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Students' Need for Belonging in the School Community

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Defining sense of community as a feeling of belongingness within a group, this article reviews research about students' sense of acceptance within the school community to address three questions: Is this experience of belongingness important in an educational setting? Do students currently experience school as a community? And how do schools influence students' sense of community? Conceptually, the review reflects a social cognitive perspective on motivation. This theoretical framework maintains that individuals have psychological needs, that satisfaction of these needs affects perception and behavior, and that characteristics of the social context influence how well these needs are met. The concern here is how schools, as social organizations, address what is defined as a basic psychological need, the need to experience belongingness. The findings suggest that students' experience of acceptance influences multiple dimensions of their behavior but that schools adopt organizational practices that neglect and may actually undermine students' experience of membership in a supportive community.

Hargreaves, Earl, and Ryan (1996) echo the voice of many researchers and educators who believe that "one of the most fundamental reforms needed in secondary or high school education is to make schools into better communities of caring and support for young people" (p. 77). The term "community" is used in different ways in the literature, but common to many of these definitions is the concept of belongingness (Solomon, Watson, Battistich, Schaps, & Delucchi, 1996). While there are differences in opinion on specific characteristics of organizations that constitute communities, as Furman (1998) explains, community is not present until members experience feelings of belonging, trust in others, and safety.

Reflecting that perspective and the definition guiding this paper is that of McMillan and Chavis (1986). The term "community", they maintain, has two uses. The first refers to a territorial or geographic unit; the second is relational and describes the quality or character of human relationships. In the present discussion, the primary concern is the relational nature of community within organizational boundaries, and specifically those of the school. Operationally, McMillan and Chavis propose that community consists of four elements: mem-

bership, influence, integration and fulfillment of needs, and a shared emotional connection. A community exists when its members experience a sense of belonging or personal relatedness. In a community, the members feel that the group is important to them and that they are important to the group. Members of a community feel that the group will satisfy their needs; they will be cared for or supported. Finally, the community has a shared and emotional sense of connection. In essence, "sense of community is a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together" (p. 9).

The significance of community is reflected in the work of Dewey and Vygotsky. Both view education as a social rather than individualistic process. Recognizing children's interpersonal needs and the importance of collaborative activities for experiential learning, Dewey promoted the idea that students should function as a social group. The quality of education, he argued, "is realized in the degree in which individuals form a group" (1958, p. 65). It is the teacher and school's responsibility to encourage the development of this sense of community by designing communal activities to which all contribute. As Dewey envisioned it, teachers and students share membership in this community, and it is through collaboration that learning occurs. Being a member of a community includes feeling part of a group. In the school, that community consists primarily of students and teachers.

Despite the arguments for community as the basis for learning and an emotional support mechanism, critics argue that schools as educational institutions pay scant attention to the socioemotional needs of students, individually or collectively (Anderman & Maehr, 1994; Goodlad, 1984; Hargreaves et al., 1996; Maehr & Midgley, 1996; Noddings, 1992; Ryan & Powelson, 1991; Ryan & Stiller, 1991). As indicated by the nation-wide emphasis on standardized achievement tests, academic accomplishment is the main priority, particularly in secondary schools. There is little formal attention to affective needs of students, and shaping the school culture are beliefs and practices that nurture individualism and competition, rather than community and collaboration. Integral to this culture are organizational policies and practices that systematically prevent and preclude the development of community among students and directly contribute to students' experience of isolation, alienation, and polarization. Kunc (1992) attributes these practices to an institutionalized set of beliefs about schooling. One is that achievement and mastery are more important than the sense of belonging. A second is that belonging is not a precondition for engagement, but a reward for compliance and achievement. The third is that personal and emotional needs of students are met at home or in social relationships outside of the classroom.

The purpose of this literature review is to examine some of those assumptions empirically. Using McMillan & Chavis' definition, the essence of this sense of community is a feeling of belonging within a group. Why is this sense of belonging important In reply to an educational setting? Do students currently experience themselves as members of a community? How do schools influence students' sense of community?

Conceptual Framework and Rationale

An integrative review in this area is warranted for several reasons. Current work in psychology tells us that the sense of community, this experience of belonging, is an important factor in understanding student behavior and performance. According to some motivational researchers, relatedness is one of three basic psychological needs that are essential to human growth and development, along with autonomy and competence (Connell & Wellborn, 1991; Deci, Vallerand, Pelletier, & Ryan, 1991; Ryan, 1995). The need for relatedness involves the need to feel securely connected with others in the environment and to experience oneself as worthy of love and respect. In essence, then, this need for relatedness is the need to experience belongingness or the sense of community. The satisfaction of each of these needs affects psychological development and the overall experience of well-being and health, even if one is not aware of them (Ryan, 1995). When student needs are not satisfied in educational settings, Deci et al. (1991) predict diminished motivation, impaired development, alienation and poor performance.

There are three particularly important aspects of this model with respect to relatedness in the school setting: First, the social context plays a significant part in determining whether individual needs are satisfied; second, needs are domain and situation specific; third, needs are on-going. Contexts differ in the extent to which they address individual needs, and people (including students) can be expected to function optimally depending on the extent to which these basic needs are satisfied. Consequently, motivation and performance will differ depending on the specific context. As Ryan (1995) explains, students who experience belongingness in school but not in sports will function better in the context where needs are satisfied. Further, the needs must be met on an ongoing basis.

Organizational research has long incorporated this basic relationship between context and behavior, recognizing that conditions in the workplace profoundly affect worker behavior and performance. The exploration of these principles in the field of educational administration is more recent. In 1988, Susan Moore Johnson wrote that school researchers had only begun to acknowledge this important principle. Thanks to the work of researchers such as Johnson (1990), Lieberman (1988), Little (1982), and Rosenholtz (1989), we now have a much clearer idea of how work conditions in school influence teacher practice. Specifically, we know that collegiality is one of the most important organizational characteristics influencing teachers' professional commitment, sense of efficacy, and performance. Accordingly, school reforms have included various strategies to enhance this sense of community among teachers. Kruse and Louis (1997), for example, describe the importance of teaming as a basis for creating this revitalizing network to provide emotional and moral support, personal dignity, intellectual assistance and personal encouragement. It is commonly accepted, and documented, that the interaction and dialogue that are central to the notion of collegiality not only satisfy emotional needs but lead to personal and professional learning. It is also understood that the organization can influence the development of this sense of community by the structural arrangements it utilizes, the processes it adopts, and the values it conveys.

Schlecty (1997) argues that schools are also workplaces for students. In theory, if the lessons of organizational research are sound, students, too, should benefit from opportunities to experience collegiality in the workplace. Despite the current preoccupation with developing sense of community within schools, discussion of developing collegiality among students themselves is often missing, with the major emphasis placed on improving the nature of relationships either among adults or between adults and students. This paper, then, adopts this motivational perspective to look at the interface between organizational practice and the motivation and performance of students in the school workplace.

Procedures

The questions posed were exploratory and the selection of research sources was an on-going process guided by principles of qualitative research. Using Wiseman's (1974) metaphor, the qualitative researcher is like a detective, developing hunches, pursuing leads, and looking for evidence, until a picture begins to emerge. The different sources were identified by searching the ERIC and PsychLit databases and by examining references in published studies. The majority of the sources are studies published in peer-reviewed journals and books. I have also relied on research reviews and several unpublished papers.

The work reported here is drawn from two major areas of inquiry. Although the variables are differently labeled—as "belongingness," "relatedness," "support," "acceptance," "membership," or "sense of community"—they all deal directly with students' psychological experiences. In some, the variables are measured directly by examining students' perspectives about their own individual or collective experience of support and involvement, in home and school settings, with family, teachers, classes, or schools. In this area, I believe that the work presented here is relatively inclusive. A second set of studies provides only a fragmentary view of some of the research dealing with friendship, peer acceptance or rejection, and dropout. Most of these studies examine external rather than internal perceptions of acceptance or rejection and are thus linked inferentially to students' experience of belongingness. Nonetheless, they provide insight on patterns and correlates of peer relationships in schools.

