angry, Rote	Willing, Flexible, Spontaneous Vs. Rigid, pressured
<b>Self-efficacy</b> (Bandura, 1977, 1997; Schunk & Pajares, 2005)	Initiation of action Expenditure of effort Performance attempts	Anxiety Resignation	
<b>Self-system Model of Motivational development</b> (Connell, 1990; Connell & Well- born, 1991)	Effort, Hard work Persistence Vs. Withdrawal, passivity	Enthusiasm, interest. liking Vs. Boredom, sadness, frustration	Attention Concentration Preference for challenge Beyond the call
<b>Value-expectancy</b> (Eccles et al., 1983; Eccles & Wigfield, 1995, 2002; Wigfield & Eccles, 2000, 2002)	Achievement strivings Effort exertion Persis- tence		





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### *Self-Determination*

Organismic theories of motivation assume that people are born with the capacity to engage in activities for their own sake in ways that are spontaneous, flexible, creative, joyful, and energized. “Intrinsic motivation” is used as a term to describe both the source of motivation and its manifestation (Deci, 1975; Harter, 1978). The source of motivation is intrinsic to the person in the sense that all humans are assumed to possess inborn psychological needs, and activities in which these needs can be met are intrinsically motivating. The quality of enthusiastic, flexible, joyful involvement is a hallmark of intrinsic motivation (Deci, Koestner, & Ryan, 1999; Deci & Ryan, 1985, 2000). Recent advances have also investigated the developmental processes by which motivation for activities that were originally extrinsic can be internalized and transformed, thereby allowing it to become more autonomous (Ryan & Connell, 1989; Ryan & Deci, 2000). Target motivational outcomes include the quality of an individual’s participation in learning tasks, as marked by effort, persistence, interest, enjoyment, enthusiasm, and, especially emotional tone (e.g., willing, pressured, or anxious).

### *Achievement Goal Orientations*

Theories of goal orientation focus on individuals’ reasons for engaging in academic tasks, that is, what an individual is attempting to accomplish while involved in a learning activity (Ames, 1992; Blumenfeld, 1992; Dweck & Leggett, 1988; Maehr & Midgley, 1996; Meece, Anderman, & Anderman, 2006; Nicholls, 1984). Although combining the work of several distinct traditions (see Elliot, 2005; Harackiewicz, Baron, Pintrich, Elliot, & Thrash., 2002; Pintrich, 2000; Thorildsen & Nicholls, 1998), there seems to be consensus about the consequences that should be considered in determining their effects: In addition to levels of processing in learning and performance, motivational outcomes include task involvement, effort, exertion, persistence on difficult tasks, selection of challenging tasks, intrinsic motivation, strategy use, passivity, procrastination, and emotions such as anxiety, enjoyment, and enthusiasm.

### *Individual Differences in Intrinsic Motivation*

Theories of academic intrinsic motivation have also been proposed that focus on individual differences between children (Gottfried, 1985; Gottfried, Fleming, & Gottfried, 2001). The target construct concerns enjoyment of school learning characterized by a high degree of task involvement, mastery orientation, curiosity, persistence, and the preference for challenging, difficult, and novel tasks.

### *Student Engagement in Academic Work*

The construct of engagement is featured prominently in some attempts to provide a conceptual framework for planning educational reforms. In this work, as summarized by Newmann and colleagues (1992), “engagement stands for active involvement, commitment, and concentrated attention” (p. 11). These researchers define “student engagement in academic work as 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” (p. 12). Because engagement depicts an “inner quality of concentration and effort to learn...”, “[l]evels of engagement





must be estimated or inferred from indirect indicators such as the amount of participation in academic work (attendance, portion of task completed, amount of time spent on academic work), the intensity of student concentration, the enthusiasm and interest expressed, and the degree of care in completing the work” (p. 13).

### *Participation and Identification*

Participation-identification models of school success emphasize “students’ active *participation* in school and classroom activities and a concomitant feeling of *identification* with school” (Finn, 1989, p. 123). Students’ behavioral involvement in the classroom (e.g., attending, reading, studying, responding to questions), referred to as “level one participation,” is considered the minimal essential ingredient for formal learning to occur; hence, its absence in the early grades is considered a risk factor for school withdrawal. As students continue in school, “level two participation” involves initiation of interactions with the teacher and the display of enthusiasm by expending more time and effort than required.

### *Self-system Model of Motivational Development*

One of the most explicit conceptualizations of engagement can be found in the Self-System Model of Motivational Development (Connell, 1990; Connell & Wellborn, 1991; Deci & Ryan, 1985). This integrative motivational model is based on fundamental human needs and assumes that engagement reflects the extent to which a particular context has been able to tap the underlying reservoir of a student’s intrinsic motivation and to foster the internalization of motivation for activities that were originally extrinsically motivated. The model holds that if schools provide children with opportunities to meet their needs for relatedness, competence, and autonomy, then students will be more engaged with the activities and people in that enterprise (Connell, 1990; Connell & Wellborn, 1991). At the same time, if school is experienced as uncaring, unfair, or coercive, students will feel they are not welcome in school, and that they are not capable of or interested in reaching the goals schools set for them. They will become disaffected and alienated, eventually withdrawing their participation, and when old enough to do so, they will leave, either through absenteeism or by dropping out.

### *Summary*

We argue that all major models of motivation have a set of target actions in common that include initiation, exertion, concentrated attention, and persistence as well as feeling states, such as interest, enthusiasm, and enjoyment. Some theories also include their opposites, such as passivity, apathy, procrastination, giving up, going through the motions, anxiety, frustration, and boredom. Taken together, these actions, referred to as engagement and disaffection, capture an important set of descriptors of energized, directed, and persistent actions (and their opposites), and hence, can be considered core foci of all theories of motivation.

### **Engagement and Disaffection as Key Components of the Motivational System**

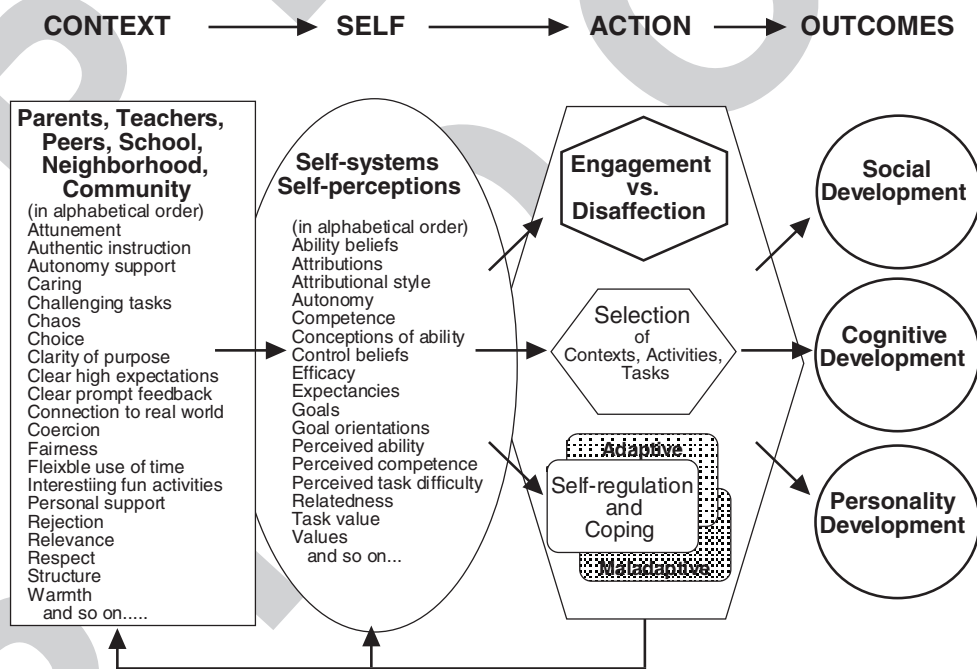
Despite apparent differences among the target phenomena of models of motivation, the promise of a common thread, embodied by the constructs of engagement and disaffection, has the potential



