Families and teachers might wish that the school could do the job alone. But today's school needs families, and today's families need the school. In many ways, this mutual need may be the greatest hope for change. (Dorothy Rich, 1987, p. 62)

There are 27 students in Ms. Douglas' third-grade classroom, each with his or her own temperament, learning style, and motivation to engage in academic and social activities. Ms. Douglas has ideas about how to motivate children to learn, based on her training and her many years of teaching experience. We can begin to understand the way motivation operates in Ms. Douglas' classroom by looking at Ms. Douglas and her students, but this is not the whole picture. Although they may not be sitting in the classroom, there are 43 parents, 4 grandparents, and 1 aunt raising the 27 students. Each caregiver has his or her own background, parenting style, values, and beliefs about education that significantly influence the day-to-day experience of each of the 27 children in Ms. Douglas' classroom. Further, Ms. Douglas also has her own ideas about how parents contribute to their children's motivation and achievement in the classroom. Most research in motivation in the academic domain has focused on child and teacher factors; however, parenting attitudes and behaviors have proven to play a central role in these areas of children's development. In order to gain a more comprehensive understanding of children's academic motivation, we clearly need to consider the role that parents play.

In the search for factors that affect children's school success, the family has long been known to be a crucial factor. Since Coleman et al's (1966) conclusion that family background is the strongest predictor of school success, researchers have been exploring parent and family factors associated with school achievement. The field has now progressed so that family factors amenable to change have been identified, motivational processes through which they affect achievement recognized, and complexities that make the work applicable to diverse families uncovered. This has been made possible by a number of trends in the research conducted on families and school motivation.
A first trend, begun as early as the 1980s was to move beyond background or "social address" (Bronfenbrenner, 1986) factors, such as parent education and socioeconomic status (SES), to focus on proximal factors that may explain some of the predictive power of family background variables (e.g., Davis-Kean, 2005). Researchers began to ask questions such as: What parent attitudes and beliefs predict student school success? How do parents' behaviors and interactions with their children and with the school affect children's school achievement? How do relationships between parents and children affect children's motivation and achievement? This work has been highly fruitful, and we can now identify a multitude of parenting factors such as parents' beliefs and expectations about their children's competence (e.g., Alexander & Entwisle, 1988; Jodl, Michael, Malanchuk, Eccles, & Sameroff, 2001; Parsons, Adler, & Kaczala, 1982), parents' attributions for their children's successes and failures (e.g., Hokoda & Fincham, 1995), and parent behaviors including involvement, autonomy support, and structure in school-related activities and events (e.g., Grolnick & Ryan, 1989; Grolnick & Slowiaczek, 1994) that are connected to success in school.

A second trend is identifying the processes through which parents affect children's school outcomes. It is increasingly apparent that children's motivation—why they engage in school endeavors and how they experience themselves with regard to school behaviors, activities, and emotions—is crucial to children's school success. Included in these processes are children's beliefs about their abilities (e.g., Harter, 1982) and about the value of school activities and endeavors (Wigfield & Eccles, 2002), children's perceptions of control over school outcomes (Skinner, Wellborn, & Connell, 1990), children's self-regulation (Ryan & Connell, 1989), and the goals children bring to their class and homework (Dweck & Elliott, 1983). Such key motivational variables are likely mediators of relations between parenting and children's school performance. A focus on motivation is consistent with an active model of children, whereby they are not passive recipients of inputs from the social context, but active interpreters of the context as they develop motives and concepts of themselves that they then bring to achievement settings.

Another key direction for research is understanding the factors that make it possible for parents to provide resources to their children that will facilitate school motivation. Parents do not interact with their children in a vacuum—they do so within their larger social and cultural contexts. Recognizing this, researchers have begun to identify factors in parents' social surroundings that enable them to provide facilitative resources to their children. Included in such characteristics are factors within other institutions, especially schools, that make facilitative parent behavior, such as involvement, more possible (e.g., Eccles & Harold, 1996; Stone, 2006). In addition, factors within parents, such as their perceived pressure to have their children succeed (e.g., Grolnick, Price, Belswenger, & Sauck, 2007), as well as factors within children themselves, such as their temperaments and competence levels (e.g., Pomerantz & Dong, 2006), may also affect facilitative parenting behaviors.

In addressing ways in which parents influence motivation and achievement in children, it is important to take a theoretical viewpoint specifying what children need to develop, thrive, and engage fully with their environments. While many theories of motivation are available, in this chapter we focus on three that have generated important research on parenting. For each of these theories—Self-Determination Theory (Deci & Ryan, 1985), Expectancy-Value theory (e.g., Eccles-Fansous et al., 1983), and Goal Orientation Theory (e.g., Dweck & Elliott, 1983)—we first describe the motivational constructs that have been shown to be crucial to school success and then describe the parenting variables that have been linked to them.

**Self-Determination Theory**

Self-Determination Theory (SDT; Deci & Ryan, 1985) posits that individuals have three psychological needs, the fulfillment of which is necessary for well-being, and which, when unsatisfied, can result in maladjustment and lack of motivation. These needs are for relatedness, autonomy, and competence.

According to SDT, the need for relatedness concerns a need to be connected with, loved, and valued by others. Such an experience is associated with feelings of security that allow one to venture out and pursue goals, making a sense of relatedness necessary for taking on challenges. In addition to the need for relatedness, the need for autonomy refers to a person's need to feel agentic, to feel like the author of his or her actions. As such, autonomy as defined by SDT is not equivalent to independence (which refers to lack of dependency on others), but rather describes the need to feel one has a choice regarding one's actions. In the school domain, autonomy is exhibited when children's academic behaviors are self-initiated and managed, rather than externally controlled, and when the behaviors are initiated for internal reasons rather than external reasons (Ryan & Connell, 1989; Ryan, Connell, & Grolnick, 1992). Lastly, the need for competence is the need to feel effective in navigating one's environment and creating successful outcomes. When this need is satisfied, children feel both in control of their successes and failures (i.e., have a sense of perceived control; Skinner, Wellborn, & Connell, 1990) and believe in their own competence to achieve desired outcomes (i.e., have a sense of perceived competence; Harter, 1983).