The research review consists of two sections. The first examines the significance of the sense of belongingness as an individual psychological need. How important is this need and how does it manifest itself, generally and in school settings? The second addresses students' experience of belongingness in schools. To what extent are students' needs for belongingness addressed in this organizational context and in what ways do schools influence the development of students' sense of community? Unless otherwise noted, "sense of community" and "belongingness" are used interchangeably throughout the paper. The term "relatedness" is a psychological concept that also parallels this sense of personal acceptance or belonging.

The Need for Belongingness: Its Significance and Manifestations

Baumeister and Leary (1995) conducted an extensive review of the literature to determine whether there was sufficient empirical evidence to conclude that the need to belong is a fundamental human motivation. They defined this need as "a pervasive drive to form and maintain at least a minimum quantity of

lasting, positive, and significant interpersonal relationships" (p. 497). A fundamental motivation, they argued, should apply to all people, operate in a wide variety of settings, and affect emotional and cognitive patterns. Further, the failure to satisfy the need should produce pathological and long-lasting consequences. The researchers note that while the need to belong is not a new idea, there is now a large body of empirical evidence to evaluate the hypothesis. Based on their review of this evidence (including over 300 citations, none included here), they determined that the need to belong is associated with differences in cognitive processes, emotional patterns, behavior, health, and well being. With respect to cognition, they note that the sense of relatedness affects people's perceptions of others, leading people to view friends and group members more favorably and to think about them more often and in more complex ways. Being accepted, included, or welcomed leads to positive emotions, such as happiness, elation, contentment, and calm, while being rejected, excluded, or ignored leads to often intense negative feelings of anxiety, depression, grief, jealousy, and loneliness. The lack of belongingness is also associated with incidence of mental and physical illness and a broad range of behavioral problems ranging from traffic accidents to criminality and suicide. Their findings are confirmed in two recent studies. In the *Journal of the American Medical Association*, Resnick et al. (1997) reported that an adolescent's sense of connectedness to family and school was significantly associated with lower rates of emotional distress, suicidality (defined as a recent history of suicidal ideation and attempts), violence, substance abuse, and sexual activity.

In a project designed to enhance students' sense of community, Battistich, Schaps, Watson, Solomon, and Lewis (in press) found that successful implementation of the program throughout a school was associated with "significant reductions in students' use of alcohol and marijuana." While this analysis did not examine sense of community as a mediating variable, an earlier study analyzing baseline data from the same project reported students' sense of school as a community was significantly and negatively associated with drug use and delinquency within and between schools (Battistich & Hom, 1997).

Being part of a supportive network reduces stress, whereas being deprived of stable and supportive relationships has far-reaching negative consequences. On the basis of their analysis, Baumeister and Leary voice the opinion that "the weight of evidence suggests that "lack of belongingness is a primary cause" (p. 511) of a wide range of psychological and behavioral problems. From their perspective, "the desire for interpersonal attachment may well be one of the most far-reaching and integrative constructs currently available to understand human nature. If psychology has erred with regard to the need to belong, in our view, the error has not been to deny the existence of such a motive so much as to under-appreciate it" (p. 522).

Other research links the experience of relatedness or belongingness to outcomes of particular significance in educational settings: 1) the development of basic psychological processes important to student success, 2) academic attitudes and motives, 3) social and personal attitudes, 4) engagement and participation, and 5) academic achievement.

Development of Basic Psychological Processes

Ryan (1995) argues that satisfaction of the three basic needs (competence, autonomy, and relatedness) supports the development of important psychological processes including intrinsic motivation, internalization, and autonomy. An intrinsically motivated person actively engages in behaviors out of personal choice rather than external requirement. These behaviors reflect an internal drive to seek out challenges and opportunities to expand knowledge and experience. Internalization refers to the assimilation of external regulation into the self. According to Ryan, this process of internalization (accepting social norms, values, and regulations) supports the development of autonomy, or a shift from an external to an internal locus of control. The studies that follow show that the quality of students' relationships with adults and peers in the home and school, and specifically, their perceptions of support, have important connections with levels of intrinsic motivation, autonomy, and internal regulation as well as self-esteem and identity integration.

An early study (Anderson, Manoogian, & Reznick, 1976) suggested that the absence of personal involvement might lead to decreases in intrinsic motivation. Studying the effect of external rewards on intrinsic motivation, the researchers were surprised to find that the greatest decline occurred in the control group where the experimenter was present but avoided involvement with the child during the time on task. Given the results, they designed a second experiment introducing three control groups modifying the experimenter's level of involvement. Again, the greatest decline occurred when the experimenter was present but ignored the child. The researchers noted that to interpret data with certainty would require an understanding of the situation from the child's perspective, but the findings suggest that the lack of personal involvement may have contributed to the decline.

An important and continuing body of research regarding students' sense of community has emerged from the Child Development Project (CDP). Beginning in 1982, a group of researchers began working with school districts throughout the country to help schools become supportive communities that address students' needs for belongingness. Multiple reports

have focused on their work in two longitudinal studies. (See Solomon et al., 1996, and Watson, Battistich, & Solomon, 1997 for a list of previous studies not included here.) The first, extending from 1981 to 1989, focused on a cohort of approximately 300-350 children from six elementary schools in one district from their entry into kindergarten in Fall 1982 through completion of grade 6. The second from 1991-1995 involved students in 24 schools in six additional school districts from large cities, suburban areas, and small cities or semi-rural areas. The purpose in both field studies was essentially the same: to implement a comprehensive program designed to enhance students' sense of community and to assess the effects of this program on a wide range of student attitudinal, motivational, and behavioral outcomes. For analysis, both studies incorporated data from program and comparison schools. "Sense of community" in these studies incorporates concepts of relatedness and autonomy support: students' experience of the classroom and school as an environment that is supportive and caring and one that provides opportunities to participate actively in classroom decision-making, planning, and goal setting.

Reports from both studies indicate a positive relationship between sense of community and student motivation. In the first study, analyses of data from a sample of 743 students in grades 4-6 found that measures of the sense of community were higher for students in program schools than for those in the comparison schools each year. These increases in sense of community, in turn, were associated with increases in various student outcomes including intrinsic academic motivation (Solomon et al, 1996). Using hierarchical linear modeling, analyses of data from the second study, based on responses from 4515 students from grades 3-6, also found a correlation between student's sense of community and measures of intrinsic motivation (Battistich, Solomon, Kim, Watson, & Schaps, 1995; Solomon, Battistich, Watson, Schaps, & Lewis, in press).

There is some controversy in the literature about the impact of supportive relationships on autonomy. For example, is it necessary for parents or other adults to sever their emotional involvement with children to support development of their sense of autonomy? Arguing from an empirical base, Ryan (1995) and Deci et al. (1991) persuasively forward the position that autonomy develops most effectively in situations where children and teenagers feel a sense of relatedness and closeness to, rather than disaffiliation from, significant adults. According to Ryan (1991), it is important to remember that autonomy does not imply detachment from others but, instead, refers to the individual's sense of agency or self-determination in a social context. Students who experience autonomy will perceive themselves to have choice and will also experience a connectedness between their actions and personal goals (Connell & Wellborn, 1991). Since the three psychological needs are basic and integrated, the satisfaction of one need reinforces and supports the other needs. As Ryan explains, "The experience of relatedness and mutuality that derives from authentic contact with others appears to play a crucial role in connecting individuals to social tasks and promoting an internalization of valued goals" (Ryan, 1991, p. 119).

Several studies show that supportive relationships with others are linked to students' internalization, self-regulation, and sense of autonomy. Grolnick and colleagues, for example, found parental involvement to be associated with and predictive of children's perceptions of control and self-regulation. In a population of 480 children in grades 3-6 of a suburban northeast district, Grolnick & Ryan (1989) rated parent interviews on autonomy support, involvement, and structure. Involvement included parental knowledge of child, time spent together, and enjoyment. Parental involvement (responses from mother and father) was significantly related to children's perceptions of control. There were also significant relationships between maternal (but not paternal) involvement and students' perceived unknown control (extent to which children had an understanding of sources of control in their environment) and acting out in class. Levels of maternal involvement were not associated with work status suggesting to the researchers that availability regarding school issues, rather than the actual hours spent with the child, may be the critical dimension.