to allow meaningful integration across conceptual systems (Ford, 1992; Wigfield & Eccles, 2002). If all models have in common certain classes of constructs, this allows for the creation of a general framework organized around the general classes of action (engagement) as well as its antecedents, namely, context (interpersonal factors) and self (intrapsychic factors), and its outcomes (learning and development; Connell, 1990; Connell & Wellborn, 1991; Skinner, 1995). Despite the fact that each of these elements is itself multidimensional, a general framework can be used to collect from motivational theories the many constructs that depict the kinds of contextual supports that should facilitate engagement and the many intrapsychic processes hypothesized to mediate their effects. A selection of these is included in Figure 11.1.

**Context**

The social contexts that shape motivational development (like the contexts that shape all aspects of children's development) consist of a collection of partially nested settings, filled with social partners and activities (Ames, 1992; Anderman & Anderman, 2000; Bronfenbrenner & Morris, 1998). For academic engagement, the microsystem of greatest interest is the classroom, which contains important social partners (the teacher, friends, peers, and classmates) and learning activities, along with the rules and routines that regulate them, such as task assignments, group projects, authority relations, rules of conduct, norms of participation, recognition systems, and instructional and grading practices (Turner & Meyer, 2000). Children usually move between multiple classrooms, and classrooms are nested within schools which contain additional social



**Figure 11.1** A general process model of motivation that distinguishes the social contexts and self-systems that facilitate and undermine motivation from engagement vs. disaffection and other indicators of motivated action, such as selection and self-regulation, and developmental outcomes.



partners, activities, and rules, as well as higher-order properties such as school climate or racial composition. The school in turn is embedded in a community, with its own economic and cultural attributes. Other settings, most particularly the home and neighborhood (e.g., block or street), also contain important social partners and activities.

Of great interest is the depiction of the specific motivational supports or hindrances that these social partners and activities provide. For example, the Self-system Model of Motivational Development posits that involvement, caring, structure, and autonomy support promote engagement whereas hostility, inconsistency, coercion, and neglect fuel disaffection. In a similar vein, work on goal structures has suggested multiple channels (through the use of various instructional, recognition, evaluation, and group strategies) by which teachers create classroom environments that communicate to students the purposes of learning. Since engagement depicts a child's interactions with learning activities, a critical social partner to scrutinize is the nature of the academic work itself (Wigfield et al., 2006). Engagement is facilitated by learning activities that are challenging, fun, meaningful, relevant, connected to that child's interests and real life, socially embedded (e.g., group- or dyadically-based), cumulative (e.g., project-based learning), and result in tangible share-able outcomes (e.g., books, exhibits, demonstrations).

The idea of a motivational system suggests that these different features of classrooms and relational contexts cannot be considered in isolation from each other. Instead, they work together to create a holistic message to students (Turner & Meyer, 2000), the meanings of which can be deciphered with reference to the relevant self-system processes. To what extent do teachers and classrooms communicate to students that the purpose of school is mastery versus the appearance (demonstration or protection) of ability? To what extent do they communicate to children and youth that they belong? That they are capable of academic success? That learning is fun, relevant, important, and connected to their own long-term goals? The general model in Figure 11.1 emphasizes the cumulative effects of these various inputs from multiple social partners, suggesting that contexts can be synergistically positive or negative in their effects, and that inputs from one context may cancel out, compensate for, or amplify the effects of another.

### *Self*

Because most major theories of motivation today focus on cognitions as proximal predictors of motivation (Murphy & Alexander, 2000; Pintrich, 2003; Wigfield, et al., 2006), the most elaborated components of the motivational system are cognitive appraisals, beliefs, and self-perceptions. These appraisals are actively constructed from a history of interactions with the social context, and so are "hot" cognitions, durable and potent internal representations of apparent reality, imbued with emotion and meaning (Skinner, 1995). They are key parts of the motivational system because they filter an individual's experiences of their social interactions and they reveal whether children find the activities or tasks at school to be meaningful, possible, desirable, or fulfilling their psychological needs. Attitudes, values, and beliefs about the self and activities are among the most important proximal predictors of engagement and disaffection.

### *Action*

The constructs of engagement and disaffection are central to all motivational models, but they do not necessarily capture the full range of possible motivational targets (Fredricks et al., 2004). Many of the theories described previously emphasize additional components as well: For example, self-





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determination theory accentuates flexible and creative versus pressured and unwilling involvement (Deci & Ryan, 1985); theories of learned helplessness often underscore the volitional deficits that accompany experiences of noncontingency (Dweck, 1999; Kuhl, 1984); and some educational theories highlight the development of a psychological or orientation component that includes identification, commitment, and psychological investment (Finn, 1989; Newmann, 1991).

In fact, at least two entire classes of motivated actions can be identified that are not typically included in definitions of engagement (but see Fredricks et al., 2004): (a) choice or selection of tasks, activities, or goals (Eccles, 1993, 2005; Eccles et al., 1998; Wigfield, et al., 2006), which is a key manifestation of the direction of action; and (b) action regulation or the intentional management and guidance of action in the face of (anticipated) obstacles or difficulties, which is studied in the academic domain as self-regulated learning (Schunk & Zimmerman, 1994) or academic coping (Skinner & Wellborn, 1994, 1997). In general, strategies of self-regulated learning reflect the intentional deployment of constructive engagement, and coping can be considered processes of re-engagement or disaffection in the face of challenges and threats. As depicted in Figure 11.1, the general motivational model creates a place for additional classes of motivated actions, including choice, action regulation, and coping, whether or not they are collectively referred to as engagement and disaffection.

### The Dynamics of Motivational Systems

A key argument of this chapter is that engagement and disaffection not only reflect motivation but they also play a causal role in the motivational system. As can be seen in Figure 11.1, engagement: (a) contributes directly to learning and development, (b) mediates the effects of individual and contextual factors on short- and long-term outcomes, and (c) exerts an impact on changes in subsequent contextual (and perhaps even individual) factors. Empirical evidence supports the role of engagement in each of these causal processes.

### *Engagement and Disaffection as Proximal Processes*

In their discussion of bioecological systems perspectives on development, Bronfenbrenner and Morris (1998) argue that the primary engine of all development are “proximal processes,” which they define as “progressively more complex reciprocal interaction between an active, evolving biopsychological human organism and the persons, objects, and symbols in its immediate external environment” (p. 996). Engagement and disaffection, which describe children’s and youth’s daily interactions with academic activities, are proximal processes.

Over time, they are the process mechanisms through which development occurs in schools—most obviously, cognitive development or learning. It is through sustained high quality participation with academic materials, tasks, teachers, and classmates that children learn. For this reason, motivational researchers have begun to focus on the nature of academic work (such as classroom activities, projects, homework) as a critical factor in children’s motivation (e.g., Lepper & Cordova, 1992; see Wigfield et al., 2006 for a review). If engagement is to contribute to high quality learning, it needs to be with tasks, activities, and people from whom the student can learn something. In keeping with this analysis, research has shown that students’ active effortful engagement in learning activities predicts important academic outcomes, including school grades and achievement test scores (Connell, Halpern-Felsher, Clifford, Crichlow, & Usinger, 1995; Jimerson et al., 2003; Ryan, 2000; Skinner, Zimmer-Gembeck, & Connell, 1998; Wentzel, 1993), attendance and





retention (Connell, Spencer, & Aber, 1994; Pierson & Connell, 1992; Sinclair et al., 2003), and academic resilience (Finn & Rock, 1997; for a review, see Fredricks et al., 2004).