We now turn to parenting behaviors that, within Self-determination Theory, facilitate the fulfillment of the three needs.

**Involvement**

Parents help facilitate the need for relatedness through positive involvement, which includes both the provision of tangible resources (e.g., time, attention) as well as relationship characteristics (e.g., emotional support, warmth) that provide children with the psychological resources essential for motivation in school (Grolnick & Ryan, 1989).

The area of parent involvement in children's schooling is a burgeoning one—with researchers from a variety of disciplines and viewpoints including academics, education, and public policy showing strong interest in this area (Fan & Chen, 2001). Parent involvement in children's education has been conceived as a key to decreasing the achievement gap between disadvantaged or minority children and their more advantaged peers and as a road to educational equality (U.S. Department of Health and Human Services, 2005). A variety of questions have been asked in the literature—questions to which we now have some relatively clear answers. Importantly, what is the evidence that parent involvement is associated with achievement outcomes? And what do we know about how parent involvement affects student outcomes?

With regard to the first question, there is now little doubt that parent involvement is positively associated with educational outcomes across a broad range of students (Fan & Chen, 2001). Bolstering this conclusion are the results of Jeynes' (2005) meta-analyses of 42 studies of urban elementary children and 52 studies of secondary school children (Jeynes, 2007), though the effect size was somewhat smaller for the secondary than the elementary school children. Parent involvement has also been linked to fewer behavior problems (Comer, 1984) and lower drop-out rates (e.g., Barnard, 2004; NCES, 1992).
Interestingly, research indicates that broader indices of parental support show higher correlations with school outcomes than more specific types of behaviors such as helping with homework at home or participating at school. In both of Jeynes' meta-analyses, measures assessing involvement as parents' supportive overall style had the strongest effects on achievement. In second through fifth graders observed interacting with their parents, a supportive style (warmth, clarity of communication, and positivity) was a stronger predictor of achievement than parent involvement at the school (Zellman & Waterman, 1998). These results support the idea that parents' positive and supportive involvement helps children to feel connected and valued, a conclusion that is reinforced by work reviewed later showing that involvement has its effect largely by helping to build motivational resources that children then bring to their school experiences (Grolnick & Slowiaczek, 1994).

Finding relations between parent involvement and children's school outcomes is important, but does not explain why these relations exist. In order to understand parent involvement, we need to determine how it is related to these outcomes, in other words, what are the mechanisms through which parent involvement has its impact? Children's motivational processes, including their thoughts and emotions about themselves as individuals and learners and the degree of autonomy they have for engaging in school related behaviors, have been addressed as such mechanisms. Dearing, McCartney, Weiss, Kreider, and Simpkins (2004) found support that parent involvement at school during kindergarten affected children's literacy through its effects on children's confidence in themselves with regard to literacy activities, which then resulted in greater competence. Hill and Craft (2003) looked at social competence and academic behavior (e.g., staying on task and being a self-starter) as possible mediators of the relation between parent involvement at school and children's school achievement. Interestingly, social competence mediated the relation for European American but not for African American families. Academic behavior was a mediator for both groups of families.

In a more comprehensive study, Grolnick, Ryan, and Deci (1991) posited a motivational model whereby parenting behavior would facilitate children's school performance by building the motivational resources children need to succeed in school. They found that both mother and father involvement contributed to children feeling more competent and in control of school successes and more autonomous in their activities, each of which were, in turn, related to children's school performance.

Grolnick and Slowiaczek (1994) further examined this motivational model by examining the ways in which three types of parent involvement: behavioral involvement (i.e., going to open houses, attending parent-teacher conferences, and participating in other school activities), cognitive/intellectual involvement (i.e., exposing children to cognitively stimulating activities such as books and current events), and personal involvement (children's reports that their parents care about school and have and enjoy interactions with them around school) affected children's motivational resources of perceived competence, perceived control, and self-regulation. Results indicated that, for mothers, two of the involvement factors, behavior and cognitive/intellectual, were uniquely related to school grades through their relations with children's enhanced feelings of academic competence and beliefs that they could control their successes and failures in school (i.e., control understanding). There was also a direct effect of parent behavior on school grades. For fathers, behavioral and intellectual/cognitive involvement were associated with children's perceived competence, which was then associated with children's grades. The results for both parents thus support a model whereby parent involvement is related to children's academic achievement by way of children's motivational resources.

Finally, closely connected to parental involvement are positive and caring relationships that can lead children to have secure relations with their parents. Such secure relations or attachments have been found to be strongly connected to children's school motivation. For example, securely attached elementary school children reported a more mastery-oriented approach to learning 2 years later than did insecurely attached children (Moss & St. Laurent, 2001). Feelings of closeness to parents predict greater engagement in school (Furrer & Skinner, 2003; Learner & Kruger, 1997). Such findings underscore the importance of relationships with parents for children.

Summary

The literature on parent involvement unequivocally supports its strong relations with academic outcomes. Further, there is evidence that involvement has its effects by facilitating motivational processes such as perceived competence, perceived control, and positive feelings about academic endeavors. If motivation is a potent mediator of involvement, it can be concluded that parents can have a strong impact on children's school success, whether or not they are able to provide assistance with specific skills such as those in math or social studies. Attachment work supports the idea that involvement may have much of its impact through the feelings of connectedness and value for the child that it conveys.

Autonomy-Support versus Control

Parents support children's need for autonomy by taking children's perspectives, encouraging their initiations, and supporting their autonomous problem solving. Controlling parenting behaviors, by contrast, involve parents taking their own perspectives, pressuring children toward particular ends, or solving problems for them (Grolnick & Ryan, 1989).

As with parental involvement, the association between parental autonomy-support and child well-being outcomes is well supported in the literature. Research has demonstrated positive effects of parental support of child/adolescent autonomy for many outcomes, including internalizing and externalizing psychopathology (e.g., Barber, 1992; Barber, Olsen, & Shagle, 1994; Ryan, Deci, Grolnick, & LaGuardia, 2006; Soenens, Elliot, Goossens, Vansteenkiste, Luyten, & Duriez, 2005), social and job search contexts (Soenens & Vansteenkiste, 2005), and health risk behaviors (e.g., Turner, Irwin, Tschann, & Millstein, 1993). Additionally, one of the key areas of interest in autonomy-support research has been in the domain of academic motivation.