In a second study, Grolnick, Ryan, and Deci (1991) again examined the relationship between parental involvement and autonomy support and students' inner resources (perceptions regarding control, autonomy, and competence). In this study, however, the researchers used student reports to assess parental be-

havior. The findings were similar with one exception. In this study, involvement from both fathers and mothers predicted students' control understanding and relative autonomy, as well as perceived competence. One explanation was that "children's *feelings* that their fathers are concerned with and involved with them is more critical than more objective ratings would suggest" (p. 515, italics added). This interpretation is consistent with Baumeister and Leary's (1995) emphasis on the person's subjective experience.

In a study of 606 students from public middle schools, grades 7-8 in suburban Rochester, Ryan, Stiller, and Lynch (1994) examined the relation between the way that students represented their relationships with teachers, parents, and peers and measures of academic motivation and self-esteem. Findings showed that students' felt security with parents, teachers, and friends were significantly but differentially associated with important motivational outcomes. In regression analysis, felt security with teachers and parents was significantly correlated with relative autonomy and perceived control while felt security with parents and friends was significantly correlated with self-esteem and identity integration. Wentzel (1997), confirming the importance of a supportive student-teacher relationship, also found students' perceptions of teacher caring significantly linked to internal control beliefs as well as other outcomes.

Conversely, in a series of three studies conducted with middle school, high school, and college students, Ryan and Lynch (1989) established that students' sense of detachment from parents negatively affected their sense of security, self-concept, and willingness to rely on parents for support. Departing from more traditional uses of the term "autonomy," the researchers use the term "emotional autonomy" to describe this sense of detachment. Examining the relationship between "emotional autonomy" and students' felt attachment with and emotional utilization of parents, they found that emotional autonomy was negatively correlated with felt attachment and emotional utilization of parents and parental acceptance. Parental acceptance, in turn, was significantly and positively related to lovability. The more emotional autonomy, or detachment, the less connected or secure they felt within the family, the less they experienced parents as conveying love and understanding, and the less they reported willingness to draw upon parental resources.

While students who feel accepted and secure are more likely to evidence autonomy and self-regulation, students who experience rejection often exhibit an unwillingness or inability to conform to norms and appear less able to act independently. A study by Wentzel and Asher (1995) of 423 sixth- and seventh-grade students in an ethnically diverse, Midwest, working class school found, for example, that children categorized as rejected or controversial were less likely to follow rules and were perceived as less independent.

Studies from the CDP also illustrate the relationship between support and self-regulation within a social context. As we will see later, when students experience acceptance they are more likely to be supportive of others. Data from both CDP studies (Solomon et al.,1996; Solomon et al., 2000; Watson et al., 1997) for example, found positive significant relationships between sense of community and various prosocial dimensions. With respect to certain prosocial values, however, these relationships held in program classes but not in comparison classes. While prosocial attitudes increased in the program schools, sense of

community in the comparison classes was negatively correlated with prosocial values and associated with a perception of peers as competitive (rather than friendly). As authors note, this suggests that the experience of support appears to promote adherence to group norms, but this can apply to negative as well as positive norms (Solomon et al., 1996).

What this small group of studies shows is that when children experience belongingness or acceptance, their perceptions differ in predictable ways and these perceptions are associated with psychological differences. When children experience positive involvement with others, they are more likely to demonstrate intrinsic motivation, to accept the authority of others while at the same time establishing a stronger sense of identity, experiencing their own sense of autonomy, and accepting responsibility to regulate their own behavior in the classroom consistent with social norms.

Academic Attitudes, Beliefs, Behaviors, and Achievement

Certain attitudes, beliefs, and behaviors are associated with success in a school setting. Some of these relate to the work itself, others with beliefs about the self and others in the school as a social context. The section that follows describes research that shows links between the quality of students' interpersonal relationships and different dimensions of their behavior and performance.

Academic Attitudes and Motives

The first set of studies deals with a broad spectrum of academic attitudes and motives. While defining belongingness in different ways, the studies come to similar conclusions, finding that students' experience of acceptance is associated with a positive orientation toward school, class work, and teachers. Students who experienced a greater sense of acceptance by peers and teachers were more likely to be interested in and enjoy school and their classes. These perceptions of school were also reflected in their commitment to their work, higher expectations of success, and lower levels of anxiety. Findings also suggest that the strength of the relation may differ depending on demographic and personal characteristics.

Analyses of baseline and later data from the CDP project link the sense of community with multiple measures of academic attitudes and motives. Student questionnaires in both studies included 12 measures of academic attitudes and motives including enjoyment of class, liking for school, task orientation, ego orientation, preference for challenge, intrinsic academic motivation, and academic expectations and aspirations. In the first study, using data gathered from 743 students in program and comparison classes from grades 4, 5, and 6, researchers (Solomon et al., 1996) examined the relative effects of program status, sense of community, and their interactions. With respect to academic attitudes, they found a significant relationship between sense of community and liking for school, achievement motivation, and intrinsic academic motivation. The strongest relationship across grades was between sense of community and liking for school.

Analyses of baseline data from the 1991-1995 study are consistent and demonstrate a positive relationship between students' sense of community and all variables except aspirations, with moderate to large associations with enjoy-

ment of class, liking for school, and task orientation (Battistich et al.,1995). The study also examined the effect of poverty and found that while poverty was negatively correlated with school community and various student outcomes, "the sense of school community showed its strongest positive relationships with student outcomes in high poverty schools" (p. 649). Using structural equation modeling, Solomon et al. (in press) and Watson, Battistich, and Solomon (1997) report similar findings. In assessing changes in implementation over the three-year period, the researchers determined that five of the schools had made significant gains but seven had not. In an analysis of data from the high change schools, Solomon et al. (in press) report significant gains in students' liking for school ($t = 2.96$, $p < .004$, ES .15), intrinsic academic motivation ($t = 2.57$, $p < .001$, ES.33), and task orientation ($t = 4.64$, $p < .001$, ES.24). According to the authors, the structural equation modeling analyses clearly indicated the critical mediating role of students' sense of community and showed particularly strong relationships with enjoyment of class and liking for school. The inclusion of program intervention and changes over time, while not establishing causality, provides a strong case for causal inference. Using structural equation modeling and data from the 24 participating schools, Watson et al. (1997) also found that the strongest predictive relationship was between sense of community and liking for school.

Two studies that follow establish the importance of peer acceptance, as distinct from friendship, and highlight the negative outcomes associated with rejection. In a longitudinal survey of 125 children from eight kindergarten classes in four Midwestern schools, Ladd (1990) examined the relative impact of friendships and peer acceptance on various aspects of school adjustment including liking, attitudes toward teachers and activities, manifest anxiety, and school avoidance (absences from class). On the basis of peer nominations, children were classified as rejected, popular, neglected or controversial. Rejected students were infrequently nominated as best friend and were actively disliked by peers. Popular students received frequent nominations as best friends and were not disliked; neglected children received few nominations as a best friend but were not disliked. Controversial students had best friends but were also actively disliked. Findings showed that classroom peer status had more impact than friendships on significantly predicting school perceptions, school involvement, and performance. Rejected children had significantly less favorable perceptions of school, higher levels of school avoidance, and lower levels of school performance than did popular, average, or neglected children. Wentzel & Asher (1995) adopted similar procedures, classifying 423 sixth- and seventh-grade students as popular, rejected, neglected, controversial, or average. In comparing scores of the four groups with average students, the authors found that popular children differed from average students only on recognition by peers as good students and perception by teachers as helpful. Neglected students, however, were higher on all indicators of motivation and self-regulated learning. Rejected children with submissive behavior patterns did not differ from the average students on any academic characteristics; however, those who were perceived as aggressive were less motivated academically and rated lower on measures of internal regulation. Controversial students, too, were perceived as less independent. Neglected students, while not perceived as best friends, were apparently accepted by their

peer group. Rejected and controversial students, however, even though some had friends, were openly disliked by their peers; these feelings of rejection appear to be mirrored in their behavior.

Goodenow is the sole or primary author of three studies dealing with the relation between students' sense of school and class membership and aspects of student motivation: expectations for success, intrinsic value, and effort. In each study, belongingness parallels the construct of relatedness as defined by Ryan 1991, Deci et al., 1991, and Connell & Wellborn 1991. The first (Goodenow, 1993b) used data from three studies involving 1366 students in grades 5-8 from one suburban middle school and two urban junior high schools. Findings showed that students' sense of school membership made a substantial contribution to variance in expectancy and value ($r^2 = .18$ and .30 respectively), but was only weakly associated with effort.

