EXPECTANCY-VALUE THEORY: RETROSPECTIVE AND PROSPECTIVE

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OVERVIEW

Expectancy-value theory is prominent in different areas in psychology, and a number of educational and developmental psychologists who study the development of achievement motivation have utilized this theory in their work (see Schunk, Pintrich, & Meece, 2006; Weiner, 1992; Wigfield & Eccles, 1992; Wigfield, Tonks, & Klauda, 2009 for overviews). In this chapter, we discuss current expectancy-value theoretical models of achievement motivation and review research based on these models. Much of this research has focused on the development of children’s expectancies and values, and how expectancies and values relate to performance, choice of different activities, and emotions. We discuss the major findings from each of these areas of research. We also provide suggestions for future research based in this theory for the next decade. We focus our review and suggestions for future research primarily on elementary and secondary school students, but include some relevant work done with college students.
MODERN EXPECTANCY-VALUE MODELS IN DEVELOPMENTAL AND EDUCATIONAL PSYCHOLOGY

Modern expectancy-value theories (e.g., Eccles, 1987, 1993, 2005; Eccles (Parsons) et al., 1983; Feather, 1982, 1988; Pekrun, 1993, 2000, 2006; Wigfield & Eccles, 1992, 2000, 2002) are based on seminal work by theorists such as Lewin (1938) and Tolman (1932) who defined the expectancy and value constructs, and also on Atkinson's (1957, 1964) expectancy-value model of achievement motivation (see Wigfield & Eccles, 1992; Wigfield et al., 2009, for discussion of the history of this theory). Current theories differ from the earlier work in several ways. First, both the expectancy and value components are defined in richer ways, and are linked to a broader array of psychological, social, and cultural determinants. Second, these models have been tested in real-world achievement situations rather than with the laboratory tasks often used to test Atkinson's theory.

The Eccles et al. Expectancy-Value Model

Eccles and her colleagues’ expectancy – value model proposes that these two constructs are the most immediate or direct predictors of achievement performance and choice, and are themselves influenced by a variety of psychological, social, contextual, and cultural influences (e.g., Eccles, 1987, 1993, 2005; Eccles (Parsons) et al., 1983; Eccles & Wigfield, 1995; Meece, Wigfield, & Eccles, 1990; Wigfield, 1994; Wigfield & Eccles, 1992, 2000, 2002). In their research, Eccles and her colleagues have focused on how expectancies, values, and their determinants influence choice, persistence, and performance. They also have examined the developmental course of children’s expectancies and values and how they are influenced by different educational contexts. They initially developed the model to help explain gender differences in mathematics expectancies and values and how these influenced boys’ and girls’ choices of mathematics courses and majors. They broadened the model to other activity areas, most notably sport and physical skill activities (e.g., Eccles & Harold, 1991).

Fig. 1 depicts the model. Moving from right to left in the model, expectancies and values are hypothesized to influence performance and task choice directly. Expectancies and values themselves are influenced by task-specific beliefs such as perceptions of competence, perceptions of the
Fig. 1. Eccles and Colleagues’ Expectancy-Value Model of Performance and Choice.
difficulty of different tasks, and individuals’ goals and self-schema, along with their affective memories for different achievement-related events. These beliefs, goals, and affective memories are influenced by individuals’ perceptions of other peoples’ attitudes and expectations for them, and by their own interpretations of their previous achievement outcomes. Children’s perceptions and interpretations are influenced by a broad array of social, contextual, and cultural factors. These include socializers’ (especially parents and teachers) beliefs and behaviors, children’s specific achievement experiences and aptitudes, and the cultural milieu in which they live (see Wigfield, Eccles, Schiefele, Roeser, & Davis-Kean, 2006, for discussion of the socialization of children’s expectancies and values).

DEFINING THE EXPECTANCY, VALUE, AND ABILITY BELIEF CONSTRUCTS IN THIS MODEL

Eccles and colleagues broadened Atkinson’s (1957) original definitions of both the expectancy and value constructs. They defined expectancies for success as children’s beliefs about how well they will do on an upcoming task currently or further into the future (e.g., How well do you think you will do in math next year?). They distinguished conceptually expectancies for success from the individual’s beliefs about competence or ability. These latter beliefs refer to children’s evaluations of their current competence or ability, both in terms of their assessments of their own ability and also how they think they compare to other students. Ability-related beliefs are prominent in many achievement motivation theories (see Schunk & Pajares, 2009; Wigfield & Eccles, 2000, for distinctions among these constructs). The construct of self-efficacy is one primary example. Perceptions of ability in the Eccles et al. model can be distinguished from self-efficacy in the following ways. In Eccles’ work ability beliefs are most often measured at the domain-specific level (although they could be measured at greater or lesser levels of specificity), and students are asked to think about their ability relative to other students, and to other activities that they do. Self-efficacy is defined as beliefs about capabilities to accomplish a certain task, and measures of it generally ask how confident the individual is that he or she can do the task (Bandura, 1977, 1997; see also Schunk & Pajares, 2009). The comparative aspects thus are not included, and so self-efficacy is one’s judgment about one’s own ability to accomplish a task without regard for whether others can do it.
In the literature, values have both broad and task-specific definitions (see Higgins, 2007; Rohan, 2000; Wigfield & Eccles, 1992, for review of some of these definitions). Broader values have to do with individuals’ sense of what are appropriate things to do, desirable end states of activities, and desirable behaviors to produce those positive end states (see Rokeach, 1973, 1979). Eccles and her colleagues focus on task-specific values in that they define values with respect to the qualities of different tasks and how those qualities influence the individual’s desire to do the task; hence the term task value (Eccles, 2005; Eccles (Parsons) et al., 1983; Wigfield & Eccles, 1992). This definition is similar to Higgins’, stressing the motivational aspects of task value. Further, these values are subjective because they are students’ own beliefs about the activity and thus there is variation among students in them.

Eccles (Parsons) et al. (1983) proposed four major components of achievement task values: attainment value or importance, intrinsic value, utility value or usefulness of the task, and cost (see Eccles (Parsons) et al., 1983 and Wigfield & Eccles, 1992, for more detailed discussion of these components). Building on Battle’s (1965, 1966) work, Eccles (Parsons) et al. defined attainment value as the importance of doing well on a given task. Attainment value incorporates identity issues; tasks are important when individuals view them as central to their own sense of themselves, or allow them to express or confirm important aspects of self. This component of value has some conceptual similarities with the identified regulation and integrated regulation components of motivation in Deci and Ryan’s (Ryan & Deci, 2000, 2009) Self-Determination Theory (SDT), which concern engaging in activities because they are important to individuals for attaining their goals and are consistent with students’ identities.