Research spanning more than three decades provides ample evidence connecting parental autonomy-support with academic achievement motivation for children and adolescents. Although work on autonomy support has been primarily conducted with older children or adolescents, SDT research has illustrated that autonomy-support is associated with motivation in infants and young children, possibly setting the stage for academic motivation in the later years. For example, Grolnick, Frodi, and Bridges (1984) showed positive correlations between mothers' autonomy support and the mastery motivation of 1-year-olds. Deci, Driver, Hotchkiss, Robbins, and Wilson (1993) similarly showed that mothers who were more autonomy supportive versus controlling during play showed more intrinsic motivation to pursue challenges presented by toys when on their own.

With elementary school children, multiple studies support the relationship between autonomy-supportive parenting and positive academic outcomes. In the study discussed previously, Grolnick and Ryan (1989) showed that maternal autonomy support was associated with children's more
autonomous self-regulation in school. In a subsequent study using children's reports of parent­
ing, Grolnick, Ryan, and Deci (1991) replicated this finding, with both maternal and paternal
autonomy-support predicting both autonomous academic self-regulation, as well as perceived
competence (Harter, 1982), and maternal autonomy-support predicting control understand­
ing (i.e., perceived control; Connell, 1985). Though these results are compelling, the authors caution
that the results are likely bidirectional. In fact, Self-Determination Theory readily acknowledges
the complexity of the relationship between parent and child factors, and research suggests that
these variables most likely represent a reciprocal, transactional process of influence between
parent and child (Bronstein, Ginsburg, & Herrera, 2005; Grolnick & Ryan, 1989). For example,
parents may respond to children they consider more competent by being autonomy-supportive
and children they consider less competent with a more controlling parenting style.

Research has also examined parent autonomy support and adolescents' motivation. For ex­
ample, Soenens and Vansteenkiste (2005) found self-determination in the school domain to be
an intervening variable between maternal autonomy-support and academic achievement out­
comes (e.g., GPA, scholastic competence ratings) in Belgian high school students. Steinberg and
colleagues (1992) found that authoritative parenting (adolescent report of parental acceptance/
involved, supervision/strictness, and psychological autonomy granting; Baumrind, 1971) at
Time 1 predicted greater increases in adolescent engagement in school than nonauthoritative
parenting over the course of 1 year. Further, in a study of the transition to junior high, Grolnick
and colleagues (2000) found that maternal autonomy-support in the sixth grade buffered against
increases in learning problems and acting-out behaviors in school in the seventh grade, and that
increases in maternal autonomy-support between sixth and seventh grades protected against
the declines in self-worth and control understanding that were evident in other children. These
findings highlight the importance of parental autonomy support, especially in times of transition,
during which children may be vulnerable.

Importantly, student drop-out has been linked to parental autonomy support. Vallerand, Fortier,
and Guay's (1997) examination of a motivational model revealed a chain of effects whereby low
perceived parental autonomy-support was linked to low feelings of competence and autonomy
about school, which predicted less self-determined school motivation, which in turn led first to
intentions to drop out, and finally, to actually dropping out of school. In addition, although per­
ceived autonomy support from teachers and school administrators were significant in the model,
parents had by far the strongest impact on these outcomes, a reflection of the depth of influence
that parents have on their children's lives.

Summary

Substantial research over the past few decades points to parental autonomy-support as a key
element in facilitating children's academic motivation. When children need for autonomy is
supported, they are more likely to be intrinsically motivated to learn, to be autonomously self­
regulated in academic contexts, and to be more engaged in school. In contrast, when children
perceive their parents as controlling, they are more likely to experience extrinsic motivation for
learning, which is related to more negative motivational and academic outcomes. That the results
are consistent across such a wide range of ages and indicators of school motivation speak to the
importance of this parenting dimension.

Structure

While parent involvement and autonomy support are both key to children's motivation, work
on parenting has suggested a third dimension that is crucial to a variety of child outcomes. In
particular, this third dimension involves the way parents set up and organize the environment to
facilitate success for children. We have labeled this dimension structure. Structure refers to the
consistent rules, guidelines, and expectations parents have for their children. Theoretically, these
guidelines give children the knowledge they need about how to attain desirable outcomes and
avoid undesirable ones. In particular, when expectations and consequences are clear and support
for following these guidelines is provided, children are expected to develop a sense of perceived
control and perceived competence that will allow them to pursue desirable ends.

In the parenting literature, there has been acknowledgement of this third dimension. How­
ever, the dimension has been variously conceptualized and operationalized. For example, some
researchers have referred to the dimension as firm vs. lax control, with lax control representing
allowing extreme independence and using lax discipline (Schaefer, 1965). Others have referred to
the dimension with terms like demandingness or strictness, though often these constructs have
included elements of both structure and control. SDT makes a clear distinction between structure,
which involves the provision of information, rules and expectations that facilitate competence,
and autonomy support versus control, which concerns how such structures are implemented (i.e.,
in a manner that is pressuring and coercive or one which allows input and child problem solving).
Rather than reviewing all of the literature on the third dimension, we focus on work that refers
specifically to parents' provision of guidelines, expectations, and rules with regard to school or
cognitively-related activities and interactions.

Some of the work relevant to the structure dimension, especially that involving young
children, has addressed the ways in which parents facilitate competence during parent-child task
interaction. In much of this work, the parenting dimension has been labeled quality of assistance.
For example, Englund, Luckner, Whaley, and Egeland (2004) rated quality of assistance as how
well mothers structured task situations with their children and coordinated their activities to
the children's during a problem solving activity. Quality of assistance was associated with IQ,
which then predicted higher achievement in first and third grade. Similarly, Frieze, Nimetz, and
Bennett (1997) showed that quality of assistance during a block design task, including providing
orienting instructions and well-timed hints, as well as autonomy support, predicted children's
competence in kindergarten. With somewhat older children, Mastanah (2001) rated how well
the parent established, maintained and followed through with limits during a 40-minute interaction
with their fourth grader. This rating was positively correlated with teacher ratings of academic
competence.