The second study (Goodenow, 1993a) looked at the influence of classroom belonging on student expectations for success and intrinsic value of academic subjects as well as effort and achievement in a suburban white middle class school. Analysis identified three factors of belongingness: positive relationships with classmates, teacher support, and general sense of belonging. Again, the sense of belonging correlated positively ($r = .614$) with expectancy, accounting for over 33% of the variance. Of the three factors, teacher support was the most important predictor of both expectancy and value, but peer support also contributed significantly. Teacher support had a significantly stronger association with expectancy and value for girls than for boys, while peer support was strongly associated with value for *boys* but not for girls. With respect to effort and achievement, expectancy was the best attitudinal predictor with class belonging as second highest correlate. Of the three belonging factors, however, teacher support was most highly correlated; peer support showed no significant effect.

A third study (Goodenow & Grady, 1993) carried this research into an urban working class city with a large Hispanic and African American population. Using the PSSM (Psychological Sense of School Membership) to assess the sense of belonging, the researchers found a significant correlation between school belonging, value of schoolwork, expectancy, and persistence, even when controlling for the influence of friends' values. School belongingness scores in these schools were noticeably lower than those in the suburban white school, with school belonging significantly associated with all outcome measures and accounting for 19% of variance in expectancy, 21% in general school motivation, and 30% in value. (General school motivation here refers to beliefs and feelings that being in school is satisfying, worthwhile, and important.)

Later studies by Wentzel (1997, 1998) conducted in suburban middle school settings also found a strong correlation between perceived support and motivational outcomes. The 1998 study found a significant relationship between perceived teacher support and school interest ($r = .33$, $p < .001$). The 1997 study focused on the relationship between teacher caring and three measures of motivation, including academic effort, and found that perceived teacher caring was significantly correlated with academic effort ($r = .36$, $p < .001$). Regression analyses assessed the relative contribution of teacher caring to changes in student motivation from grades 6 through 8 when controlling for student character-

istics, previous motivation, and previous academic and behavioral competence. Results showed that perceived caring accounted for a significant increment to R^2, approximately 7%, when added at the last step. Noting that previous research linking adult support to student outcomes had been done with minority and inner city students, this study, Wentzel suggested, indicated that support is important regardless of race or socio-economic status.

Attitudes Toward Self and Others

In general, the experience of belonging or relatedness is associated with more positive attitudes toward self and others and these views are reflected in their interaction with others. When students experience acceptance, and where the culture values and encourages supportive interaction, they are more likely to be supportive of others. In the school community, they are more helping, more considerate of others, and more accepting of others, including those not in the friendship group.

In their review of the research, Baumeister and Leary (1995) report that when people have social attachments or perceive themselves to be part of a group, helping behavior increases, with even the opportunity to talk with strangers leading to increased cooperation. People also view friends and members of their group differently: they think about them more, they think about them in more complex ways, and they view them more favorably. Johnson, Johnson, & Maruyama (1983) tested this finding in schools and found evidence that cooperative learning situations promoted more positive interpersonal relationships in cross-ethnic, mainstreaming and homogeneous groups than conditions that utilized group or interpersonal competition or individualistic learning.

Analyzing data from the CDP, Solomon et al. (1996) found a significant relationship between sense of community and various positive indicators: social competence, democratic values, empathy, enjoyment of helping others learn, intrinsic prosocial motivation, and perspective-taking. In the program schools, sense of community was also significantly related to prosocial values, but, as indicated above, these relationships did not hold in comparison classes. Reporting on data from the second study, Battistich et al. (1995) and Solomon et al. (in press) also establish a significant correlation between sense of community and various prosocial attitudes, beliefs, and behaviors including concern and respect for peers and teachers, conflict resolution, acceptance of outgroups, intrinsic prosocial motivation, and altruistic behavior. The researchers noted however, that most of the effect sizes were relatively small with the largest being concern for others (ES = .30), intrinsic prosocial motivation (ES = .24), and altruistic behavior (ES = .20). Using data from the second study, Solomon et al. (in press) and Watson et al. (1997) used structural equation modeling analyses to assess changes in outcomes associated with program implementation. Findings here, too, showed that sense of community had significant positive effects on enjoyment of helping others learn, trust and respect for teachers, prosocial conflict resolution, concern for others, prosocial motivation, and, to a lesser extent, prosocial behavior in class.

Examining changes in motivation from 6th to 8th grade, Wentzel's study (1997) also found that teaching caring was significantly correlated with the pursuit of prosocial goals ($b = .39$, $p < .001$) and social responsibility goals ($b =$

.45, $p < .001$), with perceived caring accounting for a significant increase in variance of approximately 7% for each variable, when added at the last step.

Additional studies highlight the importance of peer acceptance. The Wentzel and Asher (1995) study, mentioned above, also examined dimensions of prosocial behavior associated with various levels of peer acceptance. Neglected and popular children (in contrast with rejected and controversial students) were rated more positively by teachers on pro-social behavior; and both groups showed more evidence of positive and supportive interaction with peers. Continuing this line of inquiry, Wentzel (1998) examined the relative effect of parents, teachers, and peers and found that perceived peer support was the only source of support that independently predicted students' prosocial goal pursuit. While peer acceptance is associated with positive social behavior, peer rejection is consistently associated with anti-social behaviors, including withdrawal and aggression (Erdley & Pietrucha, 1996, as cited in Pietrucha & Erdley, 1996) and psychological distress.

Regarding attitudes toward self, the research reviewed here links various aspects of belongingness with self-esteem and self efficacy (Battistich et al., 1995; Bishop & Inderbitzen, 1995; Ryan et al., 1994); expressed need for belongingness and general perceptions of the quality of life (Green, Forehand, Beck, & Vosk, 1980), anxiety (Ladd, 1990), emotional distress (Resnick et al., 1997; Wentzel, 1998) and loneliness (Sletta, Valas, & Skaalvik,1996; Solomon et al., 1996; Solomon et al., in press).

With respect to self-esteem, findings vary somewhat depending on how support is defined. In a study of 606 students from public middle schools, grades 7-8 in suburban Rochester, Ryan et al. (1994) examined the correlation between the way that students represented their relationships with teachers, parents, and peers and measures of academic motivation, including engagement, and self-esteem. Results showed that felt security with peers was associated with greater self-esteem as well as with identity integration.

Two other studies defined acceptance using peer nominations rather than self-reports and yielded inconsistent findings. Bishop and Inderbitzen (1995) found that friendship but not peer acceptance was related to self-esteem. Brown and Lohr (1987) however, showed self-esteem as a function of peer crowd status and the individual's relative need for peer acceptance. Some of these inconsistencies may be related to conceptual and methodological problems. Conceptually, the research by Sletta, Valas, and Skaalvik (1996) indicates that the relation between peer acceptance and self-esteem is not a direct one as other studies have predicted. While peer acceptance did not directly affect self-perceptions, peer acceptance did predict loneliness; loneliness, in turn, influenced perceptions of self-esteem and social competence. These perceptions in turn related to academic success.

Operationally, peer acceptance reflects classmates' assessment of other students' popularity. Although peer acceptance may affect a student's sense of belonging, this method does not examine the feelings of those who are accepted or rejected. Peer nomination procedures commonly ask students to designate classmates who are most or least liked. In some cases, the students being rated are within the same class. In other cases, they are other students in the school. The meaning of the ratings may vary depending on the setting. Most secondary

schools are departmentalized and students participate in different group settings throughout the day. A student may not be widely recognized, popular, or liked in the school population but may have very positive experiences within a particular class or track. We know that students have different experiences by class, but, as in friendship studies, we don't know the relative impact of these experiences on students' perceptions.