### *Engagement as a Mediator of the Effects of Motivational Processes*

A second way in which engagement and disaffection organize the motivational system is that they are the action outcomes of motivational processes, and as such they are critical mediators in all theories of motivation in school. It is possible to take the position that no intrapsychic process or interpersonal condition can have an effect on learning or development, unless it first has an impact on engagement. For example, no matter how competent a child perceives herself to be, these perceptions will not have an impact on that child's development unless they lead the child to constructively engage in activities in ways that produce actual learning. Correspondingly, no matter how autonomy supportive a teacher may be, this support will not contribute to learning and development unless it shapes student engagement. From this reasoning, it follows that all process theories of motivational development require an action component, like engagement and disaffection, task choice, or strategies of self-regulated learning and coping (Dornyei, 2000). A growing body of research has shown that these action components mediate the effects of self-system processes and contextual conditions on performance and achievement (e.g., Connell et al., 1994, 1995; Covington & Dray, 2002; Eccles & Wigfield, 2002; Furrer & Skinner, 2003; Patrick et al., 1993; Skinner, Wellborn, & Connell, 1990; Skinner et al., 1998).

### *Engagement as a Contributor to the Reactions of Social Partners*

A third way in which engagement and disaffection organize the motivational system is through their feedback effects on social partners, especially teachers. The central idea is that students' engagement in the classroom is a valued energetic resource that teachers notice and to which they respond with warmth and involvement. In contrast, student disaffection is aversive and tends to elicit criticism or withdrawal of attention. The few studies that have used experimental or longitudinal designs to examine these reciprocal effects have typically found them, in kindergarten (Ladd, Birch, & Buhs, 1999), elementary (Skinner & Belmont, 1993) and middle school (Altermatt, Jovanovic, & Perry, 1998; see Furrer Skinner, & Kindermann, 2007, for a review). Students who are more highly engaged solicit increased attention, autonomy support, and high quality teaching from their teachers (Birch & Ladd, 1996; Reeve, 2005). At the same time, students who are more disaffected tend to lose their teachers' involvement over time (Furrer et al., 2003; Pelletier & Vallerand, 1996; Schutz & DeCuir, 2002). It should be noted that the effects of engagement on social partners extend beyond teachers to include parents and peers. For example, research shows that students who are more engaged select and are selected by more engaged peer groups (Kindermann, 1993, 2007).

### **Differential Development of Motivational Systems**

Taken together, these links form a system organized around cycles, bouts, or episodes of engagement with academic activities in the classroom (Ford, 1992; Skinner, 1995). In these cycles, children who start school rich in motivational resources through the quality of their engagement become richer as they progress through school, whereas children poor in motivational resources through their disengagement with learning activities become progressively poorer. Such cycles





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have been documented most clearly in work on perceived control. For example, in our own research (e.g., Schmitz & Skinner, 1993; Skinner, 1995; Skinner et al., 1990, 1998), time series and longitudinal studies have shown that children who evince high levels of efficacy and confidence are more likely to engage with learning tasks and cope with difficulties in ways (referred to as “mastery-oriented”) that allow them to be more successful and to learn more, thereby verifying their initially high perceptions of control. At the same time, students who doubt their capacities are more likely to participate in learning tasks and deal with challenges and obstacles in ways (referred to as “helpless” or avoidant) that interfere with their success in schoolwork and the development of competencies, thereby cementing their initially low sense of control. Over time, these amplifying loops (or virtuous and vicious cycles) can contribute to patterns of differential motivational development that increase the gap between the haves and have-nots (Dweck, 1999; Dweck & Molden, 2005; Skinner, 1995).

Hence, engagement is a critical construct organizing the development of the entire motivational system (Connell, 1990; Connell & Wellborn, 1991; Finn, 1989; Finn & Voelkl, 1993; Marks, 2000; Newmann, 1991; Ryan & Patrick, 2001; Skinner, 1995; Skinner et al., 2008; Wigfield, Eccles, & Rodriguez, 1998). The arc of an individual’s trajectory of engagement over their school career is one indicator of motivational development, and individual differences in these trajectories are strong predictors of withdrawal and eventual dropout from school (Connell et al., 1994, 1995; Jimerson et al., 2000; Marks, 2000). Underlying (and creating) these trajectories are the dynamics of motivational development. The support provided by social contexts and partners, through its effects on children’s appraisals, shapes children’s engagement in academic activities; this engagement has a feed-forward effect on children’s own learning and eventual development, as well as a feed-back effect on their self-systems and social partners. These motivational cycles, reinforcing and amplifying themselves over time, are responsible for the motivationally rich becoming richer, and to some extent, may help explain the ever tightening links among social support, self-perceptions, motivation, performance, and development.

### *Emergence of Motivational Resources and Liabilities*

These engagement episodes or cycles have the effect of maintaining themselves at a steady state (Ford, 1992) or of creating successive increments and decrements in their components over time, as suggested by research that documents strong interindividual stability of motivational processes as well as parallel trajectories of teacher support, children’s self-perceptions, engagement, and achievement over the school year and over many years (e.g., Hamre & Pianta, 2001; Jacobs, Lanza, Osgood, Eccles, & Wigfield, 2002; Kowaleski-Jones & Duncan, 1999; Roeser, Strobel, & Quihuis, 2002; Skinner et al., 1998; Trautwein, Lüdtke, Kastens, & Köller, 2006).

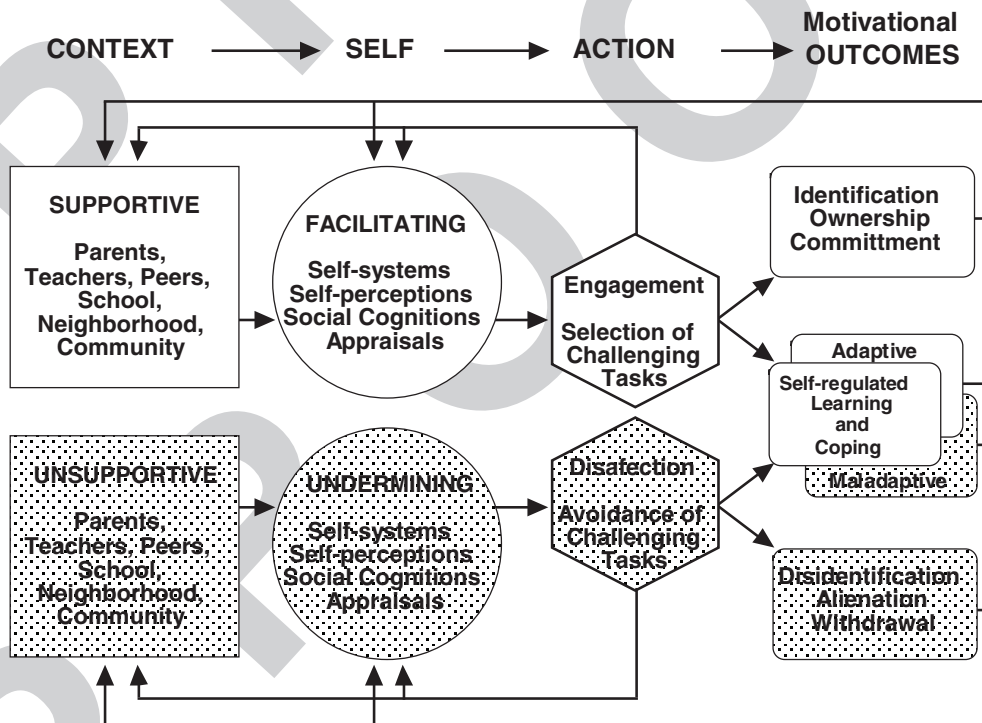
Cumulatively, these cycles may explain how, over developmental time, children’s energized and focused interactions with academic activities and social partners become part of a process that shapes the emergence of durable energetic resources and liabilities, including actual competencies and enduring social relationships, that eventually lead youth to construct the kind of personal identity that involves lasting commitments to educational goals and taking ownership for their own learning (Finn, 1989; Roeser, Peck, & Nasir, 2006; Voelkl, 1997). Motivational researchers have documented the effects of some of these resources and vulnerabilities in early adolescence, especially during school transitions (Wigfield et al., 2006). However, we know relatively little about their emergence, the timing of their appearance, or their earlier forms. Detailed programs