Less work has focused on the effects of structure on motivation per se. Based on interviews of
parents of third- through sixth-grade children, Grolnick and Ryan (1989) rated parents on two
dimensions of structure: (a) parents' provision of clear rules, expectations, and guidelines for
behavior and the stipulation of consequences for not meeting expectations, and (b) the degree
to which rules and guidelines were consistently applied or promoted. Children of parents high
on these dimensions reported more knowledge of how to succeed and how to avoid failure (con­
trast when children

In their review of work on parenting and school performance, Christenson, Rounds, and Goe­
ney (1992) suggested a larger dimension called structure for learning and stated that there is no

study that has addressed this concept comprehensively. They noted the importance of variables such as providing an appropriate space for homework, establishing a schedule, and providing adequate lighting and materials. Though there is little empirical work on such factors, Cooper, Lindsay, and Nye (2000) identified elimination of distraction as a key parenting dimension that impacts on homework.

In order to address the effects of parental structure more comprehensively, Farkas and Grolnick (2009) identified six key components of structure that would be relevant to children’s school functioning. These components include (a) clear and consistent communication of expectations, (b) clearly defined and consistently endorsed rules, guidelines, and expectations. The second, opportunities to meet or exceed expectations includes opportunities to behave within guidelines such as necessary materials or support. Third, feedback is feedback provided for meeting expectations. The fifth component, provision of rationales, involves providing reasons for rules and expectations. Finally, authority involves parents taking an active role in guidance and decision making and serving as ultimate authorities.

In a first study of these six components of structure, Farkas and Grolnick (2006) interviewed 75 seventh- and eighth-grade students and their mothers. Their findings suggest important links between components of structure and children’s motivation. In particular, provision of clear and consistent guidelines were positively correlated with children's control understanding and perceived competence, indicating that when parents provide clear rules and expectations in a consistent fashion, children report that they know how to attain success and avoid failure in school and that they feel competent to obtain desired outcomes.

Summary

While there is little research directly addressing structure, this dimension has the potential to organize research on what parents can provide to facilitate competence in children. The existing evidence supports the importance of providing rules and expectations, and opportunities to meet them, for children’s perceptions of competence and control. Clearly more research is necessary to delineate the ways parents can use structuring behaviors to facilitate competence.

Modern Expectancy-Value Theories

Modern expectancy-value theories (e.g., Eccles-Parsons et al., 1983; Feather, 1992, Heckhausen, 1977; Wigfield & Eccles, 2002) take a social-cognitive perspective on motivation and achievement. More specifically, in the tradition of Atkinson’s original expectancy-value model (1957, 1964), such theories link an individual’s persistence, task choice, and performance to their expectancy-related and task-value beliefs.

Expectancy-related beliefs are beliefs about how well an individual will do on upcoming tasks (Eccles-Parsons et al., 1983) or their perceived efficacy. Task-value beliefs include the individual’s positive and negative assessment of the task. Eccles-Parsons and her colleagues (1983) have outlined four motivational components of task value: (a) attainment value (personal importance linked to self-schema, gender, ethnicity etc.); (b) intrinsic value (enjoyment and subjective interest); (c) utility value (usefulness in relation to current and future goals); and (d) cost (the negative aspects of engaging in task performance, including performance anxiety, expenditure of effort and lost opportunities as a result of task participation).

Children’s expectancy and task-value beliefs have been shown to be strong predictors of performance and persistence in different domains, including math, reading and sports (see Wigfield & Eccles, 2002 for a review). For example, Meece, Wigfield, and Eccles (1990), in a study of 250 seventh-through ninth-graders, found that students’ performance expectancies predicted math grades and their value perceptions predicted course enrollment intentions. In another study, Simpkins, Fredricks, Davis-Kean, and Eccles (2006) found that children’s self-perceptions of competence, importance and interest in sports in sixth grade were positively related to adolescents’ sport participation in 10th grade. These relationships have been shown empirically as young as first grade and strengthen across age (e.g., Eccles, 1984; Eccles & Harold, 1991; Eccles-Parsons et al., 1983; Meece, Wigfield, & Eccles, 1990; Wigfield, 1994).

Within the expectancy-value model, parents influence children’s achievement motivation through their general beliefs and behaviors (which include gender-role stereotypes, locus of control, efficacy beliefs, child-rearing beliefs and interpretive biases), their parent-specific behaviors (teaching strategies, encouragement to participate in various activities, training of specific personal values, and explicit causal attributions), and their child-specific beliefs (which include expectations for children’s performance, perception of talents, temperament and interests and socialization goals; Eccles, 2007). These parental beliefs and behaviors have been shown to predict children’s self and task beliefs in a variety of studies (e.g., Fredricks & Eccles, 2002, 2005; Frome & Eccles, 1998; Miller & Davis, 1992; Pallas, Entwisle, Alexander, & Stilka, 1994; Stevenson, Chen, & Ullal, 1990).

With the understanding that parental beliefs regarding the child’s ability to successfully complete the task may have the most targeted influence on a child’s perceived competence, motivation, and achievement, the largest set of expectancy-value studies has focused specifically on parents’ beliefs about their children’s competence. In one such study, Parsons, Adler, and Kaczala (1982) found that the more parents expected their children to do well at math, the more positive the children felt about their own math competence. Notably, the relations between parents’ and children’s beliefs were stronger than those between children’s beliefs and their own performance.

Findings for parents’ expectations and aspirations for their children’s achievement mirror these results and extend them to children’s own expectations and values. For example, parents’ expectations for their children’s educational attainment have been linked to children’s own expectations of how far they will go in school (Halle, Kurtz-Castes, & Mahoney, 1997; Phillips, 1987). In a study of adolescents’ occupational aspirations, children of mothers and fathers who viewed their children as having a greater chance to obtain positive academic outcomes and who held high educational expectations/aspirations valued school as being important for their future and had higher educational aspirations. Children’s educational aspirations in turn predicted their professional career aspirations (Jodl et al., 2001). In the longitudinal study referenced above, Simpkins et al. (2006) found that parents who reported more sport and math promoting beliefs and behaviors, such as high ratings of their children’s competence, valuing of the activity, encouragement, provision of materials, and time involvement with their children in the activities, had children with higher sport and math ability self-concepts, interest, importance and participation in both domains concurrently and across time.