Intrinsic or interest value is the enjoyment one gains from doing the task. This component is similar in certain respects to notions of intrinsic motivation and interest (see Hidi & Renninger, 2006; Ryan & Deci, 2000; Schiefele, 2009) in that when children intrinsically value an activity they often become deeply engaged in it and can persist at it for a long time. However, it is important to note that in this theoretical model, it is the task that produces the enjoyment.

Utility value or usefulness refers to how a task fits into an individual’s future plans, for instance, taking a math class to fulfill a requirement for a science degree. In certain respects utility value is similar to extrinsic motivation, and more specifically, to the SDT construct of identified regulation because when doing an activity out of utility value, the activity is a means to an end rather than an end in itself (see Ryan & Deci, 2000, 2009). However, the activity also can reflect some important goals that the person
holds deeply, such as attaining a certain occupation. In this sense, utility value also connects to personal goals and sense of self, and so has some ties to intrinsic motivation or integrated regulation, the most autonomous form of regulation in the SDT model.

Cost refers to what the individual has to give up to do a task (e.g., Do I do my math homework or call my friend?), as well as the anticipated effort one will need to put into task completion. Is working this hard to get an A in math worth it? Eccles (Parsons) et al. (1983) emphasized that cost is especially important for choice. Choices are influenced by both negative and positive task characteristics, and all choices are assumed to have costs associated with them because one choice often eliminates other options. For instance, choosing to major in history means that one cannot major in another field that also may have some value to the individual. Despite the theoretical importance of cost to choice, to date, cost has been the least studied of the different components of subjective values.

**Pekrun's Control-Value Model**

Pekrun (1993, 2000, 2006, 2009) developed a model of achievement motivation based in the expectancy-value tradition. He calls his theory a control-value theory, using the construct of “control” to capture different kinds of beliefs having to do with individuals’ appraisals of different possible cause–effect relationships between actions and outcomes in achievement settings. Indeed, the notion of appraisal is fundamental to his work; he argues that individuals’ appraisals of their actions, the likelihood that the action will produce certain outcomes, and the appraisal of the values of both actions and outcomes are fundamental determinants of motivation. He also has been quite interested in linkages between control beliefs, value, and motivation.

Pekrun (1993, 2000, 2006, 2009) distinguished three kinds of expectancy beliefs that comprise the main control beliefs in his model. Situation-outcome expectancies are expectancies that a situation will produce an outcome; thus the individual’s own action is not essential when these linkages operate. Action-outcome expectancies refer to individuals’ beliefs about the consequences of their own actions. Action-control expectancies concern individuals’ beliefs about whether they can do a certain action, which are conceptually similar to Bandura’s (1997) self-efficacy construct; Pekrun prefers the term action control because it deals directly with
individuals’ beliefs about whether they can successfully control their actions, and also ties to the literature on volition.

Pekrun (1993, 2000, 2006, 2009) also distinguished different kinds of achievement values, or value cognitions, to use his term. He differentiates between the value of outcomes and the value of actions, and further separates intrinsic and extrinsic aspects of each. Intrinsic values of outcomes concern the intrinsic enjoyment of an outcome, whereas extrinsic outcome values reflect the instrumentality of an outcome. In the same vein, intrinsic values of action have to do with the inherent value of the action to the individual, whereas extrinsic action values have to do with actions that lead to an instrumental outcome (e.g., studying to get a good grade on a test in order to maximize one’s chances of getting into graduate school).

One important aspect of this model is Pekrun’s (1993) specification of how individuals’ appraisals of different activities leads to motivation to undertake an action or not, and also to their performance. The process starts with an appraisal of the value of a given outcome; if it is valued, then the individual forms situation-outcome expectancies, action-outcome expectancies, and action-control expectancies. If the situation totally determines an outcome the other expectancies do not function; however, if it does not then both action-outcome and action-control expectancies determine motivation, particularly if the action is valued. Ultimately, the individual’s motivation is determined by the complex interplay of these appraisals. Pekrun reviews empirical evidence from his longitudinal work showing that different kinds of expectancy and value cognitions relate positively to one another. Expectancies and intrinsic values predict adolescents’ academic effort and also their grades. Further, Pekrun presents some evidence that the motivation variables and achievement relate reciprocally over time.

Much of Pekrun’s recent work focuses on relations of motivation and emotion (e.g., Pekrun, 2006, 2009; see also Schutz & Pekrun, 2007). Pekrun distinguishes three general kinds of emotions. Anticipatory (or prospective) emotions are those that occur before an individual undertakes an achievement activity, and Pekrun argues that these are influenced by individuals’ expectancies and values for the activity. For instance, if the individual expects to do well at the activity and values it, then she will experience emotions such as hope and joy. If not, anxiety and hopelessness will be experienced. Concurrent emotions are experienced as the individual does different activities, and Pekrun stated that enjoyment and boredom are two fundamental emotions that occur as an activity is ongoing. Finally, retrospective emotions occur as individuals reflect on an activity. These emotions include joy, pride, sadness, or shame, and again are based in the
individual’s appraisal of the activity and its value to him or her. We review below some specific findings with respect to these different emotions.

The two models just reviewed are similar in a number of ways. Important differences between them are that in Pekrun’s (2000, 2006) model the expectancy construct is more elaborated. There also is a clearer distinction of action and outcome in this model. Eccles and her colleagues discuss a wider variety of components of task value. They also include a more elaborate set of antecedents of both expectancies and values.

MAJOR RESEARCH FINDINGS ON EXPECTANCIES AND VALUES

Researchers have done extensive work on children and adolescents’ expectancies and values. We focus on three main research areas: change over time in students’ expectancies and values; their relations to one another; and their relations to performance, choice, and emotions.