of research on the development of goals (Dweck, 2002), values (Wigfield & Eccles, 1992, 2002), perceived control (Skinner et al, 1998), and self-regulated learning (Pintrich & Zusho, 2002) may help guide research attempting to explore qualitative developmental changes in other key assets, such as a sense of solidarity, ownership, and identity within the academic community. These motivational resources, although they likely emerge at successive ages, can all be seen as protective factors, fostering academic coping and resilience.

### Challenges to Studying and Promoting the Entire Motivational System

A focus on motivational development makes clear that research and interventions must attempt to examine and then take into consideration the dynamic interactions between engagement and the explanatory forces (such as discipline practices or relationships with teachers) that shape its quality over time, and that also shape the emergence of other important motivational outcomes (such as taking responsibility for one's own learning) that arise at later developmental levels. Figure 11.2 depicts a process model of the differential development of the motivational system that distinguishes short-term action outcomes (such as choice and participation) from long-term motivational resources and liabilities (such as self-regulated learning and identification). This general motivational framework, although useful in guiding research and interventions, also presents significant challenges. We enumerate five.



**Figure 11.2** The motivational dynamics of engagement and disaffection. The dynamics that amplify engagement are depicted in the top portion, and those that fuel disaffection are depicted in the bottom portion.



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### *Rich Conceptualizations of Engagement and Disaffection*

A major challenge to researchers and practitioners is to realize the full richness promised by constructs of engagement and disaffection. Motivational conceptualizations, attempting to capture energized and directed action, suggest that the quality of children's ongoing participation in academic activities encompasses multiple components, including behavior, emotion, and cognitive orientation. A time perspective is also implied, including choice of future activities, initiation of involvement, ongoing participation, and responses to (anticipated and actual) obstacles and difficulties.

Such multidimensional constructs raise thorny conceptual and measurement issues (e.g., O'Farrell & Morrison, 2003). The construction of explicitly multidimensional assessments of engagement and disaffection (Appleton, Christenson, Kim, & Reschly, 2006; Skinner et al., 2007; Wellborn, 1991), including ones with hierarchical structures, is needed to clarify and elaborate these constructs. Moreover, in identifying patterns of action, both variable-centered and person-centered approaches (e.g., Patrick et al., 1993; Roeser et al., 2002) are useful strategies. That is, combinations of dimensions may be needed to fully capture the presentation of engagement and disaffection in individual students. For example, a student who is anxiously trying hard has a different quality of engagement from one who is enthusiastically involved in a task (e.g., Patrick et al., 1993). Or a student who is behaviorally passive because of boredom has a different quality of engagement than one who is angry (e.g., Finn, et al., 1995). Consistent with the view of action as an inherently multifaceted concept, conceptualizations and assessments may move toward typologies or prototypes of engagement (e.g., Connell & Wellborn, 1991; Wellborn, 1991).

For practitioners and interventionists, a complex construct like engagement and disaffection has benefits and drawbacks. On the one hand, it places more demands on teachers and evaluators: They will need to attend to multiple dimensions of students' participation in class, including ones that are not as obvious as behavioral engagement and disaffection, such as engaged and disaffected emotions. Moreover, teachers (and researchers) will need to be mindful of teachers' own reactions to students, and the unrolling of reciprocal dynamics over time. On the other hand, a full conceptualization of engagement identifies a worthy adversary, that is, a motivational outcome worth working toward, and it also specifies a motivational resource that must be safe-guarded when improvements in other outcomes (e.g., cognitive or social) are the target. No matter what the gains, if teaching practices or intervention efforts undermine any of the features of engagement or foster disaffection, they cannot have lasting positive effects.

### *Distinguishing and Integrating Constructs from Different Motivational Theories*

The identification of a common construct that taps key motivational processes has a huge potential benefit to the motivational area: In principle, it allows theorists to compare, contrast, and begin to integrate major models of motivation, that for too long have occupied separate territories (Ford, 1992; Wigfield & Eccles, 2002). However, it will be a slow and challenging process. As first steps, researchers can examine the effects of a broad range of motivational factors (both interpersonal or individual) on a common set of important motivational processes, thus allowing for the detection of factors that have similar patterns of effects and the discovery of factors that boost one aspect of engagement (e.g., persistence) while undermining another (e.g., enjoyment).

However, progress will also involve theoretical disputes and dueling structural analyses. Because





of the field's current focus on social cognitive predictors of motivation, one of the most contentious tasks will be to determine which intrapsychic processes are part of the same underlying self-systems. For example, a thicket of concepts has grown up around the issue of competence or control (Elliot & Dweck, 2005; Skinner, 1996), and the clear structural differentiation of these constructs (e.g., Bong & Skaalvik, 2003) as well as their functional integration (e.g., Skinner et al., 1998) would represent a major step forward (Eccles & Wigfield, 2002). In a similar vein, the convergence of multiple versions of achievement goal theory (Elliot, 2005) has been very useful to the motivation area, but the conceptual and empirical links of these constructs to self-determination theory have yet to be fully recognized (e.g., Ryan & Deci, 1989).

Similar care and effort will be needed to integrate work on the contextual contributors to motivational development. Because of the relative lack of attention to context (Anderman & Anderman, 2000; Urdan, 1999), initial work may focus on surfacing and collecting the many candidate factors from theories of the antecedents of self-systems (e.g., Flammer, 1995), or theories of teaching (Reeve, Bolt, & Cai, 1999), parenting (Skinner, Johnson, & Snyder, 2005), and peer relations (Hymel, Comfort, Schonert-Reichl, & McDougall, 1996). Thoughtful conversations and careful studies will be needed to tease apart whether the features depicted by one theory (e.g., the kinds of authority relations found to promote learning goals) are the same or different from the active ingredients specified by other theories (e.g., autonomy support as depicted in self-determination theory). These dialogues are an opportunity to acknowledge real overlap as well as to sharpen real differences among major theories of motivation.