Because expectations for achievement in different academic domains may vary according to the child’s gender, in particular, that boys may be viewed as more competent in math and girls as more competent in language tasks, the role of parents’ gender-based beliefs in the development
of children's achievement motivation has been a focus of study. For example, Jacobs and Eccles (1992) found that parents' gender-based stereotypes directly influenced their perceptions of their children's abilities in math, English and sports, which in turn influenced the children's performance and self-perceptions of their abilities across these domains, even after controlling for the child's previous performance.

Summary
Modern expectancy-value studies provide a model of the manner by which parent and family characteristics are transmitted via parents' general and child-specific beliefs and parental role modeling and activity specific behaviors (Eccles, 2007). Consistent with the theory, parents' expectancies of their children's competence and parents' valuing of the task in which the child is engaging appear to have strong influences on children's motivation across childhood and adolescence (Wigfield & Eccles, 2002). Further research is needed to address the development of children's achievement values, the link between expectancies and values and achievement and motivation across ages, and the manner in which expectancies and values themselves are linked with these developmental processes (Wigfield, Eccles, Schiefele, Roese, & Davis-Kean, 2006).

Goal Orientation Theory
In the realm of academic achievement, Goal Orientation theorists (e.g., Dweck & Leggett, 1988; Nicholls, 1984) distinguish among children's different approaches to learning. Children with a mastery orientation, learning, or mastery goals focus in their achievement pursuits on learning new things and mastering new skills. Children with a performance orientation, or performance goals tend to focus on external outcomes such as grades or "looking smart" (as judged by themselves and others), with an ultimate goal of maximizing the likelihood of being evaluated as competent and minimizing evaluations of incompetence. Within the category of performance goals, some researchers argue that it is necessary further differentiate between approach and avoidance components (e.g., Elliot, 1999, 2005; Elliot & Harackiewics, 1996; Pintrich, 2000). For example, performance-approach would involve appearing competent and outperforming peers, and performance-avoidance goals would involve avoiding any evaluations of incompetence.

In general, the research has been fairly clear about the consequences for children of adopting these various orientations to learning. Children with a mastery orientation or learning goals tend to be more intrinsically motivated to learn, leading them to be more engaged in the learning process, and thus to have more positive achievement outcomes (Gutman, 2006; Matos, Lens, & Vansteenkiste, 2007). Children with performance-approach-oriented goals have been shown to have positive academic self-concepts and often perform well, but do not tend to exhibit intrinsic motivation to learn. In contrast, children with performance-avoidant goals tend to be low on measures of learning and achievement motivation (Harackiewicz, Barron, Pintrich, Elliot, & Thrash, 2002; Matos, Lens, & Vansteenkiste, 2007).

Given the significance of children's achievement orientations for academic motivation and success, researchers have begun to examine how these orientations may develop in children. Classroom contexts (e.g., Gutman, 2006; Midgley, 2002), peer and other social relationships (e.g., Nelson & De Bock, 2008), and parental influences (e.g., Boon, 2007; de Bruyn, Dekovic, & Meijten, 2003; Gonzales & Wolters, 2006; Gonzalez-DeHass, Willems, & Holbein, 2005; Gurland & Grolnick, 2005) have all been addressed.

In an effort to examine children's development of goal orientations, Gutman (2006) conducted a study of African American adolescents transitioning to high school. Notably for our discussion of parenting influences, results indicated that adolescents whose parents endorsed mastery goals had higher grades than peers whose parents did not endorse mastery goals. However, these authors did not include motivational outcomes in children so it is not clear how parents' goals had their effect.

In support of the hypothesis that goal orientations are at least in part socialized by parents, Hokens and Fincham (1995) conducted a laboratory study of mastery-oriented and "helpless" third-grade children doing solvable and unsolvable tasks with their mothers. They found that, compared with mothers of "helpless" children, mothers of mastery-oriented children were more sensitive and responsive to their children's requests for help, were warmer in their interactions with their children, and were more likely to respond to their children's low-ability attributions and performance goal statements with mastery-oriented responses. In contrast, mothers of "helpless" children were more likely to respond to their children's performance goal statements with performance goal statements of their own, to respond to low-ability attribution statements with suggestions to quit the task, and to respond to negative child affect with negative affect.

Several studies lend support to the central role that parenting styles play in children's goal orientations. In particular, both Boon (2007) and Gonzalez and Wolters (2006) found that an authoritative parenting style, in which the child's perspective is elicited and respected, but appropriate rules and boundaries are enforced (Baumrind, 1967), was related to enhanced mastery goals in children. Further, Gonzalez and Wolters (2006) found that authoritarian parenting (a parenting style focused on conformity, obedience, and respect for authority; Baumrind, 1967) was associated with a performance-approach orientation in children, whereas permissive parenting (a parenting style involving little to no provision of rules, boundaries, or limitations; Baumrind, 1967) was negatively related to children's mastery orientations and positively related to children's performance-approach orientations. Similarly, in a laboratory task, Gurland and Grolnick (2005) found that controlling parenting behaviors (see the discussion of Self-Determination Theory) were associated with children's endorsement of performance goals.