Development of Expectancy-Related Beliefs and Values

One important developmental question is how distinct the expectancy and value constructs are in children of different ages. Eccles and Wigfield (1995) and Eccles, Wigfield, Harold, and Blumenfeld (1993) factor analyzed children’s responses to questionnaire measures of each construct. The major findings from these analyses were: (1) children’s expectancy-related beliefs and values formed distinct factors in children as young as 6; (2) within a given domain (e.g., reading, math, sports) children’s beliefs about their current competence, expectancies for success, and perceived performance load on the same factor, suggesting that these components comprise a single concept for children aged 6–18; (3) within a given domain the components of achievement values identified by Eccles and her colleagues can be distinguished factorially in children in fifth grade and beyond; and (4) across activity domains competence-related beliefs form distinct factors in children as young as 6, indicating that children differentiate across domains with respect to these beliefs (e.g., expectancy-related beliefs in math are factorially distinct from expectancy-related beliefs in reading). The same is true of achievement values; the value children attach to reading factors separately from the value they attach to math.
A second important developmental question is how the level of children’s expectancy-related beliefs and values change across age. The general pattern is that children’s competence beliefs for different tasks decline across the elementary school years and through the high school years (see Dweck & Elliott, 1983; Eccles, Wigfield, & Schiefele, 1998; Stipek & Mac Iver, 1989; Wigfield et al., 2006, for review). Many young children are quite optimistic about their competencies in different areas, and this optimism changes to greater realism and (sometimes) pessimism for many children. Researchers in the US have examined change over the entire elementary and secondary school years in children’s competence beliefs for math, language arts, and sport (Fredricks & Eccles, 2002; Jacobs, Lanza, Osgood, Eccles, & Wigfield, 2002), and Watt (2004) looked at change across middle and senior high school in Australia. Jacobs et al. found that children’s perceptions in each area were strongly positive early on. However, the overall pattern of change was a decline in each domain. There were some differences across domains with respect to when the strongest changes occurred, particularly in language arts and math. In language arts, the strongest declines occurred during elementary school and then little change was observed after that. In sports, the change accelerated during the high school years. The decline in math competence beliefs was steady over time. Fredricks and Eccles and Watt also found declines over time in competence beliefs and values, although the specific trends were somewhat different across these studies. This is most likely due to the somewhat different ways in which the constructs were measured in each study and (potentially) cultural differences in the samples (see further discussion below in the section on gender differences).

Two caveats about these findings should be mentioned. First, most of the research just described is normative, describing mean-level change across groups of children. Researchers have shown that these patterns do vary for children achieving at different levels (Harter, Whitesell, & Kowalski, 1992; Wigfield, Eccles, Mac Iver, Reuman, & Midgley, 1991). Second, it also has been shown that some preschool children react negatively to failure (see Dweck, 2002; Stipek, Recchia, & McClintic, 1992). Children reacting negatively to failure early on may be more likely to be pessimistic about their abilities even in the early elementary school years (Burhans & Dweck, 1995). Thus not all young children are optimistic about their abilities in different areas.

Factors Influencing the Development of Expectancy-Related Beliefs and Values
What explains these changes in children’s competence beliefs and values? Researchers have considered this question more fully with respect to the development of children’s competence beliefs, and have discussed two main
kinds of influences. First are children’s own experiences of mastery and failure with different tasks, the kinds of feedback children get from parents about their accomplishments, and how children interpret and come to understand this information about their performance. Bandura (1997), Dweck (2002), and Wigfield et al. (2009) provide further discussion of these influences.

The second influence is the kinds of experiences children have in the home and school environments (see Wigfield et al., 2006; Wigfield, Eccles, & Rodriguez, 1998). Parents provide children with many different kinds of evaluative feedback and often provide them with a set of opportunities to participate in different activities. This feedback and activity involvement influences children’s developing sense of what they are good at and what they value. In school, children are evaluated more systematically, formally, and frequently than they are at home, and these evaluations become more prevalent and important as children go through school. These evaluations in different areas lead children to develop distinct ideas about their competencies in these areas, and also to have a better understanding of their strengths and weaknesses in each area. The ways in which these evaluations are done can have either positive or negative effects on children’s competence beliefs and motivation. For example, the strong push for high-stakes testing in school can weaken the competence beliefs and motivation of students doing poorly on such tests (Deci & Ryan, 2002).

Children also have more frequent opportunities in school to engage in more social comparison activities because they spend so much time with same-age peers and receive information about how others are doing (Ruble, 1983; Skaalvik & Skaalvik, 2002). Such information begins to influence children’s sense of their own competence, with the effects noticeable at least as early as ages six or seven. More broadly, the contextual organization of classrooms and schools with respect to reward structures, kinds of achievement tasks and outcomes emphasized, and opportunities for decision making and collaboration can influence the development of students’ expectancies and values (see Eccles & Midgley, 1989; Wigfield et al., 1998).

Less has been written about how these and other factors influence the development of children’s achievement values, although work on the development of children’s interests is relevant to the development of children’s intrinsic value (see Schiefele, 2009; Wigfield et al., 2006, for review of the work on the development of interest). Children’s own experiences with different activities can influence how much they like or are interested in different activities; for instance, some children will find reading fascinating, and others will find it boring. Parents and teachers provide children with
feedback about the importance and usefulness of different activities (e.g., doing well in school is important; you need to learn math so you can become a scientist), which can influence children’s own valuing of them (Wigfield et al., 2006). Parents and teachers also may be more enthusiastic about children’s participation in some activities rather than others, which could influence how children value them. Children also likely compare their interest in different activities to those of their peers, and these kinds of value-related social comparisons may influence children’s own valuing of the activity. More broadly, cultural norms and ideas about what is appropriate for different children to do can influence the value children place on different activities (see Eccles, 2005). For instance, there are gender stereotypes about which activities are more appropriate for boys and girls.

Wigfield (1994) and Wigfield et al. (2009) discussed developmental trajectories of the different components of task value, postulating that interest may be the first to emerge, followed by importance and utility value. Importance ties to individual’s sense of self, which develops quickly during the elementary school years. Utility has to do with the perceived usefulness of different activities, and ideas about this take shape across the school years. Higgins (2007) provides a discussion of sources of influence on adults’ task values (see Wigfield et al., 2009, for a developmental analysis of these sources).

**Relations of Expectancy-Related Beliefs and Values**

How do the expectancy-related beliefs and values relate to one another over time? Wigfield et al. (1997) studied change across the elementary school years in children’s expectancy-related beliefs and values in several domains (measuring the usefulness and interest components of value). In contrast to Atkinson’s (1957, 1964) view that expectancies and values are inversely related, in this study at all grade levels and in all domains relations among the constructs were positive. The positive relations increased in strength across age. For instance, at first grade children’s competence beliefs and values in math and reading had a median correlation of .23. By sixth grade the median correlation of these variables in these domains was .53. Thus children’s task values, expectancy, and competence beliefs increasingly are positively related, suggesting that children come to value what they are good at. Indeed, Wigfield et al. (see also Wigfield & Eccles, 1992) explained the differences between their work and Atkinson’s by stating that in real-world achievement situations individuals value the tasks at which they think
they have a good chance of doing well. Similarly, Harter (2006) has argued that being competent at activities one thinks are important is an important positive predictor of self-esteem. When one lacks competence at activities deemed important then self-esteem can suffer.

A further interesting question from a developmental perspective is whether competence-related beliefs or achievement values have causal priority. That is, do children come to value activities at which they are competent, or do children learn to be competent at things they value? Bandura (1997) argued that efficacy beliefs are the prior causal factor; children learn to enjoy those activities at which they are competent. Jacobs et al. (2002) reported data that supports this claim in their longitudinal study of first through 12th grade children. They found, first, that children were more likely to value math, sports, and language arts activities when they believed they were competent at those activities. Further, change in competence beliefs predicted strongly the developmental trajectory in children’s subjective task values, accounting for over 40% of the variance in these trajectories. Thus change in children’s values was based strongly in how their competence beliefs changed.