Other research also suggests that individuals' needs for interaction and acceptance differ, thereby affecting their perception of the setting and their experience of belongingness. Wong and Csikszentmihalyi (1991), for example, show that students with high needs for affiliation spent more time thinking about social interaction than did those with lower needs, and that needs and experiences differed by gender. Girls had higher needs for affiliation, spent more time interacting with others, and enjoyed that time. It was a very different story for boys, however. Those boys with high needs for affiliation viewed themselves as feminine, and felt worse whether they were alone or with others than did boys with lower affiliation needs. Boys with the strongest needs to be liked and involved with others were less likely to demonstrate the dominance characteristics associated with male status and popularity in the peer group, more likely to experience non-acceptance, and more likely to have the strongest emotional reaction to non-acceptance.

While acceptance by peers tends to be associated with a variety of positive outcomes, rejection is consistently and repeatedly associated with negative effects at various ages and in multiple settings (Bauermeister & Leary, 1995). In schools, the Green et al. study (1980) found that children who were not accepted expressed higher needs for belongingness and greater dissatisfaction with the quality of life. Wentzel (1998) found significant links between perceived lack of support, particularly from peers and family, to distress, while Sletta et al. (1996) found that non-acceptance by peers was a direct and significant predictor of loneliness.

Participation, Dropout, and Engagement

Drawing again from diverse sources, the research is consistent in identifying the psychological sense of belongingness as an important factor in participation, school engagement, and dropout, described by Leithwood and Aitken (1995) as the "final step in a long process of gradual disengagement and reduced participation" in school life (p. 56).

Finn's theory of school withdrawal maintained that identification with the school was an important factor sustaining school involvement and that participation in school activities contributed to identification (Finn, 1989). More recent research (Leithwood, Jantzi, & Haskell, 1997; Leithwood & Jantzi, 1999), however, also shows that higher levels of student identification with school lead to higher levels of student participation. Using survey data from 9,941 students in a large Canadian School District, the researchers explored the relative effects of principal and teacher leadership on two aspects of student engagement: participation and identification. A path analysis testing the framework for the study found that the elements in the model (family, principal leadership, and school conditions) explained 84% of the variation in student participation and 78% of the variation in student identification. Their findings

also showed that student identification contributed to variation in student participation, reporting a path coefficient of .52. Leithwood and colleagues defined participation broadly in terms of response to requirements, class related initiative, extra curricular activities, and decision-making, an operationalization that incorporates many aspects of engagement. Their finding is important because it challenges an embedded assumption that shapes policy recommendations: that students develop sense of community through their participation in extra-curricular activities or that a strong extra-curricular program will satisfy student needs for a sense of community and lead to engagement. This finding suggests, however, that students' participation is also shaped by their experience as being part of a supportive community.

In terms of classroom involvement, several studies link levels of participation to a sense of belongingness: where students experience risk, participation levels decline; as students' sense of community increases, their sense of personal risk decreases, and participation increases. Johnson, Lutzow, Strothoff, and Zannis (1995), for example, adopted an action research model in an effort to reduce negative behavior by encouraging supportive relationships among students through cooperative learning and bonding activities within and between classes. At the completion of the project researchers found that behavioral referrals had dropped by as much as 71% and students indicated a higher level of comfort and satisfaction with the group. Students indicated a greater ability to make friends easily and naturally, to express their ideas and feelings, and to make mistakes in the group without worrying about being put down. Observers also noticed that, in informal activities, students tended to stay in the larger group rather than separating into factions as they had in prior years.

Another study (Jones & Gerig, 1994) emphasizes how peer acceptance, as distinct from teacher support, affects classroom involvement. In a study of sixth graders, the researchers found that students' perceptions of themselves and the classroom environment had a strong influence on student-teacher interactions with students being reluctant to participate because of anticipated reactions from peers. The observers described the team teachers in the study as "warm and caring" and found an equitable distribution of teacher-initiated communication with students. The "silent" students themselves were not significantly different from other students with respect to gender, race, or achievement, but they seldom initiated interaction. (Students designated as silent were those who, during 14 observations, initiated on average fewer than one interaction with teachers in 3 of 4 academic subjects). In interviews, common themes emerged. The majority of the silent students (67%) were serious about school and wanted to do well, but many lacked confidence (50%), had few or no friends (40%), and viewed themselves as shy, expressing their fear of making mistakes and being laughed at or embarrassed in front of others (72%). Among these students, 19% traced their reactions to painful prior experiences where their input had been ignored or ridiculed. Silence was a way of avoiding personal risk. In this case, silent students clearly did not experience themselves to be part of a supportive peer group. While this had no apparent effect on achievement—silent students achieved at similar levels to their peers—the behavioral and emotional impact is apparent. Several students also described low levels of engagement, spending most of the time daydreaming, though not enough to affect their grades.

An elementary student in a study by Allen (1995) described his reaction to what he perceived as an unfriendly school: "I wouldn't just say anything I wanted to" (p. 295). College women reported similar feelings in an interview study (Aleman, 1997). Even in this small and relatively homogeneous setting, students expressed concerns about peer judgment in the classroom, describing impersonal relationships with classmates and their fear of criticism. "Women often gauged the risk of speaking in class by the degree to which they 'knew' the other class members." If they "knew" them, they would be trusted not to criticize their thinking in a degrading manner. In classrooms where they didn't know people, they were "unlikely to ask questions, express a minority opinion, play the devil's advocate, or publicly wrestle with ideas" (p. 36).

At a more extreme level are students who drop out of school completely. Studies of dropouts highlight the relation between students' sense of acceptance and the decision to remain in or to leave school. While by no means conclusive, other studies also demonstrate that, consistent with the theoretical premise that motivation is context specific, school conditions have a more direct influence on student academic motivation and behavior than does family.

To identify the factors contributing to dropout and delinquency, Elliott and Voss (1974) designed a study to track 2,617 students in eight California metropolitan schools from ninth grade until graduation. They predicted that student academic failure would lead to normlessness and social isolation and subsequently to dropout and delinquency. Although academic failure, school normlessness, and social isolation all predicted dropout, normlessness was the strongest predictor, with academic achievement and school normlessness accounting for virtually all of the predictive power of social isolation. The operational definition of normlessness (dislike of school and non-conformity to accepted school norms) is conceptually similar to disengagement, while the term "social isolation" (lack of participation, feelings of centrality, and a trusting relationship with teachers) is converse to sense of acceptance or membership. The study also looked at the relative impact of home and school. Researchers found little support for the notion that dropout was motivated by problems at home and determined that the major instigating forces in dropout are rooted in academic failure and alienation from the school. Interestingly, the study also determined that while delinquency contributes to leaving school, delinquency rates decline after dropout, a fact that reinforced the researchers' view that "the school is the critical generating milieu for delinquency"(p. 203).

Resnick et al. (1997) also found that the school context accounted for as much or more of the variance in students' experience of emotional distress and violence than the family context, particularly at the middle school level. With respect to emotional distress, characteristics of the school context accounted for 17.6% and 13.1% of variance, respectively, in grades 7-8 and 9-12. The contribution of family context accounted for 14.6% and 13.5% of the variance in the two grade levels. With respect to violence, school context accounted for 7.1% and 5.8% of the variance, while family context accounted for slightly lower percentages, 6.5% and 4.6%.

Within the school, peer and teacher acceptance are both important sources of support. Noting a relatively recent interest in children's peer relationships and acceptance of the idea that low peer acceptance places children at risk on vari-

ous dimensions of social and cognitive adjustment, Parker & Asher (1987) conducted a review of the literature regarding effect of low peer acceptance on adjustment in later life. Exploring links between peer acceptance, school drop out, criminality, and adult mental health, they concluded, as did Elliott & Voss (1974), that there is strong and clear evidence of a predictive link between low acceptance and dropping out of school.

Additional support for this perspective comes from a more recent interview study of 100 Pittsburgh school students who left but eventually returned to complete their schooling in a job corps program (Altenbaugh, Engel, & Martin, 1995). The central finding was that dropouts felt alienated and estranged from their schools—teachers and peers—as well as from their homes, neighborhood, and society in general. Although peer acceptance was not a specific focus of the study, there was evidence throughout that peer relationships were problematic for these dropouts, with students who left describing conflict, teasing, harassment, and fights. They perceived schools as uncaring environments and experienced no sense of school membership. Association with other potential dropouts increased pressure to reject school norms and values, while association with more successful students led to feelings of inferiority and rejection.