Summary
Goal Orientation Theory provides a useful lens through which a greater understanding of children's academic achievement motivation can be reached. Abundant research has shown the positive motivational and academic outcomes associated with having mastery, as opposed to performance, goals. While some research links parenting to goal orientations, much of this work includes broad parenting constructs such as authoritative parenting. Although the Gurland and Grolnick (2005) and Hokens and Fincham (1995) studies have offered a first step towards describing more specific parenting behaviors that are associated with mastery goal orientations, more research in this area is needed. It is interesting that several of the key parenting constructs identified as important for facilitating learning versus performance goals such as authoritativeness, responsiveness, and autonomy support overlap with facilitative dimensions identified within Self-Determination Theory. Such work highlights the need for research on parenting and motivation that crosses theoretical areas.
Diversity and Parenting—Age, SES, and Cultural Background

Much of the research presented above assumes that the effects of parenting are consistent across populations. However, there is reason to believe that, not only is parenting affected by background factors, but the ways in which key parenting behaviors are expressed differs for different populations and ages. For example, while the effects of parent involvement are consistent across populations, the types of involvement that are facilitative vary with age, with involvement at the school more important for younger ages (Grolnick et al., 2000; Jeynes, 2007). Further, while parent involvement affects families across background and culture, the ways parents from different cultural groups become involved may differ (Kerbow & Bernhardt, 1993). For example, Asian American families may be more involved in educational activities outside the school while European American and African American families tend to be more involved at school (Lee & Bowen, 2006).

Given the ways in which parents from various ethnic/racial groups tend to be involved, it is not surprising that the effects of different types of involvement have sometimes been found to vary for these groups. For example, involvement at home was found to be more predictive of European American children's scores on quantitative concepts (math readiness) while involvement at school was more important for African American children's readiness scores (Hill, 2001). With regard to SES, Cooper and Cossnoce (2007) found that reports of parent involvement at school were positively correlated with economically disadvantaged children's academic orientation but were negatively correlated for non-disadvantaged children. These authors concluded that while parents of non-disadvantaged children become involved when their children are achieving poorly, those of disadvantaged children may be involved regardless of achievement level, thus for disadvantaged children parent involvement is a resource that can facilitate academic progress. Clearly, it is important to consider the meaning of and goals for involvement behaviors for different groups.

While these complexities in the types of specific behaviors and practices that affect motivation in diverse families do not challenge overall theories of parenting and motivation, more controversial is the idea that some parenting dimensions themselves may have different effects in different cultures or groups. For example, some authors have questioned the assumption that autonomy-support is universally beneficial, positing that the need for autonomy is merely a western phenomenon (e.g., Markus, Kitayama, & Heitman, 1996). In an effort to demonstrate the applicability of the construct of autonomy-support cross culturally, Chirkov and Ryan (2001) studied 236 high school students in the United States and Russia. They discovered that the construct of autonomy-support was interpreted similarly by Russian and U.S. students. In addition, the findings that autonomy-supportive parenting was associated with more intrinsic motivation in school, less extrinsic motivation in school, and more general well-being were almost identical for the two groups. Thus, there is at least some evidence that the motivational model appears to be supported across a variety of settings (see also Chen, Dong, & Zhou [1997] for complementary work with Chinese students). However, additional work in more cultures and with other key parenting constructs is crucial to determine how parenting and motivation may play out across cultures.

Factors that Build and Limit Parents' Capacities to Support Children's Motivation

A number of parent beliefs, orientations, and behaviors have been identified as facilitating children's school motivation. Nonetheless, just as children's environments affect their motivation, parents themselves are affected by factors that influence their abilities to provide facilitative environments for their children's motivation. External stresses and available resources, including socioeconomic factors, contribute to the parental context for motivation, as does the more proximal context of the parent-school relationship. Furthermore, parents experience internal pressures (e.g., concerns about the competition that children may face, and their sense of their own worth as a reflection of their children's achievements) and individual perspectives and beliefs (e.g., ideas about children's motivation) that may affect the manner in which they provide support for their children overall and particularly in relation to children's motivation in school.

External Stresses and Resources: The Broader Context for Parenting

As with any parental behavior, parental support for children's motivation in school must be understood within the context within which the parents and family live (Belsky, 1984; Bronfenbrenner, 1986). High levels of stress have been found to be negatively related to parental characteristics such as warmth and responsiveness (Belsky, 1984; Roberts, 1989), whereas social support has been positively associated with provision of a nurturant family environment (Crick, Greenberg, Ragozin, Robinson, & Basham, 1983). In many research models, parenting has been conceived as mediating the relationship between socioeconomic context and children's developmental outcomes (e.g., Conger & Conger, 2002; Duncan & Brooks-Gunn, 1997; Keating & Hertzman, 1999). McLoyd (1990) proposed a family stress model, suggesting that parenting behaviors are mediating processes through which socioeconomic inequalities and financial stressors influence child outcomes. Evidence for this relationship has been found in European American, African American, and Latino families (Gutman & Eccles, 1999; Mistry, Vandewater, Huston, & McLoyd 2002). Conger and Donnellan (2007) proposed an interactionist model of SES and human development. In this model, parental "positive characteristics," which include attributes such as cognitive abilities, social competence, persistence, self-efficacy, and ambition, affect SES. Further, parents' life-course situation affects these parental characteristics, and it is this reciprocal dynamic process that affects children's development. Longitudinal investigations of these transactional relationships have shown support for the model (e.g., Caspaldi, Conger, Hops, & Thornberry, 2003).