#### *Engagement as a Diagnostic Tool*

Patterns of engagement and disaffection, if they are core indicators of student motivation, may also have the potential to provide teachers and parents a window into the contextual and intrapsychic obstacles students are dealing with as they tackle school-related activities (Skinner et al., 2008). However, it will be a major challenge to theorists and researchers to provide an empirical map detailed enough to justify its use in the field. A few examples may illustrate the potential of this approach: If a child shows a pattern of disaffection characterized by low participation and boredom, and the strongest predictor of such actions is a lack of autonomy, then teachers may consider the antidote of more autonomy support—that is providing students with more interesting academic tasks, more choice in selecting approaches, or activities with more apparent relevance to their daily lives (Reeve et al., 1999).

In contrast, patterns of disaffection dominated by anxiety may point to a sense of helplessness and incompetence as a likely vulnerability. Research on the facilitators of a sense of control, in turn, suggest that provision of involvement and structure, including information about strategies and support for enacting them, may begin to build self-efficacy (Bandura, 1997; Skinner et al., 1998). Research on the psychological and interpersonal predictors of other common patterns, such as self-handicapping and procrastination, or passive-withdrawn or disruptive disaffection (Covington & Dray, 2002; Finn et al., 1995; Roeser, et al., 2002), may likewise reveal both the self-perceptions that typically underlie them and the teacher and parent responses effective in counteracting them (Furrer et al., 2003). Studies investigating the progression of qualitatively different patterns of engagement and disaffection may eventually reveal warning signs early enough to allow preventative actions.





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### *Capturing Process, Episodes, and Dynamics*

A major challenge to researchers and interventionists will be to explore the directions of effects in process models and to detect feedback loops (Dornyei, 2000; Ford, 1992). To accomplish this, of course, studies will need to include markers of change over time. So far, longitudinal, time series, and experimental studies suggest that influence flows in both directions. In general, research suggests that amplifying loops are the most typical, reinforcing virtuous or vicious cycles of motivation and achievement. Additional research is needed which documents teachers' and parents' typical reactions to student engagement and disaffection at different ages and over different time windows. Of greatest interest would be studies which help to identify the conditions under which disaffection is met with *countervailing* teacher and parent reactions that lead students back toward engagement.

In general, the intelligent inclusion of time, whether real-time, episodic time, or developmental time, is in its infancy in research on motivation (Ford, 1992), just as it is in the field of psychology more generally. Process models (Dornyei, 2000; Heckhausen, 1991) and dynamic systems theories of motivation (Ford, 1992) will provide some initial guidelines for these endeavors. For example, in a time series study of perceived control and engagement, the design was organized around episodes of naturally-occurring graded homework and tests: Information about expectations and effort was collected prior to completing each assignment, whereas actual performance and attributions for success and failure were assessed only after assignments or tests were graded (Schmitz & Skinner, 1993). This allowed for the examination of the role of perceived control in sequential intraindividual cycles of effort and performance.

### *What is Developing in Motivational Development?*

For motivational researchers, it will be a challenge to examine how motivational dynamics give rise, not just to differential trajectories of engagement, but also to qualitative shifts in important motivational resources and liabilities. For example, as children enter concrete operations thought between third and fifth grades, they may accumulate experiences and beliefs that will crystallize and consolidate as they enter middle school and beyond. Models of participation and identification provide one example of what may be at stake (e.g., Finn, 1989). These models hold that children's participation at school can lead them to identify with its values and goals, and to internalize the sense that they belong there. Other developmental models emphasize the eventual emergence of a sense of pride, ownership, and responsibility for one's own learning (Wolters, 2003), the desire to become a self-regulated learner (Schunk & Zimmerman, 1994), and the acquisition of a repertoire of constructive strategies for coping with challenges, setbacks, and failures (Skinner & Wellborn, 1997).

These models also highlight what is at risk for students who are not fully engaged or who lose their eagerness during the early school years. They paint a picture of disaffection that leads to withdrawal or disruptive classroom behavior, which if unchecked produces the kinds of disidentification, resistance to taking responsibility, and opposition to the values and goals of schooling, that eventually promises friction with teachers and parents, absenteeism, academic failure, and leaving school. These trajectories of escalating disaffection and eventual drop-out are much too familiar to researchers and educators, and as previously mentioned, are especially prevalent among boys and adolescents from low income, ethnic minority, and immigrant groups.





## Conclusion

Enthusiasm about engagement has led researchers and practitioners to entrust the idea with a variety of meanings and messages. It has come to symbolize the notion that neither children's academic achievement nor their chances of completing high school are predetermined by their racial, economic, or social status, but instead depend on the extent to which teachers and educational institutions, along with parents and communities, can make schools a welcoming place where students *want* to come and, when present, where they are willing and able to do the hard work that is learning. It allows us to describe what success looks like: enthusiastic effort, concentration, determination in the face of difficulty, fun. The idea of engagement focuses researchers and practitioners on relationships and social interactions, between the student and teachers, principal, classmates, friends, family members, and importantly, the academic activities themselves, and on the disciplinary practices and organizational structures that shape these interactions and relationships.

We argue that engagement and disaffection are central players in the dynamics of motivational development: because they directly influence learning and performance, because they mediate the effects of individual and interpersonal factors, and because they shape reactions from the social context. Taken together, these feedforward and feedback effects place engagement at the heart of motivational cycles that amplify initial individual differences in such a way that the motivationally rich get richer and the poor get poorer as students progress through their academic careers. Cumulatively, such episodes give rise, not only to learning, but also to bonding, commitments, and identifications that function as social glue when the going gets tough, promoting self-regulated learning and resilience and, eventually, allowing children and youth to take responsibility for their own academic progress and development.

## References

- Abramson, L. Y., Seligman, M. E. P., & Teasdale, J. D. (1978). Learned helplessness in humans. *Journal of Abnormal Psychology, 87*, 49–74.
- Altermatt, E. R., Jovanovic, J., & Perry, M. (1998). Bias or responsivity? Sex and achievement-level effects on teachers' classroom questioning practices. *Journal of Educational Psychology, 90*, 516–527.
- Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology, 84*, 261–271.
- Anderman, L. H., & Anderman, E. M. (Eds.) (2000). The role of social context in educational psychology: Substantive and methodological issues [Special issue]. *Educational Psychologist, 35* (2).
- Appleton, J. J., Christenson, S. L., Kim, D., & Reschly, A. L. (2006). Measuring cognitive and psychological engagement: Validation of the Student Engagement instrument. *Journal of School Psychology, 44* (5), 427–445.
- Bandura, A. (1977). Self-efficacy: Toward a unified theory of behavioral change. *Psychological Review, 84*, 191–215.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Birch, S. H., & Ladd, G. W. (1996). Interpersonal relationships in the school environment and children's early school adjustment: The role of teachers and peers. In J. Juvonen & K. R. Wentzel (Eds.), *Social motivation: Understanding children's school adjustment* (pp. 199–225). New York: Cambridge University Press.
- Blumenfeld, P. C. (1992). Classroom learning and motivation: Clarifying an expanding goal theory. *Journal of Educational Psychology, 84*, 272–281.
- Boesch, E. E. (1976). *Psychopathologie des alltags* [Everyday psychopathology]. Bern, Switzerland: Huber.
- Bong, M., & Skaalvik, E. M. (2003). Academic self-concept and self-efficacy: How different are they really? *Educational Psychology Review, 13*, 1–40.
- Brandstädter, J. (1998). Action perspectives on human development. In W. Damon (Series Ed.) & R. M. Lerner (Vol. Ed.), *Handbook of child psychology: Vol. 1. Theoretical models of human development* (5th ed., pp. 807–863). New York: Wiley.
- Bronfenbrenner, U., & Morris, P. A. (1998). The ecology of developmental processes. In W. Damon (Series Ed.) & R. M. Lerner (Vol. Ed.), *Handbook of child psychology: Vol. 1: Theoretical models of human development* (5th ed., pp. 993–1028). New York: Wiley.