Engagement, as distinct from participation and the antithesis to dropout, is a multidimensional variable including behaviors, emotions, and psychological orientation (Connell & Wellborn, 1991; Newmann, 1992). Students who are engaged are interested in learning, enjoy challenges and persist in completion of tasks. Here, research shows that satisfaction of the basic psychological needs, including relatedness, influences the level of engagement. Several studies testing this theory have yielded positive findings emphasizing the significance of the relation between support and engagement whether based on teacher ratings or self-reports. The studies further demonstrate that, while teacher support may have the most direct effect on student motivation, support from parents and peers contribute in different but important and complementary ways. As Wentzel (1998) explains, "Parents, peers, and teachers play relatively independent roles in young adolescents' lives and the effects of having multiple sources of support on motivational and academic outcomes are primarily additive rather than compensatory" (p. 207).

Connell & Wellborn (1991) collected data from students, parents, and teachers in three samples: Grades 3-6 in a rural/suburban community; grades 4-6 in a working class; suburban school district; and grades 7-10 in a predominantly minority urban setting. The samples included 245, 542, and 700 students. The study found that emotional security (relatedness) with parents, teachers, and classmates was significantly associated with teacher ratings of engagement. A sense of emotional security with teachers ($r = .23$, $p < .001$) and with peers ($r = .21$, $p < .001$) had a stronger correlation with engagement than did security with parents ($r = .13$, $p < .05$); however, emotional security with parents influenced student relationships with teacher and classmates ($r = .33$ and $.35$). The study also considered the relative impact of adult educators and peers and demonstrated that students' relationships with adults *and* peers made independent contributions to engagement. As in other studies, here, too, the support relationship with adults in school had more effect on students' psychological state than support from home.

Three other studies of engagement found equally strong relationships between different sources of support and student engagement. A recent study examining the relationship between teacher caring and student engagement yielded a significant correlation ($r = .697$, $p < .01$) with teacher caring accounting for 47% of the variance in student engagement among high school juniors and seniors in a middle income suburban community (Freese, 1999).

Ryan et al. (1994) found a strong positive relation between the way students represented their relationships with teachers, parents, and peers and measures of academic motivation, including engagement, and self-esteem. The strongest correlations in the study were between felt security with teachers and engagement ($r = .43$, $p < .001$) (as measured by self-report on a 16-item engagement scale) and between utilization of teachers to deal with school problems and positive coping ($r = .40$, $p < .001$). In other words, students who felt more security with teachers were also more engaged, and students who viewed teachers as sources of support were more willing to rely on teachers for support and demonstrated stronger coping behavior. Conversely, those students who were "unlikely to turn to others for help showed poorer school adaptation and motivation and lower self-esteem and identity integration" (p. 243). The finding that "teacher representations add variance to outcome predictions even after controlling for parents' inputs" (p. 244) again demonstrates that teachers make an important and distinct contribution to students' well being.

Wentzel (1998), too, assessed the ways in which parent, teacher, and peer support are related to academic performance and to various measures of adolescent motivation including psychological distress, interest in school, academic and social goal orientations, and interest in class. Interest in class referred to the degree to which students engage and persist in classroom activities, based on teacher ratings and self-reports. With a sample of 167 sixth-grade students from a 6-8 middle school in a suburban, middle class and predominantly white community, she found that while family support contributed to variance in school interest, perceived teacher support made the strongest contribution ($b = .33$, $p < .001$). Teacher support was also the only source of support contributing significantly to student interest in or engagement in class ($b = 18$, $p < .05$). As indicated previously, teacher support was an independent and positive predictor of interest in class, interest in school, and social responsibility (willingness to comply with school norms). Family support predicted interest in school and academic goal orientation while, as reported previously, perceived peer support was the *only* predictor of students' adoption of prosocial goals and behavior.

Regarding the source of support, both the Wentzel (1998) and Ryan et al. (1994) studies found that teachers, family, and peers affect students' performance in school in different ways. While teachers have the strongest and most direct influence on students' academic behavior, specifically interest and engagement in class and school, the effect of peer support, while less direct, is no less significant. In the Wentzel study, as in Sletta et al. (1996), the experience of peer support or, conversely, the absence of support, was a significant predictor of emotional distress; this, in turn, was significantly linked to perceptions of social competence, interest in school, and performance.

Another study sheds light on the pathways between student engagement and students' experience of relatedness and risk behavior (Connell, Halpern-Felsher,

Clifford, Crichlow, & Usinger, 1995). The researchers proposed that perceptions of support and involvement from significant others shape students' beliefs about themselves in school and that these self-perceptions affect behavior and, specifically, their engagement. Engagement contributes directly to performance, adjustment, and the individual's experience of support, "as significant others react to the individual's behavior in the setting" (p. 44). Analyses of longitudinal data gathered from 443 urban African American adolescents from grades 7-9 through grades 10-12 revealed that students who avoided risk behaviors in junior high school (low attendance, suspensions, poor grades, low test scores, grade retention) and were more engaged were more likely to remain in high school three years later. As predicted, engaged students reported more positive perceptions of competence, autonomy, and relatedness in the school setting than did students who were less engaged. Path analysis showed that the experience of support significantly predicted students' level of school engagement: $r = .54$ for males and .51 for females, $p < .001$. Student engagement, in turn, predicted lower levels of risk behavior. The study further demonstrated that students' relationships with adults and peers made independent contributions to engagement.

Achievement

Studies of peer acceptance and friendship consistently show that high achievement is correlated with peer acceptance and/or peer interaction (Green et al., 1980; Jules, 1991; Ladd, 1990; Swift & Spivack, 1969; Taylor, 1989; Wentzel & Asher, 1995). Children who are preferred by peers and teachers tend to be those who are academically competent. Conversely, those children who are most frequently rejected tend to be low achievers. In most cases, the data do not establish direction, revealing no answer to the chicken-egg question. While this data, too, could be used to argue that peer acceptance influences achievement, I examine this research later arguing that achievement also affects peer acceptance and sense of belonging through its effects on peer status. Here, however, we look at evidence regarding the relationship between sense of community and achievement.

There is little evidence demonstrating that the sense of belonging is directly related to achievement, but there is substantial evidence showing or suggesting that the sense of belonging influences achievement through its effects on engagement. Ladd (1990) described peer status as a predictor of school performance at the preschool level. In a study of two groups of students through their middle school years (grades 6-7 and grades 6-8), Wentzel & Caldwell (1997) also confirmed that peer acceptance and group membership, but not reciprocal friendships, had a strong and significant association with academic achievement even when accounting for differences in social behavior. In both studies, however, peer acceptance and group membership were based on peer nominations and friendship designations. Several other studies examined the links between belongingness based on student perceptions of their own acceptance within the context of the classroom or school and various outcomes including achievement (Battistich et al, 1995; Solomon et al., 1996; Connell & Wellborn, 1991; Goodenow, 1993a, 1993b; Solomon et al., in press). These show small or non-significant correlation between various dimensions of belongingness (re-

latedness, parental involvement, school and class membership) and achievement. Goodenow (1993b) examined the relation between school membership, motivation (effort, absence, and tardiness), and academic achievement in the form of grades from first quarter and end of year. Data from a sample of 611 students from grades 5-8 in a suburban school showed that school belonging was only weakly associated with effort ($r = .25$, $p < .001$), absences ($r = -.18$, $p < .001$), and tardiness ($r = 0.14$, $p < .01$) and somewhat more strongly related to first semester grades ($r = .27$, $p < .001$) and to grade point average for the year ($r = .33$, $p < .001$).

Goodenow (1993b) assessed students' personal sense of being included, liked, and respected in a particular classroom by teachers and peers. Although the study included a large sample of students (N = 353), the test of the relationship between classroom belonging, motivation (expectancy and value), effort, and achievement used only English grades from a small subset (N = 87). Effort and achievement were the dependent variables. The correlation analysis showed that expectancy was the strongest predictor of effort ($r = .422$, $p < .001$) and grade ($r = .625$, $p < .001$), with classroom belonging as the second highest correlate ($r = .341$ and $.430$, $p < .001$, respectively for effort and grade). Of the three belonging factors, teacher support was most highly correlated with effort ($r = .258$, NS) and grade ($r = .375$, $p < .001$) ; peer support had no significant effect.