Less work has specifically examined the manner in which such contextual factors influence the three dimensions identified as facilitative within SDT, i.e., autonomy support, involvement, and structure. Grolnick, Weiss, McKenzie, and Wrightman (1996) interviewed parents about how they motivate their adolescents to do their homework, do well in school and other behaviors, whether they have expectations or rules for these behaviors, how they respond to positive or negative outcomes, and how they respond to conflicts in these areas. They also collected information about the stressful events parents had recently endured and the availability of social supports to them. For mothers, the more stressful events they had experienced, the less they tended to provide structure and autonomy support. These results suggest stressful events may interfere with mothers' abilities to provide resources, such as time and energy, and to develop and enforcing rules and guidelines overall, and may serve to undermine mothers' tendencies to take children's perspectives and support their initiations, which likely require emotional availability. The study found, however, that the number of stressful events endured was not related to fathers' behaviors. Instead, for fathers, reports of social support were related to greater levels of involvement. It is possible that daily stresses do not interfere with fathers' manners of interacting with their children as much as they may for mothers. Nevertheless, when fathers have extra support, they may be more able to extend their capacities to spend time and energy with their children. These results demonstrate the complex relationships between external pressures and parenting behaviors associated with child motivation.
Although Grolnick et al. (1996) examined the relationship of contextual factors to parenting behaviors from a Self-Determination Theory perspective, they did not look at these factors in relation to parenting behaviors with regard to school more specifically. In a subsequent study, Grolnick, Benjet, Kurowiski, and Apostolakis (1997) examined relations between contextual factors and parental involvement in children's schooling. The researchers identified three hierarchically organized sets of factors influencing parental involvement, namely parental and child characteristics, family context, and teacher behavior and attitudes. They found that mothers who felt efficacious, who saw their roles as that of teacher and who viewed their children as less difficult were more involved in cognitive activities. Parental social support was associated with both school and personal involvement. While this study found that SES did predict involvement, especially school and cognitive involvement, SES was not associated with parents' personal involvement in children's schooling. Similarly, single parents were also less likely to be involved in school activities than parents from two-parent families; however, no relationship was found between family configuration and cognitive-intellectual or personal involvement. Thus, not all types of parental involvement are equally susceptible to external stress. These results lend support to the findings of Chavkin and Williams (1989) which dispute the idea that low-income parents lack interest in their children's schooling, by showing that parents with fewer resources may participate less than their more resourced counterparts in school activities, but are fully involved with supporting and knowing about their children's progress in school. Overall, research in this area calls for a complex understanding of the manner in which context influences the kinds of support parents may provide for their children's motivation in school.

School Factors: Schools Can Make a Difference

The parent-school relationship is a particularly salient context for parents' support of children's motivation at school. Both exogenous and process variables have been shown to influence parents' relationship with their children's schools (Eccles & Harold, 1996; Stone, 2006). Exogenous variables include background characteristics of the school staff (e.g., experience and race), school structural and compositional variables (e.g., student body characteristics, size), and resources and general school practices (Stone, 2006). Process characteristics consist of teacher beliefs about parents and students and practices that are instituted to influence the relationship families have with the schools (e.g., parent involvement, parent outreach, parent-teacher communications; Stone, 2006).

Research has provided some information regarding the role of exogenous factors in parent-school relationships. For example, schools with a high proportion of minority and low-income students have been found to have poorer teacher-parent relationships (Metropolitan Life Survey of the American Teacher, 2001), while smaller schools have higher levels of parent involvement (Gardner, Riblatt, & Beatty, 2000).

Likewise, teacher characteristics have been related to parent-school relationships. Thus, teachers who reported more negative beliefs and lower expectations of students were less likely to reach out to parents and reported more distrust of parents (Stone, 2003). In the study of factors associated with parent involvement in children's schooling discussed earlier (Grolnick et al., 1997) teachers reported on their beliefs about parent involvement and the degree to which they used practices to involve parents in their classrooms. Teachers' active efforts to include parents in classroom activities fostered parental involvement, but this was the case only when parental attitudes and social context were facilitative. In particular, teacher practices were positively associated with parent involvement for parents who saw themselves as efficacious and viewed their roles as that of teacher, and those who experienced less difficult contexts, but were not associated with parent involvement for parents low on these attitudes or high in stress. This indicates that, at least with the types of practices teachers used in this study, teachers may not be reaching parents who are in the most difficult circumstances or whose beliefs may not match those of the teacher. Such findings suggest that schools may need to think especially creatively about involving parents who are traditionally hard to reach.

In addition to these classroom level factors, system-wide attention to enhancing family-school partnerships can provide parents environments that are favorable to involvement in children's education. One approach to fostering family school relationships is the National Network of Partnership Schools (Sanders & Epstein, 2000), which provides states, districts, and schools assistance to improve family-school relationships through comprehensive development strategies, including the creation of "action teams," explicit attention to goal-oriented system-wide planning, ongoing assessment of the quality and progress of development of partnerships and each school's participation in networking activities. Studies have indicated that when schools devote these types of attention and resources to family-school relationships, family and community involvement in schools improve (Epstein, 2001; Sanders & Simon, 2002; Sheldon & Van Voorhis, 2004). A longitudinal study of one such partnership school demonstrated increased connections with families on seven out of eight indicators of family involvement and commitment to family involvement over time (Epstein, 2005). These results demonstrate the role of school-family partnerships in providing parents the contexts they need to more fully support their children in school.

Parents' Experiences of Internal Pressure

In the same way that social-contextual and school factors may provide a context for parenting practices, the psychological processes which parents bring to their efforts to support their children overall and in relation to their schooling may influence parental motivational attitudes and behaviors.

To understand how pressure and individual difference factors predict autonomy supportive versus controlling parental behaviors, Grolnick, Guiland, DeCourcey, and Jacob (2002) observed mother-child dyads completing homework-like tasks (poem and map task) in a laboratory setting. Dyads were placed in either a high-pressure condition with a focus on the child being tested on the task and their parents responsible to prepare them for this evaluation, or a low-pressure condition with no mention of performance standards. Mothers also completed questionnaires about their attitudes toward supporting children's autonomy versus controlling their behavior. Mothers who endorsed controlling attitudes before the laboratory manipulation were more controlling during the homework-like tasks, marking the role of parent factors in their interactions. In addition, mothers in the high-pressure condition were more controlling overall on the poem task. However, on the map task, mothers who had controlling attitudes were more controlling in the high- than the low-pressure condition, whereas mothers who endorsed more autonomy supportive attitudes were not affected by the condition. These results highlight the role of evaluative pressure, motivational style, and task type in predicting controlling parental behaviors.

To further explore the role of internal factors in parental practices, Guiland and Grolnick (2005) examined the role of worry and perception of threat in parents' behavior in interacting with their children. They hypothesized that mothers' anxiety about their child's performance and their perceptions of competition, and scarcity of resources for their children would increase their controlling behaviors which might, in turn, predict children's goal orientations. They found that...
mothers who perceived higher threat in their children's current and future environments used more controlling behaviors and endorsed more controlling attitudes than mothers who reported a greater sense of security, predictability, and resources available to their child. Furthermore, controlling parenting was associated with children's endorsement of performance rather than learning goals (Dweck & Leggett, 1988) with some support for a mediational model for these relationships, whereby threat was associated with controlling behavior which then predicted more performance-oriented goals.