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- Chapman, M. (1984). Intentional action as a paradigm for developmental psychology: A Symposium. *Human Development*, 27, 113–114.
- Connell, J. P. (1990). Context, self, and action: A motivational analysis of self-system processes across the life-span. In D. Cicchetti & M. Beeghly (Eds.), *The self in transition: From infancy to childhood* (pp. 61–97). Chicago: University of Chicago Press.
- Connell, J. P., Halpern-Felsher, B. L., Clifford, E., Crichlow, W., & Usinger, P. (1995). Hanging in there: Behavioral, psychological, and contextual factors affecting whether African-American adolescents stay in high school. *Journal of Adolescent Research*, 10, 41–63.
- Connell, J. P., Spencer, M. B., & Aber, J. L. (1994). Educational risk and resilience in African-American youth: Context, self, action, and outcomes in school. *Child Development*, 65, 493–506.
- Connell, J. P., & Wellborn, J. G. (1991). Competence, autonomy and relatedness: A motivational analysis of self-system processes. In M. Gunnar & L. A. Sroufe (Eds.), *Minnesota Symposium on Child Psychology: Vol. 23. Self processes in development* (pp. 43–77). Chicago: University of Chicago Press.
- Covington, M. V., & Dray, E. (2002). The developmental course of achievement motivation: A need-based approach. In A. Wigfield & J. S. Eccles (Eds.), *Development of achievement motivation* (pp. 33–56). San Diego: Academic Press.
- Deci, E. L. (1975). *Intrinsic motivation*. New York: Plenum.
- Deci, E. L. (1992). On the nature and function of motivational theories. *Psychological Science*, 3, 167–171.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum Press.
- Deci, E. L., Koestner, R., & Ryan, R. M. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin*, 125, 627–668.
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11, 227–268.
- Dornyei, Z. (2000). Motivation in action: Towards a process-oriented conceptualization of student motivation. *British Journal of Educational Psychology*, 70, 519–538.
- Dweck, C. S. (1975). The role of expectations and attributions in the alleviation of learned helplessness. *Journal of Personality and Social Psychology*, 31, 674–685.
- Dweck, C. S. (1999). *Self-theories: Their role in motivation, personality, and development*. Philadelphia: Psychology Press.
- Dweck, C. S. (2002). The development of ability conceptions. In A. Wigfield & J. S. Eccles (Eds.), *Development of achievement motivation* (pp. 57–88). San Diego: Academic Press.
- Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review*, 95, 256–273.
- Dweck, C. S., & Molen, D. C. (2005). Self-theories: Their impact on competence motivation and acquisition. In A. J. Elliot & C. S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 12–140). New York: Guilford.
- Eccles, J. S. (1993). School and family effects on the ontogeny of children's interests, self-perceptions, and activity choice. In J. Jacobs (Ed.), *Nebraska Symposium on Motivation, 1992: Developmental perspectives on motivation*. (pp. 145–208) Lincoln: University of Nebraska Press.
- Eccles, J. S. (2004). Schools, academic motivation, and stage-environment fit. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (2nd ed., pp. 125–153). New York: Wiley.
- Eccles, J. S. (2005). Subjective task values and the Eccles et al. model of achievement-related choices. In A. J. Elliot & C. S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 105–121). New York: Guilford.
- Eccles, J. S., Adler, T. F., Futterman, R., Goff, S. B., Kaczala, C. M., Meece, J., & Midgley, C. (1983). Expectancies, values and academic behaviors. In J. T. Spence (Ed.), *Achievement and achievement motives* (pp. 75–146). San Francisco: Freeman.
- Eccles, J. S., & Wigfield, A. (1995). In the mind of the achiever: The structure of adolescents' academic achievement related-beliefs and self-perceptions. *Personality and Social Psychology Bulletin*, 21, 215–225.
- Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review of Psychology*, 53, 109–132.
- Eccles, J. S., Wigfield, A., & Schiefele, U. (1998). Motivation to succeed. In W. Damon (Series Ed.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology: Vol. 3. Social, emotional, and personality development* (5th ed., pp. 1017–1095). New York: Wiley.
- Elliot, A. J. (2005). A conceptual history of the achievement goal construct. In A. J. Elliot & C. S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 52–72). New York: Guilford.
- Elliot, A. J., & Dweck, C. S. (Eds.). (2005). *Handbook of competence and motivation*. New York: Guilford.
- Finn, J. D. (1989). Withdrawing from school. *Review of Educational Research*, 59, 117–142.
- Finn, J. D., Pannozzo, G., Voelkl, K. E. (1995). Disruptive and inattentive-withdrawn behavior and achievement among fourth graders. *The Elementary School Journal*, 95, 421–454.
- Finn, J. D., & Rock, D. A. (1997). Academic success among students at risk for school failure. *Journal of Applied Psychology*, 82, 221–234.
- Finn, J. D., & Voelkl, K. E. (1993). School characteristics related to school engagement. *Journal of Negro Education*, 62, 249–268.
- Flammer, A. (1995). Developmental analysis of control beliefs. In A. Bandura (Ed.), *Self-efficacy in changing societies* (pp. 69–113). New York: Cambridge University Press.