Connell & Wellborn (1991) found that while emotional security with parents, teachers, and classmates (relatedness) was significantly associated with teacher ratings of engagement in school, none of the relatedness variables was significantly correlated with academic performance. They do establish through path analysis, however, that these measures of emotional security predict student engagement and this in turn predicts school performance.

Wentzel's (1998) research, too, identifies the emotional reaction to experiences of acceptance or rejection as a critical intermediary between perceived support, academic behavior, and academic outcomes. In this longitudinal study of 167 sixth-grade middle school students, she found that while seventh-grade grade-point averages were correlated significantly with social support, the relationship was indirect, through its effects on interest in class, interest in school, and social responsibility. Each of these motivational variables was a significant predictor of student grades.

Grolnick & Ryan (1989) established a link between reports of maternal involvement and grades, test scores, and teacher rated competence. Grolnick et al. (1991) proposed that children's inner resources or psychological perceptions mediated between parental behavior and achievement and were able to determine that parental involvement and autonomy support affected children's perceptions of themselves with respect to competence, autonomy, and control. As in Connell & Wellborn's (1991) study, these motivational variables then predicted performance differences. In this study, autonomy support had a greater effect than involvement; however, Ryan and others make the point that direction of causation is unclear since certain children's behaviors might engender different forms of parental behavior.

Summary

The concept of belongingness is a broad one, defined variously as

belongingness, relatedness, sense of community, sense of school or classroom membership, support, and acceptance. Research on friendship, too, reflects the importance of personal relationships. Most of the research, with some exceptions, treats this concept, however defined, as an independent variable, exploring its relationship and contribution to an equally broad range of motivational, behavioral, and performance outcomes. Noticeable gaps in the research, as we shall see in the second section, deal with the development and incidence of this sense of belongingness, particularly with respect to peer relationships.

The research tells us a number of things. The first is that the experience of belongingness is associated with important psychological processes. Children who experience a sense of relatedness have a stronger supply of inner resources. They perceive themselves to be more competent and autonomous and have higher levels of intrinsic motivation. They have a stronger sense of identity but are also willing to conform to and adopt established norms and values. These inner resources in turn predict engagement and performance.

Those students who experience a sense of relatedness behave differently from those who do not. They have more positive attitudes toward school, classwork, teachers, and their peers. They are more likely to like school, and they are also more engaged. They participate more in school activities, and they invest more of themselves in the learning process. They have a stronger sense of their own social competence, and they are more likely to interact with peers and adults in prosocial ways.

Feelings of rejection/alienation are the flip side of the relatedness coin. Findings regarding the effects of rejection are consistent and clear. Rejection or the sense of exclusion or estrangement from the group is consistently associated with behavioral problems in the classroom (either aggression or withdrawal), lower interest in school, lower achievement, and dropout. More important are the findings that link rejection to various forms of emotional distress including loneliness, violence, and suicide. These findings lend strength to Bauermeister and Leary's suggestion that these maladaptive school behaviors should be interpreted as "desperate attempts to establish or maintain relationships with other people or sheer frustration and purposelessness when one's need to belong goes unmet" (Bauermeister & Leary, 1995, p. 521). Unfortunately, these perhaps predictable behavioral responses only aggravate and further jeopardize the quality of their relationships with teachers and peers.

The research suggests that this experience of belongingness is important at all ages and at all levels from pre-school through high school. Findings cross age and grade levels, but there are differences in the strength of the correlation, suggesting that need for belongingness and the personal and institutional responses to these needs may vary depending on gender, age, and context. Whereas girls seem to have developed socially acceptable ways of addressing these personal needs, boys' patterns of interaction with teachers and with peers often seem counterproductive. With respect to age, the middle school seems to be a crucial time, particularly for boys.

While the findings are generally consistent, the strongest relationships emerge with regard to the association between the experience of relatedness and student engagement. Here we find consistently strong and significant correlations. Particularly important is support from teachers. While peer and family support have

an important influence on student perceptions and behavior, teacher support has the most direct impact on student engagement. How students feel about school and their coursework is in large measure determined by the quality of the relationship they have with their teachers in specific classes. Peer acceptance, however, affects students' self-perceptions that, in turn, affect behavior in important ways. These findings are significant for two reasons. School-based personnel as well as the public often attribute disengagement and poor performance to factors intrinsic to the child, the home environment, and the peer culture. This research challenges that perspective, showing that the school directly contributes to engagement over and above the contribution of family and peers and that parents and peers affect student behavior in very discrete ways. The link between relatedness and engagement is also particularly significant because of the predictive links between engagement and performance.

At least some of the inconsistencies in the research can be attributed to methodological problems. From a psychological perspective, belongingness is a subjective phenomenon. The widespread use of peer and teacher nominations, particularly in the research on peer acceptance, may be important as a means of understanding group dynamics in a peer culture, but provides little insight into the personal experience of students who are part of this social culture. In school settings as in adult work settings, peer acceptance is distinctly different from friendship or popularity. Students may have a sense of acceptance but not be classified as popular by their peers. Similarly, friendship, while extremely important, may be insufficient to mitigate the effects of rejection by colleagues in the workplace. Recognizing these conceptual distinctions may require us to reexamine many of the assumptions about students and peers that have grown out of research from this alternate paradigm.

Peer Relationships and Sense of Community Among Students

There is little research that provides us with a deep understanding of the nature and quality of peer relationships within the school context. What little we do know comes in scattered pieces of information gleaned from a variety of sources. From the research presented in the previous section, we can establish that students' experience of acceptance is linked in many important ways to students' engagement and performance. In a more general sense, we can also establish that, while kids care about the quality of peer relationships in school, many do not consider themselves to be part of a supportive student community and have relatively few opportunities in the school day to interact with one another.

In a focus group interview study of K-5 student perceptions of school and their role in decision-making, students emphasized the importance of peer relations (Allen, 1995). The students were very aware of interpersonal problems as well as positive changes that had taken place after one school had eliminated ability grouping. Because they had more opportunities to work with other students, they felt that they were learning better. As they explained, "We learn better in groups. We help other kids learn. It's easier for a kid to put it in words, because we understand how kids think" (p. 295). In this school, a student provided the perspective of a new student coming into the school: "[T]hey made me their friends. I was real quiet but they asked me to play with them." Other

kids agreed: "There's no kids here who don't have friends" (p. 297). "It's easy to meet friends here, kids introduce you and help with problems, they don't knock you down in line." Their experience contrasted with another school where "everybody calls people names," and "people liked to fight a lot." With respect to peer relations, the author concluded that for students an ideal school would be a place with "friendly people who make everyone feel included" (p.299). Among kindergarten children, Ladd (1990) found that peer status significantly predicted school perceptions, school involvement, and performance. In a middle school population, Wentzel & Caldwell (1997) also found achievement related to peer acceptance and group membership. Both studies, however, relied on peer nomination procedures to establish acceptance.

The literature implies that the majority of students have friendships and positive peer relations but there is little research that specifically examines the nature or extent of peer relations in school settings. Several studies, however, provide information suggesting that a closer look may be warranted. In Kindermann's (1993) study of fourth- and fifth-grade students, 13 of 109 (12%) did not belong to any peer group in the classroom. In Bishop and Inderbitzen's (1995) study of ninth-grade adolescents, 61 of 542 (over 11%) had no reciprocal friend. In two groups of sixth-grade middle school students, Wentzel & Caldwell (1997) found that 37% of 212 and 28% of 404 students did not have a reciprocated friendship.

Their study and others suggests that boys are less likely to experience a sense of belongingness in schools than are girls. Research shows, for example, that girls have significantly higher peer acceptance ratings than boys (Wentzel & Caldwell, 1997), experience a significantly higher sense of belonging (Goodenow, 1993a; Goodenow & Grady, 1993), and have significantly more and better friends, whereas males develop significantly more negative relationships with classmates than females do (Phelps, 1990). Boys, too, Ryan, et al. (1994) found, are less likely to utilize friends for emotional issues and significantly higher in reporting that they turn to no one for emotional and school concerns, behaviors that are linked with poorer school adaptation and motivation and lower self-esteem and identity integration. In several studies (Moore & Boldero, 1991; Goodenow, 1993b) the strength of the relationship between the experience of peer acceptance and various outcomes is stronger for boys, leading Moore and Boldero to conclude that, although boys apparently are less involved in friendships, friendships may be more important for their psychosocial development.