Grolnick, Price, Beiswenger, and Sauck (2007) broadened this exploration of the factors that might contribute to controlling behavior in mothers by examining the effects of situation, maternal and child characteristics on maternal autonomy supportive versus controlling behavior. In this study, mothers were placed either in a socially evaluative condition in which they were told that their child would be rated for how much they were liked or accepted by other children, or a no-evaluation condition in which they were told that their child would simply meet and play with other children. Mothers reported on their attitudes toward supporting or controlling children's behavior and the degree to which they tended to hinge their self-worth on how successful their children were socially or social contingent self-worth (Crocker & Park, 2004; Eaton & Pomerantz, 2004). Results showed that mothers in the evaluation condition spent more time giving their children answers (a controlling behavior), mothers with controlling attitudes exhibited more controlling behaviors, and mothers high in social contingent self-worth who were in the evaluation condition were most controlling. Thus, situational pressures combined with parental attitudes and psychological processes may set the stage for controlling parental behaviors. More research on the nature of parental internal pressures and the manner in which they affect children's motivation in school is needed to understand the complex relations among situational, child, and parental characteristics at play in these relationships.

**Child Characteristics**

A final factor that may help explain parents' controlling behavior is characteristics of the children themselves. Parenting is clearly a bidirectional process, with children as active participants in their parenting environments (Lollis & Kuczynski, 1997). It makes sense that it would be far easier to provide autonomy support to a child who is well-behaved and cooperative than one who is constantly testing boundaries. Further, involvement with a child who is positive and appreciative may be much more rewarding than that with a child who is more negative. Supporting this reasoning, Grolnick, Weiss, McKenzie, and Wrightman (1996) found that parents who saw their adolescents as more difficult tended to report less involvement and more controlling behavior than parents who saw their adolescents as easier. Similarly, in the Grolnick et al. (1997) study described earlier, parents who viewed their children as more difficult were less likely to be involved in school activities.

Just as parents' perceptions of children's difficulty may be associated with parental attitudes and behavior, so may parents' perceptions of their children's competence be related to parental attitudes and practices. Grolnick et al. (2007) showed that mothers who perceived their children as more fearful of negative evaluation in social situations tended to have more controlling attitudes regarding children's behavior. Similarly, Pomerantz and Eaton (2001) found that parents who worried about their child's academic performance reported more controlling attitudes and using more controlling practices. Following up on this, Pomerantz and Dong (2006) found that mothers with negative perceptions of their child's competence who also endorsed the stability of these child characteristics were most likely to pass on this pressure, thus affecting children's academic and affective functioning over time.

**Conclusions and Future Directions**

Children's motivation and achievement in school are clearly the result of the interplay of many factors at multiple levels. Our review of the literature suggests that the family, and in particular parenting, is an important influence on school outcomes at all levels including school readiness, the transition to school, developing and maintaining positive motivation in elementary and secondary school, and preventing drop-out. In particular, when parents believe in children's competence and have high expectations for them, provide the resources that children need to feel connected to others, and facilitate a sense of autonomy by supporting children's initiations and problem-solving, children's motivation is most likely to thrive. Unfortunately, there are many factors that interfere with parents' abilities to provide such resources to their children. While one promising direction is for schools to use practices for involving parents, there is some evidence that such strategies may not be effective for reaching the most stressed parents and those whose ideas about their roles do not match those of the school (Grolnick et al., 1997). Certainly there are challenges ahead for helping all parents to support their children's educations.

There are a number of promising research directions that may help to advance the area of parenting and children's motivation. Here, we identify three that we are pursuing.

First, more attention needs to be paid to transactional processes among children, parents, and schools in understanding children's motivation. Though children's active role in their own socialization has been recognized since the 1960s (e.g., Bell, 1968), the majority of research still assumes parent to child directionality. In our own work, we have identified child to parent pathways in which parents appear to be responding in their behavior to children's levels of competence (e.g., Grolnick & Slowiaczek, 1994). Stattin and Kerr's (2006) work showing that adolescent problem behavior largely drives parents' monitoring efforts, with more problem behavior predicting decreased monitoring over time, is a good example of work in this area. Longitudinal studies employing cross-lagged correlations and structural modeling techniques will be useful avenues for assessing bidirectional relations.

While most research in the academic domain examines cognitive processes, children's school success depends on emotional competence as well. Children's emotional competence, including being able to identify and understand emotions and to regulate emotional responses, has been linked to both academic and social outcomes (DeRose, Calkins, Anastopoulos, Keane, & Shelton, 2003; Shields et al., 2001). In a recent study (Bellas & Grolnick, 2007), we are using classroom observations and teacher interviews to understand how teachers think about and respond to children's emotions in their classrooms. Preliminary results show that teachers acknowledge the importance of emotions in supporting children's motivation, often emphasizing that children's emotional reactions may influence their ability to attend and persist in challenging academic situations. Further, teachers emphasize the role of parents and parent-teacher relationships in supporting children's emotional development and providing an environment for children's emotional well-being and motivation in school. More research is needed to understand the role of teachers and parents individually, as well as teacher-parent relationships, in supporting children's emotional development both overall and in school.

A third area of research involves the expectations about adults that children bring to the school setting. We have been studying the effects of children's expectations about how autonomy
supportive vs. controlling adults are likely to be on their experiences of rapport with new adults. 
Guraln and Grofnick (2002) used a videotape procedure in which children were shown a video of an unfamiliar adult taking them through a task. Results showed that children who expected the adult to be more autonomy-supportive before seeing the video reported higher levels of rapport with the adult.

In our current work, we are attempting to provide information to children before encounters with new adults to determine whether we can increase the development of rapport (Friendly, Grolnick, & Guraln, 2007). With regard to parents, there are several promising directions for this work. First, it would be important to understand how experiences with parents might shape expectations of teachers and other adults in the school setting. The area of children's expectations is one of several that require effective exchanges between parent and teacher.

Clearly, the area of parenting and motivation is a ripe one for research in the next decades. As Dr. Rich stated in her wise conclusion with which we began this chapter, parents and schools must work together to assure student success.

References


Parenting and Children's Motivation at School