Marsh and his colleagues examined relations of self-concept of ability and achievement and found that they are reciprocally related (e.g., Marsh & Yeung, 1997, 1998). Marsh, Köller, Trautwein, Lüdtke, and Baumert (2005) extended this work by including a measure of interest along with achievement, to examine reciprocal relations across all three variables in the domain of math. The interest measure asked how much students enjoy math, how important it was for them to be good at math, and if they would do math in their spare time. The major findings of this work were that math self-concept and achievement related reciprocally over time, and math interest and achievement (while correlated) did not relate reciprocally. Math self-concept and interest did relate reciprocally, but there was stronger evidence for the prediction of math interest from math self-concept than the reverse, findings that are similar to those of Jacobs et al. (2002). Thus, it appears that competence beliefs may be what drives children’s values and interests, at least for the kinds of achievement-related activities these researchers studied.

Expectancies, Values, Performance, and Choice

There is clear evidence from a variety of longitudinal and cross-sectional studies in different domains that individuals’ expectancies for success and
achievement values predict their achievement outcomes, including their performance, persistence, and choices of which activities to do (e.g., Bong, 2001; Eccles, 1993; Eccles (Parsons) et al., 1983; Denissen, Zarrett, & Eccles, 2007; Durik, Vida, & Eccles, 2006; Marsh et al., 2005; Meece et al., 1990; Pekrun, 1993, 2009; Simpkins, Davis-Kean, & Eccles, 2006; Xiang, McBride, & Bruene, 2004). Students’ expectancies for success and beliefs about ability are among the strongest psychological predictors of performance, even when the effects of previous performance are controlled. These relations become reciprocal as children get older (Marsh & Yeung, 1997, 1998). Students’ subjective task values predict both intentions and actual decisions to persist at different activities, such as taking mathematics and English courses and engaging in sports activities. Because, as just discussed, expectancies and values themselves are positively related, it is important to note that each has indirect as well as direct effects on performance and choice. That is, children’s task values indirectly influence their performance through their relationship with children’s expectancies for success, and children’s expectancies influence their choice of activities through their relationships with task value.

The relations of expectancies, values, and performance are evident in children as young as first grade, although they strengthen across age (Eccles, 1984; Eccles (Parsons) et al., 1983; Eccles & Harold, 1991; Meece et al., 1990; Wigfield, 1997). These relations of expectancies, values, and choice extend over time; Durik et al. (2006) reported that the importance children gave to reading in fourth grade related significantly to the number of English classes they took in high school. Also, children’s interest in reading measured in fourth grade indirectly predicted (through interest measured in 10th grade) high school leisure time reading, career aspirations, and course selections. In another longitudinal study looking at relations of performance, ability beliefs and values, and choice, Simpkins et al. (2006) found that children’s participation in math and science activities in late elementary school related to their subsequent expectancies and values in these areas, which in turn predicted the number of math and science courses they took through high school. Interestingly, in this study it was children’s ability-related beliefs in high schools that predicted choice more strongly than did students’ values; Simpkins et al. speculated that this may have occurred because students know the importance of such courses for college entrance, and are more likely to take them when they expect to do well in them. These findings suggest that there may be developmental and/or situational differences in how ability beliefs, expectancies, and values relate to choice; this is an important topic for future research.
Battle and Wigfield (2003), in one of the few studies to include the cost component of achievement values, found that attainment and utility value were positive predictors of college students’ intentions to enter graduate school, but the perceived psychological cost of graduate school attendance was a negative predictor. Thus, when students value something they also report they are more likely to engage in the activity. When the activity is seen as having too great a cost, they will be less likely to engage in it.

*Expectancies, Values, and Emotions*

As previous authors have noted (Schutz & DeCuir, 2002; Schutz & Lanehart, 2002; Pekrun, 2006, 2009), there is a growing need to understand the associations between emotions and achievement motivation. Recently, there have been studies revealing associations between emotions and self-regulation (see Pekrun, Goetz, Titz, & Perry, 2002; Schutz & Davis, 2000; Turner & Husman, 2008), attributions (Perry, Turner, & Meyer, 2006; Weiner, 2000), and goal orientations (Linnenbrink & Pintrich, 2002; Turner, Meyer, Schweinle, 2003) and expectancies and values (Frenzel, Pekrun, & Goetz, 2007). As discussed earlier, Pekrun (1992, 2009), in his control-value theory of motivation, stated that students’ expectancies and values can have emotional consequences. When students expect to do well, value the activity, and perform well, positive emotions occur. When they have lower expectancies and perform poorly, they can become anxious about the activity, and experience other negative emotions.

Work by Turner and Schallert (2001), Frenzel et al. (2007), and Pekrun (1992, 2000) examined associations between emotions, expectancies, and values. Turner and Schallert (2001) evaluated expectancies and values as predictors of shame following test feedback in an undergraduate psychopharmacology course, specifically whether expectancies and values predicted shame reactions after feedback. The expectancy block of variables was comprised of perception of academic ability, certainty of academic ability, and self-efficacy. These variables together positively predicted shame reactions, but did not individually predict. The values block of variables was made up of importance of academic ability, extrinsic goals, intrinsic goals, and task value. This block of variables together positively predicted shame reactions and individually only intrinsic and extrinsic goals predicted shame reactions (both positively). Turner and Schallert also found that expectancies negatively predicted shame, and task value did not explain additional variance in shame when added into the regression. These findings
are slightly complicated by the expectancies and value scales that were formed. The composite value variable included intrinsic and extrinsic goal items, which are not generally found in task-value scales. In addition, the expectancy measurement seems to more accurately measure efficacy since it described current ability beliefs as opposed to future beliefs. Nevertheless, this study showed the complex associations between motivation and academic emotions.

Frenzel et al. (2007) extended Turner and Schallert (2001) by evaluating additional motivations and gender differences in the associations of expectancies, values, and emotions. Frenzel et al. examined the association between gender, emotions, competence beliefs, and values for math in a large sample of fifth and sixth grade students. They found that females had lower competence beliefs, domain values, and equal achievement values as males, and that gender differences in emotions were mediated by these beliefs and values. Initially, the associations between gender and emotions were significant, with males rating themselves more highly on enjoyment and pride and females on anxiety, hopelessness, and shame. However, when competence beliefs, domain values, and achievement values were entered into the regression all the non-mediational betas became non-significant (except for enjoyment). Frenzel et al. (2007) also investigated gender as a potential moderator of the associations between mathematics grade, competence beliefs, domain value, and achievement value. Gender moderated the positive association between competence beliefs (favoring girls) and domain value (favoring boys) and the associations (all negative) between predictors (i.e., competence beliefs and values) and hopelessness were all larger in magnitude for females. The associations between domain and achievement values and pride were higher for boys. Another interesting point is that the association between prior achievement and pride was nonsignificant for females. An interesting extension would be to examine how these associations and gender interactions might change developmentally from fifth and sixth grade as studied here through high school.