- Ford, M. E. (1992). *Motivating humans: Goals, emotions, and personal agency beliefs*. Newbury Park, CA: Sage.
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74 (1) 59–109.
- Frese, M., & Sabini, J. (1985). *Goal-directed behavior: The concept of action in psychology*. Hillsdale, NJ: Erlbaum.
- Furrer, C., Kelly, G., & Skinner, E. (2003, April). *Can teachers use children's emotions in the classroom to diagnose and treat underlying motivational problems?* Poster presented at the biennial meetings of the Society for Research in Child Development, Tampa, FL.
- Furrer, C., & Skinner, E. (2003). Sense of relatedness as a factor in children's academic engagement and performance. *Journal of Educational Psychology*, 95, 148–162.
- Furrer, C., Skinner, E., & Kindermann, T. (2007). *How the motivationally "rich" get "richer": Reciprocal effects of student engagement in the classroom on changes in teacher support over the school year*. Unpublished manuscript. Portland State University.
- Gottfried, A. E. (1985). Academic intrinsic motivation in elementary and junior high school students. *Journal of Educational Psychology*, 77(6), 631–645.
- Gottfried, A. E., Fleming, J. S., & Gottfried, A. W. (2001). Continuity academic intrinsic motivation from childhood through late adolescence: A longitudinal study. *Journal of Educational Psychology*, 93, 3–13.
- Hamre, B. K., Pianta, R. C. (2001). Early teacher-child relationships and the trajectory of children's school outcomes through eighth grade. *Child Development*, 72, 625–638.
- Harackiewicz, J. M., Baron, K. E., Pintrich, P. R., Elliot, A. J., & Thrash, T. M. (2002). Revision of achievement goal theory: Necessary and illuminating. *Journal of Educational Psychology*, 94, 638–645.
- Harter, S. (1978). Effectance motivation reconsidered: Toward a developmental model. *Human Development*, 21, 36–64.
- Heckhausen, H. (1991). *Motivation and action* (P. K. Leppmann, Trans.). Berlin: Springer.
- Hymel, S., Comfort, C., Schonert-Reichl, K., McDougall, P. (1996). Academic failure and school dropout: The influence of peers. In J. Juvonen & K. R. Wentzel (Eds.) *Social motivation: Understanding children's school adjustment* (pp. 313–345). New York: Cambridge University Press.
- Jackson, A. & Davis, G. (2000). *Turning points: Educating adolescents for the 21st century*. New York: Teachers College Press.
- Jacobs, J., Lanza, S., Osgood, D. W., Eccles, J. S., & Wigfield, A. (2002). Ontogeny of children's self-beliefs: Gender and domain differences across grades one through 12. *Child Development*, 73, 509–527.
- Jimerson, S. J., Campos, E., & Greif, J. L. (2003). Towards an understanding of definitions and measures of school engagement and related terms. *California School Psychologist*, 8, 7–27.
- Jimerson, S., Egeland, B., Sroufe, L. A., & Carlson, E. (2000). A prospective longitudinal study of high school dropouts: Examining multiple predictors across development. *Journal of School Psychology*, 38, 525–549.
- Kindermann, T. A. (1993). Natural peer groups as contexts for individual development: The case of children's motivation in school. *Developmental Psychology*, 29, 970–977.
- Kindermann, T. A. (2007). Effects of naturally-existing peer groups on changes in academic engagement in a cohort of sixth graders. *Child Development*, 78, 1186–1203.
- Kochanska, G., Aksan, N., & Carlson (2005). Temperament, relationships, and young children's receptive cooperation with their parents. *Developmental Psychology*, 41, 648–660.
- Kowaleski-Jones, L. & Duncan, G. J. (1999). The structure of achievement and behavior across middle childhood. *Child Development*, 70, 930–943.
- Kuhl, J. (1984). Volitional aspects of achievement motivation and learned helplessness: Toward a comprehensive theory of action control. In B. A. Maher & W. A. Maher (Eds.), *Progress in experimental personalities research* (pp. 99–171). New York: Academic Press.
- Ladd, G. W., Birch, S. H., & Buhs, E. S. (1999). Children's social and scholastic lives in kindergarten: Related spheres of influence? *Child Development*, 70, 1373–1400.
- Lepper, M. R., & Cordova, D. I. (1992). A desire to be taught: Instructional consequences of intrinsic motivation. *Motivation and Emotion*, 16, 187–208.
- Maddox, S. J., & Prinz, R. J. (2003). School bonding in children and adolescents: Conceptualization, assessment, and associated variables. *Clinical Child and Family Psychology Review*, 6, 31–49.
- Maehr, M. L., & Midgley, C. (1996). *Transforming school cultures*. Boulder, CO: Westview Press.
- Marks, H. M. (2000). Student engagement in instructional activity: Patterns in the elementary, middle, and high school years. *American Educational Research Journal*, 37, 153–184.
- Meece, J. L., Anderman, E. M. & Anderman, L. H. (2006). Classroom goal structures, student motivation, and academic achievement. *Annual Review of Psychology* (Vol. 57, pp. 487–504). Chippewa Falls, WI: Annual Reviews.
- Meece, J. L., & Kurtz-Costes, B. (2001). Introduction: The schooling of ethnic minority children and youth. *Educational Psychologist*, 36, 1–7.
- Merton, R. K. (1953). *Social theory and social structure*. London: The Free Press of Glencoe.
- Miceli, M., & Castelfranchi, C. (2000). Nature and mechanisms of loss of motivation. *Review of General Psychology*, 4(3), 238–263.
- Murdock, T. B. (1999). The social context of risk: Status and motivational predictors of alienation in middle school. *Journal of Educational Psychology*, 91, 62–76.





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- Murphy, P. K., & Alexander, P. A. (2000). A motivated exploration of motivation terminology. *Contemporary Educational Psychology, 25*, 3–53.
- National Research Council. (2004). *Engaging schools: Fostering high school students' motivation to learn*. Washington, DC: National Academic Press.
- Newmann, F. (1991). Student engagement in academic work: Expanding the perspective of secondary school effectiveness. In J. R. Bliss & W. A. Firestone (Eds.), *Rethinking effective schools: Research and practice* (pp. 58–76). New York: Teachers College Press.
- Newmann, F., Wehlage, G. G., & Lamborn, S. D. (1992). The significance and sources of student engagement. In F. Newmann (Ed.), *Student engagement and achievement in secondary schools* (p. 11–39). New York: Teachers College Press.
- Nicholls, J. G. (1984). Achievement motivation: Conceptions of ability, subjective experience, task choice, and performance. *Psychological Review, 91*, 328–346.
- O'Farrell, S. L., & Morrison, G. M. (2003). A factor analysis exploring school bonding and related constructs among upper elementary students. *The California School Psychologist, 8*, 53–72.
- Patrick, B. C., Skinner, E. A., & Connell, J. P. (1993). What motivates children's behavior and emotion? The joint effects of perceived control and autonomy in the academic domain. *Journal of Personality and Social Psychology, 65*(4), 781–791.
- Pelletier, L. G., & Vallerand, R. J. (1996). Supervisors' beliefs and subordinates' intrinsic motivation: A behavioral confirmation. *Journal of Personality and Social Psychology, 71*, 331–340.
- Peterson, C., Maier, S. F., & Seligman, M. E. P. (1993). *Learned helplessness: A theory for the age of personal control*. New York: Oxford University Press.
- Pierson, L. H., & Connell, J. P. (1992). Effect of grade retention on self-system processes, school engagement, and academic performance. *Journal of Educational Psychology, 84*, 300–307.
- Pintrich, P. R. (2000). An achievement goal theory perspective on issues in motivation terminology, theory, and research. *Contemporary Educational Psychology, 25*, 92–104.
- Pintrich, P. R. (2003). A motivational science perspective of the role of student motivation in learning and teaching contexts. *Journal of Educational Psychology, 95*, 667–686.
- Pintrich, P. R., & Schunk, D. H. (2003). *Motivation in education: Theory, research, and application* (2nd ed.). Englewood Cliffs, NJ: Merrill-Prentice Hall.
- Pintrich, P. R., & Zusho, A. (2002). The development of academic self-regulation: The role of cognitive and motivational factors. In A. Wigfield & J. S. Eccles (Eds.), *Development of achievement motivation* (pp. 250–284). San Diego: Academic Press.
- Reeve, J. (2005). *Understanding motivation and emotion* (4th ed.). Hoboken, NJ: Wiley.
- Reeve, J., Bolt, E., & Cai, Y. (1999). Autonomy supportive teachers: How they teach and motivate students. *Journal of Educational Psychology, 91*, 537–548.
- Roeser, R. W., Peck, S. C., & Nasir, N. S. (2006). Self and identity processes in school motivation, learning, and achievement. In Alexander, P., & Winne, P. H. (Eds.), *Handbook of educational psychology* (2nd ed., pp. 391–424). Mahwah, NJ: Erlbaum.
- Roeser, R., Strobel, K. R., & Quihuis, G. (2002). Studying early adolescents' academic motivation, social-emotional functioning, and engagement in learning: Variable- and person-centered approaches. *Anxiety, Stress, and Coping, 15*, 345–368.
- Ryan, A. M. (2000). Peer groups as a context for the socialization of adolescents' motivation, engagement, and achievement in school. *Educational Psychologist, 35*, 101–111.
- Ryan, R. M., & Connell, P. (1989). Perceived locus of causality and internalization: Examining reasons for acting in two domains. *Journal of Personality and Social Psychology, 57*, 749–761.
- Ryan, R. M., & Deci, E. L. (1989). Bridging the research traditions of task/ego involvement and intrinsic/extrinsic motivation: A commentary on Butler (1987). *Journal of Educational Psychology, 81*, 265–268.
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology, 25*, 54–67.
- Ryan, A. M., & Patrick, H. (2001). The classroom social environment and changes in adolescents' motivation and engagement during middle school. *American Educational Research Journal, 38*, 437–460.
- Schmitz, B., & Skinner, E. (1993). Perceived control, effort, and academic performance: Interindividual, intraindividual, and multivariate time-series analyses. *Journal of Personality and Social Psychology, 64*(6), 1010–1028.
- Schunk, D. H., & Pajares, F. (2005). Competence perceptions and academic functioning. In A. J. Elliot & C. S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 85–104). New York: Guilford.
- Schunk, D. H., & Zimmerman, B. J. (Eds.). (1994). *Self-regulation of learning and performance*. Hillsdale, NJ: Erlbaum.
- Schutz, P. A., & DeCuir, J. T. (2002). Inquiry on emotions in education. *Educational Psychologist, 37*, 125–134.
- Seligman, M. E. P. (1975). *Helplessness: On depression, development, and death*. San Francisco: Freeman.
- Sheroff, D. J., Csikszentmihalyi, M., Schneider, B., & Sheroff, E. S. (2003). Student engagement in high school classrooms from the perspective of flow theory. *School Psychology Quarterly, 18*, 158–176.
- Sinclair, M. F., Christenson, S. L., Lehr, C. A., & Anderson, A. R. (2003). Facilitating student learning and engagement: Lessons learned from Check & Connect longitudinal studies. *The California School Psychologist, 8*, 29–41.
- Skinner, E. A. (1995). *Perceived control, motivation, and coping*. Newbury Park, CA: Sage.
- Skinner, E. A. (1996). A guide to constructs of control. *Journal of Personality and Social Psychology, 71*, 549–570.