Of all the academic emotions, test anxiety has received the most attention (Schutz & DeCuir, 2002; Schutz & Lanehart, 2002). In a study of the relations between test anxiety, achievement, and expectancies, Pekrun (1992) found that effort-control expectancy was negatively associated with test anxiety and subjective valence (importance) of failure was positively moderately correlated with expectancy of failure in a large study done in Germany. In addition, in fifth through eighth grade students’ achievement was associated with lower test anxiety, and failure expectancies were associated with higher test anxiety (Pekrun, 2006). He also commented that
achievement and anxiety did not have a direct association, which offers evidence that they may be mediated by expectancies.

Pekrun (2009) described the current state of empirical evidence on academic emotions. He reported that test anxiety is consistently positively correlated with failure expectancies and that failure expectancies, valuing achievement, and effort-control expectancies are antecedents of test anxiety in younger students as well as university students (cf. Pekrun, Goetz, Perry, Kramer, & Hochstadt, 2004). Based on these studies, it is clear that there are associations between expectancies, values, and emotions. Further, these associations between these variables are altered when feedback and gender are considered. Additional work might consider how these associations may change in different domains.

**PROSPECTIVE: NEW RESEARCH DIRECTIONS**

There are numerous important topics for future research on children’s expectancies and values that build on the research reviewed in this chapter. We focus on several areas that we believe are key: (1) extending the achievement value construct; (2) considering links of achievement values to future instrumentality of education; (3) studying expectancies and values in diverse groups of children and adolescents from different cultures; and (4) attending to the role of context. We also make some measurement and other methodological recommendations.

*Extending the Achievement Values Construct*

We believe there are at least three important ways that work on achievement task values should be extended. First, as we noted in the section above on definitions, researchers studying achievement values have looked at both broader values about the kinds of action that are desirable both on their own and to reach certain goals (e.g., Rokeach, 1973, 1979), and the components of task-specific values focused on in expectancy-value models in the achievement motivation field. Rokeach distinguished between terminal values (things such as wisdom, freedom, equality, and happiness) or desired end states, and instrumental values (things such as honesty, responsibility, and independence), which are ways to attain the terminal values. It would be interesting to examine connections between Rokeach’s broader human values and achievement task values as a way to see how individuals’
approaches to different tasks relate to their broader values. To our
knowledge the only researcher who studied these connections was Feather
(1982, 1988). Feather found that college students’ instrumental values as
defined by Rokeach predicted the value they attached to different college
courses in math and English, and that the task-specific values predicted
choice of college major. These relations should be examined development-
tively to begin to determine when students begin to define their core
instrumental and terminal values, and how these impact their task-specific
values. One intriguing possibility is that children’s interests and task values
may partly determine their broader core values; children’s more generalized
values might emerge from their specific experiences with different activities
rather than the reverse. Researchers could use the existing measures of these
constructs to study these relations in children and adolescents, although the
measures of broader values developed by Rokeach and Feather likely would
have to be adapted for use with young children.

A second area for future research on achievement values is to ask whether
there are other components of task value beyond the intrinsic, importance,
and utility components that have been the focus of most of the research.
Or do these three components capture achievement values fully, at least
with respect to predicting relevant achievement outcomes? Here are some
additional possibilities. Some tasks or activities may be valued because
they are exciting or stimulating or perhaps even risky; stimulation and risk are
related to interest value but perhaps extend beyond it. Risk taking has been
described as characterizing the adolescent developmental phase (Arnett, 1992;
Feldstein & Miller, 2006), and so this possible aspect of value might be salient
then. Excitement, stimulation, and risk most likely characterize nonacademic
activities, but perhaps some academic activities (an explosive science
experiment; a daring novel) could be characterized in these ways too.

One group of Rokeach’s (1973, 1979) terminal values includes inner
harmony, peacefulness, and beauty; perhaps there are certain tasks or
activities that promote these kinds of feelings and contribute to an overall
sense of calm and well-being. Gaskins (1999) proposed that motivation
theories do not deal adequately with how motivation can lead to
psychological states such as contentment and inner harmony; in our view
SDT perhaps comes closest with its strong focus on well-being. Expectancy-
value theory could be extended in this direction by assessing whether some
tasks or activities that individuals do contribute to these kinds of feelings, or
terminal values to use Rokeach’s term. From the particular perspective
of achievement motivation such additional components of value would be
most relevant if they related clearly to children’s performance on different
activities or choice of them. Such linkages could be assessed if measures tapping these other possible aspects of value were developed.

In addition to exploring possible new components of task value, we also believe the cost aspect of value deserves further exploration. Battle and Wigfield’s (2003) study with college students showed that cost related negatively to importance and utility value attached to graduate school, and also to intentions to enroll in graduate school. These findings suggest that when individuals believe the cost of an activity is too high they are less likely to pursue it. It would be interesting to extend this work to elementary and secondary school students. Young children often engage in many different academic and nonacademic activities. As they get older each activity potentially gets more time intensive, and children (and their parents, coaches, and teachers) get a clearer sense of which activities children enjoy and are capable of performing, and which are not. As their schedules get more intense they likely consider whether the time spent on a less enjoyable activity continues to be worth it. During early adolescence and adolescence these demands get more intense. Adolescents likely consider cost in at least two ways, within a given activity set (which of these sports activities can I continue to do given time constraints) and across activities (how do I balance time spent on school, social activities with friends, and other nonacademic activities). Relations of cost, the other aspects of task value, and perceived competence and expectancies likely play important roles in these decisions. Thus further considerations of cost would give us a fuller picture of children and adolescents’ decisions about which activities to pursue and which to give up. We suggest that researchers examining children’s expectancies and values include existing measures of cost into their studies, and explore its relations with other motivational beliefs and values, and various outcomes.

Researchers interested in studying potential additional aspects of students’ values could start by interviewing students about why they engage in different tasks, and then develop survey measures of them. These components are potentially interesting in their own right, but it also would be informative to see if they predict performance and choice in studies that include measures of the other aspects of task value.

The Long-Term Value of Tasks and Activities

Greene, Miller, and their colleagues and Husman, Lens, and their colleagues have discussed another important motivational construct that relates to
achievement values, the instrumentality of an activity or set of activities (Greene, Miller, Crowson, Duke, & Aikey, 2004; Husman, Derryberry, Crowson, & Lomax, 2004; Husman & Lens, 1999; Miller & Brickman, 2004; Miller, DeBacker, & Greene, 1999). Instrumentality refers to students’ perceptions that tasks they are doing will help them attain future goals. This construct builds on earlier work on the role of the future in motivation by expectancy-value theorists such as Raynor (1982). It also relates to the utility and importance value constructs in Eccles, Wigfield, and colleagues’ expectancy-value model. However, Husman et al. noted that much of the work in the motivation field focuses on motivation for immediate tasks and activities, and that even extant measures of utility value focus primarily on immediate usefulness rather than long-term usefulness. Students’ current motivation obviously is important for their engagement in learning, but students also know that a major purpose of education is to prepare them for the future. Therefore, if students believe that current educational activities are useful to them in the long run, they are more likely to be motivated to achieve (see also Maehr, 1974 for discussion of the related construct of continuing motivation).

There are a number of important findings from these researchers’ studies of high school and college students’ perceived instrumentality. One important issue is how distinct instrumentality is from task values. In their factor analytic work both Husman et al. (2004) and Miller et al. (1999) found that instrumentality can be distinguished empirically from items measuring task value and intrinsic motivation, although scales for each of these constructs relate positively to one another (it is important to note that the measures of instrumentality and task values used by these researchers are not identical). These studies provide evidence that the future-oriented instrumentality construct indeed is distinct from the value of current tasks.

With respect to relations of instrumentality to other constructs, Husman and Lens (1999) found that students who see the instrumentality of their educational activities to their future success are more positively motivated, self-regulated, and achieve higher GPAs. Greene et al. (2004) found that high school students who viewed the activities they do in class as motivating and believed that teachers support their autonomy had higher self-efficacy, which in turn predicted their instrumentality and reported use of cognitive strategies. Thus students’ sense of the instrumentality of their educational experiences relates to how motivating they see their current activities, illustrating the important connection of current and future motivation. Self-efficacy and strategy use were direct predictors of achievement; instrumentality was an indirect predictor. These latter findings relate to
Eccles, Wigfield, and colleagues’ work reviewed earlier showing that ability-related beliefs directly predict achievement, whereas values are indirect predictors. Instrumentality also predicted students’ mastery and performance approach goals (see Greene, DeBacker, Ravindran, & Krows, 1999, for further research on relations of task values and goals).

Recently, Husman and Shell (2008) developed a measure of students’ perspective on the future that includes different dimensions of this perspective. These include extension, or how far ahead into the future the student thinks; connectedness, or how much students see their current activities linked to future possibilities; speed, or students’ sense of how fast time is passing, and valence, which refers to the importance of future goals relative to present ones. Their confirmatory factor analyses provided support for these dimensions of future time perspective.

It is clear from this work that instrumentality is important to students’ achievement and relates to a variety of other motivation-related beliefs, values, and goals. Miller and Brickman (2004) proposed a model of future-oriented motivation and self-regulation, based in social cognitive models of self-regulation such as that of Bandura (1986) and work on future goals such as that of Markus and Nurius (1986). There are two parts of the model, one dealing with future regulation and one dealing with proximal regulation. Miller and Brickman also proposed connections between the future and proximal parts of the model; for instance, they discussed connections between individuals’ future goals and the proximal goals they have for completing current tasks, arguing that when individuals have future goals they are more motivated to pursue proximal goals. They also discussed how individuals’ valuing of achievement connects to their future goals, which in turn connect to the perceived instrumentality of the tasks they are doing in school. Miller and Brickman posited that individuals’ beliefs about their ability also relate to their valued future goals. Perceived instrumentality relates to how the current tasks are valued, and also to task engagement, self-regulation, and performance. This model thus connects general educational values, future goals, the instrumentality of current tasks, ability beliefs, and the value of current tasks. A number of the links in the model are similar to those presented in Eccles and Wigfield’s and Pekrun’s expectancy-value models reviewed earlier. Two important differences in these models are the clearer specifications of links of values and goals in the Miller and Brickman model, and the clearer connections of present and future motivation (Miller & Greene, personal communication, August 14, 2009). Expectancy-value researchers interested in choice of activities and long-term relations of expectancies and values to performance
and choice should consider including measures of instrumentality in their studies as well, to explore further links between current and future aspects of motivation.

Another important direction for research looking at instrumentality, achievement values, performance, and choice is to examine developmentally when children begin to have a clear sense of the instrumentality of different activities, when these beliefs are distinguishable from the components of task value, and how they relate to choice and performance in children of different ages. As noted earlier in Eccles and colleagues’ work with younger children, it appears that utility and importance factor together (Eccles et al., 1993). During the early school years children do not have a clear sense of how different tasks could be useful to them. Children’s sense of the instrumentality of different activities likely develops during later elementary school and through middle school. Dimensions such as the extensivity of their future time perspective likely are limited at least until high school. Looking at the developmental relations among these constructs using the measures now available in the literature, and their relations to expectancy beliefs, performance, and choice, is an important direction for future research in the expectancy-value tradition.

**Gender, Ethnic, and Cultural Differences in Expectancies and Values**

Researchers studying children’s expectancies and values have long been interested in group differences, with a particular focus on gender differences in expectancies and values (see Wigfield & Eccles, 2002; Wigfield et al., 2006, for detailed review). This work shows that boys’ and girls’ expectancies and values tend to follow gender stereotypic patterns, with boys having more positive expectancies and values in domains such as math and sports, and girls in reading/English and music (Eccles, 1984; Eccles et al., 1993). However, recent studies of gender differences in expectancies and values have revealed a somewhat different picture. Jacobs et al. (2002) did not find significant gender differences in value of math, though gender differences in competence beliefs in math (favoring boys) and English (favoring girls) were found, along with gender differences in English value (favoring girls) and sport value and competence beliefs favoring boys. Fredricks and Eccles (2002) hypothesized that gender differences in competence beliefs and values in math and sport would increase over time because of the gender stereotypic nature of these activity domains, but found instead that math
competence beliefs and sports interest and intrinsic value converged for boys and girls.

Watt (2004) examined gender differential trajectories in the associations between talent perceptions, intrinsic value, utility value, success expectancies, perceptions of difficulty, and effort required in math and English in 7th–11th grade Australian students. She found that males generally rated themselves more highly on math talent, expectancies, and values than did females for math, and females generally followed similar patterns for English (except math utility value, English expectancies for success and talent perceptions which were not significantly different).