- Skinner, E. A., & Belmont, M. J. (1993). Motivation in the classroom: Reciprocal effects of teacher behavior and student engagement across the school year. *Journal of Educational Psychology, 85*, 571–581.
- Skinner, E. A., Furrer, C., Marchand, G., & Kindermann, T. (2008). Engagement and disaffection in the classroom: Part of a larger motivational dynamic? *Journal of Educational Psychology, 100*, 765–781.
- Skinner, E. A., Johnson, S., & Snyder, T. (2005). Six dimensions of parenting: A motivational model. *Parenting: Science and Practice, 5*, 175–236.
- Skinner, E. A., Kindermann, T. A., & Furrer, C. (in press). A motivational perspective on engagement and disaffection: Conceptualization and assessment of children's behavioral and emotional participation in academic activities in the classroom. *Educational and Psychological Measurement*.
- Skinner, E. A., & Wellborn, J. G. (1994). Coping during childhood and adolescence: A motivational perspective. In D. Featherman, R. Lerner, & M. Perlmutter (Eds.), *Life-span development and behavior* (Vol. 12, pp. 91–133). Hillsdale, NJ: Erlbaum.
- Skinner, E. A., & Wellborn, J. G. (1997). Children's coping in the academic domain. In S. A. Wolchik & I. N. Sandler (Eds.), *Handbook of children's coping with common stressors: Linking theory and intervention* (pp. 387–422). New York: Plenum.
- Skinner, E. A., Wellborn, J. G., & Connell, J. P. (1990). What it takes to do well in school and whether I've got it: The role of perceived control in children's engagement and school achievement. *Journal of Educational Psychology, 82*, 22–32.
- Skinner, E. A., Zimmer-Gembeck, M. J., & Connell, J. P. (1998). Individual differences and the development of perceived control. *Monographs of the Society for Research in Child Development, 63* (nos. 2 and 3) whole no. 254.
- Spencer, M.B. (2006). Phenomenology and ecological systems theory: Development of diverse groups. In W. Damon (Series Ed.) & R. Lerner (Vol. Ed.), *Handbook of child psychology, vol. 1: Theoretical models of human development* (6th ed., pp. 829–893). New York: Wiley.
- Taylor, R. D., Casten, R., Flickinger, S., Roberts, D., & Fulmore, C. D. (1994). Explaining the school performance of African-American adolescents. *Journal of Research on Adolescence, 4*, 21–44.
- Thorkildsen, T., & Nicholls, J. G. (1998). Fifth graders' achievement orientations and beliefs: Individual and classroom differences. *Journal of Educational Psychology, 90*, 179–201.
- Trautwein, U., Lüdtke, O., Kastens, C. & Köller, O. (2006). Effort on homework in grades 5 through 9: Development, motivational antecedents, and the association with effort on classwork. *Child Development, 77*, 1094–1111.
- Turner, J. C., & Meyer, D. K. (2000). Studying and understanding the instructional contexts of classrooms: Using our past to forge our future. *Educational Psychologist, 35*, 69–85.
- Urdu, T. C. (Ed.). (1999). *The role of context: Advances in motivation and achievement* (Vol. 11). Greenwich, CT: JAI.
- Vallerand, R. J., Pelletier, L. G., Blais, M. R., Brière, N. M., Senécal, C. B. & Vallières, E. F. (1993). On the assessment of intrinsic, extrinsic, and amotivation in education: Evidence on the concurrent and construct validity of the Academic Motivation Scale. *Educational and Psychological Measurement, 53*, 159–172.
- Voelkl, K. (1997). Identification with school. *American Journal of Education, 105*, 294–318.
- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review, 92*, 548–573.
- Weiner, B. (1986). *An attributional theory of motivation and emotion*. New York: Springer.
- Weiner, B. (2005). Motivation from an attributional perspective and the social psychology of perceived competence. In A. J. Elliot & C. S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 73–84). New York: Guilford.
- Wellborn, J. G. (1991). *Engaged and disaffected action: The conceptualization and measurement of motivation in the academic domain*. Unpublished doctoral dissertation, University of Rochester, New York.
- Wentzel, K. R. (1993). Does being good make the grade? Social behavior and academic competence in middle school. *Journal of Educational Psychology, 85*, 357–364.
- White, R. W. (1959). Motivation reconsidered: The concept of competence. *Psychological Review, 66*, 297–333.
- Wigfield, A., & Eccles, J. S. (1992). The development of achievement task values: A theoretical analysis. *Developmental Review, 12*, 265–310.
- Wigfield, A., & Eccles, J. S. (2000). Expectancy-value theory of motivation. *Contemporary Educational Psychology, 25*, 68–81.
- Wigfield, A., & Eccles, J. S. (2002). Students' motivation during the middle school years. In J. Aronson (Ed.), *Improving academic achievement: Impact of psychological factors in education* (pp. 159–184). San Diego: Academic Press.
- Wigfield, A., Eccles, J. S., & Rodriguez, D. (1998). The development of children's motivation in school contexts. *Review of Research in Educational Psychology, 23*, 73–118.
- Wigfield, A., Eccles, J. S., Schiefele, U., Roeser, R., & Davis-Kean, P. (2006). Development of achievement motivation. In W. Damon (Series Ed.) & N. Eisenberg (Volume Ed.), *Handbook of child psychology, 6th Ed. Vol.3. Social, emotional, and personality development* (pp. 933–1002). New York: Wiley.
- Wooley, M. E., & Bowen, G. L. (2007). In the context of risk: Supportive adults and the school engagement of middle-school students. *Family Relations, 56*, 92–104.
- Wolters, C. A. (2003). Regulation of motivation: Evaluating an underemphasized aspect of self-regulated learning. *Educational Psychologist, 38*, 189–206.





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