Watt (2004) commented that the differences between her findings and those of Fredricks and Eccles (2002) and Jacobs et al. (2002) may be due to differences in measurement. Watt measured talent perceptions as ability, which is less influenced by achievement experiences than competence beliefs (the measure used by Fredricks & Eccles, 2002). In addition, differences in results concerned with values may be due to the different types of values that were assessed. Jacobs et al. (2002) assessed a combined task values that contained items from all three aspects of value defined by Wigfield and Eccles (2000). Fredricks and Eccles (2002) measured interest and importance, and Watt measured intrinsic and utility value. These conflicting findings from the studies done in different cultural contexts, and the gender differences in US children's beliefs and values, demonstrate the complexity in the development on different types of task values. For these and other reasons is it important to continue to evaluate gender differences in achievement motivation.

Researchers also have been interested in ethnic differences in expectancies and values, and related motivation constructs, as well as interactions of gender and ethnicity (see Graham, 1994; Graham & Taylor, 2002; Meece, Glienke, & Burg, 2006; Guthrie, Rueda, Gambrell, & Morrison, 2009; Wigfield et al., 2006, for review). Some of this work shows that African American children have more positive competence beliefs than do European American children, but that these beliefs do not relate as strongly to achievement for the African American children (see Graham, 1994). Graham, Taylor, and Hudley have found interesting interactions of ethnicity and gender, using a peer nomination measure asking who students admire in their school that they describe as a way to measure task value (Graham, Taylor, & Hudley, 1998; Taylor & Graham, 2007). They found that African American, European American, and Hispanic American females chose students who were fashionable, athletic, and high achievers as ones they admired, as did European American boys. African American
and Hispanic American males nominated classmates that were fashionable and athletic, but were not high achievers. This work shows why it is important to consider gender and ethnicity together, as there are different patterns for boys and girls in different ethnic groups with respect to values-related beliefs. Additional research is needed to explore these patterns further.

Other researchers have examined broader issues tied to ethnicity that can impact children’s expectancies and values. In a qualitative study, Sanders (1997) interviewed 28 African American middle school students about their perceptions of racial barriers for success and found that there were three categories of boundary: denial of racism and barriers, moderate awareness of them, and high awareness of them. These perceptions were positively associated with academic achievement, particularly for the high awareness group. This group viewed racism as a challenge and an opportunity to work harder. Taylor and Graham (2007) found a positive relation between perception of racial barriers and nomination of low achievers as admired or valued for African American boys in middle school, but not for female middle school students or elementary school students. This association was not found in the Hispanic American portion of the sample. This study may offer insight into the development of the association between perception of racial barriers and values. Future work might use similar protocols in order to continue to evaluate perceptions of gender and ethnicity boundaries simultaneously and associations with values and expectancies for success.

Researchers increasingly are interested in cross-cultural differences in expectancies and values and other motivation-related constructs. Wigfield et al. (2009) reviewed studies that assessed expectancy-related beliefs and values in students from various countries in order to evaluate the relations and developmental associations of the key constructs in expectancy-value theory. In terms of competence beliefs they noted that researchers find similar decreases in competence beliefs in students in Hong Kong. Generally, students in western societies have higher mean levels of competence beliefs than do students in Asian countries in various subject areas, even though the Asian students’ achievement often is higher. There are fewer cross-cultural studies of task values; extant research indicates that the different components of values can be identified in Korean students (Bong, 2001). Less is known about relations of task value to performance and choice of activities. Clearly more work is needed to elucidate similarities and differences in expectancies and values across cultures, and their relations to performance and choice, to provide information about the relevance of this theory cross-culturally.
When discussing these cultural differences it is imperative to assess the fidelity of the instruments cross-culturally as well as potential interpretation differences of participants in different countries. For example, Stevenson and Stigler (1992) discussed the potential differences in the measurement of utility value in Eastern cultures in which value of teachers may play a more significant role when responding to items. Similar points may apply to measures of expectancies and competence beliefs.

Methodological Issues

There are a number of well-validated self-report measures of expectancies, values, and related constructs in the literature that have provided the foundation of our knowledge in this area and can continue to be used in future research (see Wigfield & Cambria, 2010, for review). There are many reasons why student self-report is a good way to measure motivation; if one is interested in measuring individuals' beliefs then self-report needs to be used. These measures can be plagued by social desirability, however. For instance, it can be difficult for children to state on a questionnaire that school is not important to them. Further, self-report measures can be problematic in developmental studies with young children. Researchers have made strides in developing appropriate measures for young children and ways of administering them to help children answer them well (e.g., Eccles et al., 1993; Marsh, Ellis, & Craven, 2002), but care still must be taken in their use.

Karabenick et al. (2007) described their program of work focused on studying the cognitive processes used by respondents as they complete surveys. The purpose of this work is to help researchers understand how individuals respond to self-report items and thereby improve the validity of these measures by developing items that are understood by participants in ways compatible with researchers' intentions in developing the items. Part of this work involves cognitive pretesting of items to be used on surveys. Karabenick et al. provide examples from motivation research of how respondents understand different measures used frequently in work on motivation. It may be especially important to do this kind of work with young children, in order to understand more clearly how they interpret different items and the constructs they measure.

An important issue to consider is the problem of shared method variance in response to self-report measures when researchers rely solely on them; this problem can result in inflated correlations among the variables. We urge researchers to include other kinds of measures along with participant
self-report measures, to get a more complete picture of students’ expectancies and values, their interrelations, and relations to outcomes. Studies reviewed earlier include other measures such as different performance measures, decisions about what activities to continue, and so on that broaden the work beyond student self-report. Other possibilities include having teacher or parent ratings of children’s motivation; researchers have used such measures successfully and they have been shown to relate to various achievement outcomes (e.g., Guthrie et al., 2004). Having multiple informants and multiple kinds of measures adds complexity to a study, but has many benefits as well. Another alternative is to use “indirect” self-report measures such as those used by Graham and her colleagues (Graham & Taylor, 2002; Taylor & Graham, 2007) to measure task value; such measures have the potential of avoiding some of the concerns about social desirability of the direct measures.

Another issue concerns the kinds of statistical analyses to use when doing studies that include multiple related measures of motivation, performance, and other outcome variables. Many of the studies discussed earlier used traditional variable-centered approaches such as hierarchical regression analyses or multivariate repeated measures ANOVAS to look at predictive relations among variables and change over time, factor analyses to look at the dimensionality of different constructs, and correlational analyses and structural equation modeling to look at relations among them. Recently, researchers doing studies that include multiple related measures have been using other kinds of analytic techniques and approaches that may prove to be especially beneficial for this kind of work. Shell and Husman (2008) used canonical correlation to look at relations of a set of motivation variables to a set of self-regulation variables. This analytic technique allows researchers to look at latent linear combination of variables and provides information about which correlations among the set of variables are meaningful to interpret.

Another useful analytic technique is HLM, which allows the researcher to look at variation both within and between classes. Tsai, Kunter, Lüdtke, Trautwein, and Ryan (2008) used this analytic technique to examine how different contextual and personal factors related to situated interest. Finally, there is increasing interest in using person rather than variable-centered approaches when studying motivation. Peck, Roeser, Zarrett, and Eccles (2008) and Roeser and Peck (2003) discuss these kinds of approaches. Pastor, Barron, Miller, and Davis (2007) provide a review and critique of different person-centered approaches and describe the advantages of latent class or profile analysis for researchers who measure a variety of motivation constructs and examine their relations to different outcomes.
We have focused throughout this chapter on developmental issues. Researchers have used successfully both cross-sectional and longitudinal studies to look at relations among expectancies and values and their development. We believe some of the most interesting questions about how these relations change over time, which construct may take causal precedence, and how they relate to performance and choice require longitudinal designs. New longitudinal studies would be build on the important work of Fredricks and Eccles (2002), Jacobs et al. (2002), Marsh et al. (2005), and Watt (2004).

Expectancy-Value Theory and Context

Motivation researchers increasingly are interested in how children’s motivation is affected by the different educational contexts that they experience (e.g., Hickey, 1997, 2008; Hickey & Granade, 2004; Nolen, 2007; Nolen & Ward, 2008; Perry et al., 2006; Turner et al., 2002; Turner & Patrick, 2008; Urdan, 1999). These (and other) researchers make the essential point that children’s motivation is not a stable individual characteristic that operates similarly in different settings. Instead, children’s motivation is situated in and strongly influenced by what occurs in classrooms: the kinds of tasks and activities they experience in different subject areas, how teachers organize and structure these activities and the classroom environment more generally, students’ relations and interactions with other students, to give just a few examples. Nolen and Ward (2008) separated situated and sociocultural approaches to motivation into three broad categories (sociocultural, person in context, situative), and provide an informative discussion of the similarities and differences in these approaches. One important difference across these approaches is whether the context is seen as influencing the individual (according to Nolen and Ward researchers taking sociocultural and person in context approaches take this view) or whether the individual is part and parcel of the social context rather than just influence by it (researchers taking a situative view).

Over the last 25 years researchers have learned much about how different classroom contexts, structures, and activities influence students’ motivation (see Ames, 1992; Maehr & Midgley, 1996; Perry et al., 2006; and Stipek, 1996, for review), and this work has led to a better understanding of how teachers can organize their classrooms to promote motivation. Such work has generated a set of principles having to do with fostering positive motivations in classrooms These principles have to do with the kinds of
tasks and activities to provide, the goal structure to emphasize, the importance of active learning opportunities, and others. However, researchers focusing on situative and contextual influences also note that the variation in children’s motivation across different situations means that there are limits to these general principles and that children’s motivation reflects a complex interplay of the individual and the contexts they experience (e.g., Hickey & Granade, 2004). Indeed, Hickey and McCaslin (2001) discussed how situated views emphasize the ways in which specific motivational practices (e.g., the provision of incentives) impact the ways students negotiate shared meaning in different educational contexts, which will influence how those practices operate in the different context. Thus such practices may not necessarily operate similarly in different classroom contexts (see also Nolen & Ward, 2008).

Expectancy-value theorists have considered contextual influences on children’s motivation in a number of ways. As noted earlier, Eccles, Wigfield, and colleagues’ model includes a variety of social, cultural, and contextual influences on children’s expectancies and values (see Eccles, 1993; Eccles & Midgley, 1989; Eccles et al., 1998; Wigfield et al., 1998). These include cultural views and stereotypes about what are appropriate activities for different children to do; socializers’ beliefs and provisions of opportunities in different areas; and classroom characteristics, activities, and structures. All of these influences are dynamic and situation bound. Further, as discussed earlier measures of children’s expectancies and values are situated at least to the domain-specific level, and could be made more specific. In these and other ways context and situation are an integral part of expectancy-value theory, and researchers adopting this view have examined how a variety of contextual and situation factors influence children’s expectancies and values in reciprocal ways (see Eccles et al., 1998; Wigfield et al., 1998, for review).

Having said that, there are potential and actual points of disagreement between some theorists focusing on context and situation and expectancy-value theorists on the nature of motivation and its influences on learning. This debate centers around assumptions of the nature of knowledge, learning, motivation, and where they reside (see Hickey, 2008; Hickey & Granade, 2004; Nolen & Ward, 2008). Sociocultural and situative theories of learning and motivation are based in part Vygotsky’s (1978) work, and a major premise of his work is not just that contexts influence individuals, but that knowledge and learning actually are part of the context, not necessarily an individual phenomenon; this is the approach researchers categorized by Nolen and Ward (2008) as adopting a situative approach take. Individuals’ motivation thus reflects their engagement with the community of learners in
their classrooms, and meaningful engagement is not possible by a given individual if the whole community is not engaged. This “distributed” view of knowledge and motivation rests on different assumptions about the nature of motivation than the assumptions made by social cognitive theorists about the importance of individual beliefs, beliefs, values, goals, and other motivation-related constructs residing in the individual that are seen as determinants of motivation. Such beliefs, values, and goals may become less relevant if motivation is part and parcel of the context rather than the individual (see Hickey, 2008). Our own position is that individuals’ ability-related beliefs and values (among other individual characteristics) remain important influences on students’ achievement, choices, and engagement in different activities. Contexts and situations can moderate these influences in important ways, but the individuals’ perceptions of these influences and their self-beliefs and values remain key to understanding their motivation.

These different kinds of assumption have implications not only for how motivation and engagement are characterized, but also how it is studied. The traditional self-report measures utilized in much research based in social cognitive models of motivation may not be responsive enough to situations to capture fully their influence, or perhaps more important, capture how engagement exists in the interactions of the individual and context rather than just the individual. Hickey and Granade (2004) and Turner and Patrick (2008) discussed some alternative methodologies to capture situated motivation (see also Ainley & Hidi, 2002), and Hickey and Granade noted the importance of doing research that includes measures coming from both social cognitive and sociocultural perspectives as a way to begin to test some of the different assumptions and predictions coming from these different perspectives. Nolen and Ward (2008) discussed how in situative and other sociocultural approaches to motivation considering the context or community as a unit of analysis (rather than the individual) is crucial, as is researchers’ participation in the community. Use of these different kinds of methodologies and analysis approaches will provide further insight into students’ motivation, how it is influenced by context, and the interplay of the context and individual, that will help the field continue to move forward.

CONCLUSION

Expectancy-value theory has been a vibrant theoretical perspective on motivation, and as we hope is clear from this chapter, researchers continue
to uncover new and interesting things about students’ expectancies and values, and their relations to a variety of outcomes. Over the next ten years we anticipate important new findings about how expectancies and values relate to various motivational, behavioral, and emotional outcomes; vary in different groups of children; and are influenced (and influence) different contexts.

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