In his study of resilient Hispanic adolescents, Gordon (1996) reports that schools do not satisfy students' belongingness needs and that the environment is not supportive in this area, but there is insufficient information to assess this claim. From baseline data gathered in the second study, Battistich et al. (1995) report that none of the 24 elementary schools in the second CDP project showed a high level of sense of community. Watson et al. (1997) also noted that about 25% of the upper-grade students experienced school as an uncaring place and that this perception was stronger in schools serving poor children.

McNamara and McNamara (1997) offer evidence that approximately 15-20% of students are involved in bullying, much of it at the elementary level, either as the bully or as the victim. Based on interviews and observations of more than

1000 students in eight middle, junior, and high schools representing a suburban mix of middle-class, wealthy, and low-income families, Shakeshaft and colleagues (Shakeshaft, Barber, Hergenrother, Johnson, & Mandel, 1997; Shakeshaft, Mandel, Johnson, & Wenk, 1998) describe a pervasive environment of adolescent peer harassment.

A study of teacher teaming and sense of belonging (Arhar & Kromrey, 1993) used three measures of social bonding to peers, teachers, and school. Responses from 4761 seventh graders in 22 urban and suburban schools showed that peer-bonding scores were noticeably lower than scores on school or teacher bonding under all conditions in both low and high SES schools. Using the School Climate Survey developed by Child Study Center School Development Program at Yale University, Osterman (1995) found that perceptions of teacher support were noticeably higher than perceptions of peer support in data from 1369 junior high and high school students in an affluent but diverse suburban district. Of the eight climate factors, perceptions of student relationships were lowest and declined with increasing grade levels. (Christine Emmons, Research Director at the Child Study Center, confirms that this pattern of relatively low scores for peer support is one that they have also observed in their use of the instrument.)

In their study of school belonging, Goodenow and Grady (1993) also reported that school belonging scores gathered from urban low income schools were only slightly above the midpoint, with 41% disagreeing that they belonged or were supported. In contrast, in a study of classroom belonging in a suburban high-income school (using a measure incorporating beliefs about peers and teachers), student responses were well above the 3.0 midpoint (Goodenow, 1993a).

Emphasizing the contextual nature of the issue, in a small parochial school, grades 7-9, only two of 80 students (both girls) were identified as isolates, with 91-100% of the classmates making this assessment (Cairns, Perrin, & Cairns, 1985). A study by Leithwood and associates (Leithwood et al., 1997) defines belongingness as a component of school identification and includes relationships with peers and teachers. Collected from a large school district with a strong equity policy, measures of school identification, incorporating belongingness and valuing, were relatively high. The overall mean was 3.85 on a five-point scale, with a stronger response at the elementary level: 3.95, versus 3.58 at the secondary level.

Examining peer relationships in classrooms, we find that there are groups, but group boundaries seldom encompass the entire class. In a study of students' self-selected peer groups, Wentzel & Caldwell (1997) found that the composition of student peer groups differed and that "group membership" was often distinct from reciprocal friendship. In some cases, all reciprocal friends were contained within the group; in others, groups had no reciprocated friendships. While most groups included students from outside of the classroom, others included only classmates. Although not a focus of this study, there were differences in grouping patterns between the two schools, differences that might be explored in relation to school and classroom grouping practices.

Peers tend to associate with those they define as "friends" and these friends tend to be like themselves in terms of race, class, gender, and most importantly,

in terms of perceived academic ability (Cairns et al., 1985; Johnson et al., 1983; Kagan, 1990; Kinderman, 1993; Urdan, 1997). These friendship groups are visible, highly stable (Cairns et al., 1985; Kinderman, 1993), and exclusive, with students restricting positive interactions to other group members in and out of the classroom.

The Development of Peer Relationships in Schools

How does this sense of belongingness develop? What role, if any, does the school play? Much of the literature dealing with peer acceptance makes the assumption that students' ability to establish positive relationships is self-determined: Children who are highly accepted by their peers are more sociable and more socially competent. They may place more value on relationships with others or simply know how to get along with others and do what is necessary to be accepted. Conversely, some argue that rejection, while not condoned, is a predictable and reasonable response to certain behaviors, particularly aggression or withdrawal. This assumption is embedded in much of the research and implicit in policy recommendations that focus on remediating students' social skills. Motivational theory, however, provides a different lens to frame the problem. Belongingness is a basic need, characteristics of the social context determine whether these needs are met, and apparently "anti-social" behaviors may more appropriately be interpreted as an indicator that needs are not being satisfied in the particular social context. If the need for relatedness is satisfied, this should be evident in collaborative and prosocial behaviors. In what ways, then do schools influence the development of community among students?

Interaction

According to Baumeister and Leary (1995), the need for belongingness is so powerful that people will develop social attachments very easily and strive to maintain relationships and social bonds even under difficult circumstances. When people have a chance to develop a relationship, the natural response is to move towards a communal orientation even in the face of previous biases. The primary condition necessary for the development of relationships is frequent and affectively positive interaction. Theoretically, then, there should be a direct relationship between the frequency and quality of interaction and students' sense of community.

Outside of research on cooperative learning which clearly establishes the relationship between interaction and the quality of peer relationships, I would argue that there is relatively little work that focuses on the incidence, quality, and effects of positive interaction among students in the classroom and school as a whole. While we know some things about student interaction within classrooms and within friendship groups, we know very little about interaction among students outside of these boundaries. Existing research, however, suggests the following: 1) there are few opportunities for interaction among students during the school day, in class or out; 2) the frequency and quality of interaction both affects and is affected by one's sense of acceptance; and 3) aspects of school and classroom practice influence opportunities for interaction *and* students' sense of acceptance.

Goodlad (1984) observed little interaction among high school students in

the classroom, and speculated that teachers' emphasis on whole-group instruction might be designed to prevent alliances. Hargreaves et al. (1996), too, showed how individualized instructional practices maintain student isolation. Phelps's (1990) study of one middle school found few opportunities for students to get to know one another. Through interviews, Phelps found that peer interactions were almost exclusively limited to out of school activities. Queried about their interaction with friends, "not one student provided an activity that occurred inside or during school." Only 16 of 167 responses had something even remotely to do with school—primarily attending sporting events. Any interaction with friends or other classmates during the day took place outside of the classroom, mostly during the 30-minute lunch period. Phelps reported that "[s]chool—at least this school—did not provide a great deal of time for students to interact socially with their peers" (p. 133).

An unpublished study of peer interaction in an affluent suburban high school (Osterman, McLeod, & Ostrovskaya, 1997) generated similar findings. During class time, the average number of interactions with other classmates tended to be very infrequent but differed by academic level. The average number of interactions based on full-day observation of six students was 8 per 50-minute class in special education classes. In middle-level and advanced classes, means were 1.54 and 1.76, respectively. A mid-level student attending six classes would have approximately 12 momentary interactions with classmates during the entire day. An interaction was any verbal contact. Typically, these were extremely brief and consisted of a single comment or question. In very few instances were they part of a dialogue. Interactions outside of the classroom were infrequent as well. Of the six students, only one ate lunch in the cafeteria (several went through the entire day without eating lunch); and in only two cases did students (both females) spend more than five minutes with friends in a social situation.

Interaction patterns differ for individual students and, while interaction per se is not necessarily associated with popularity (Wentzel & Asher, 1995), peers who are more accepted have more positive interactions with other students (Green et al., 1980). As the previous section indicates, although interaction influences acceptance, the reverse is also true: Interaction is affected by one's sense of acceptance, with students being more open and involved when they anticipate favorable reactions from classmates.

Classroom Practices

In the literature, three aspects of classroom practice seem to have an important impact on students' sense of relatedness through their effects on the frequency and nature of student interaction in the classroom: methods of instruction, teacher support, and authority relationships between teachers and students.

Instruction

In 1996, Leithwood and colleagues presented data showing that quality of instruction accounted for 46% of the variation in students' sense of belonging (Leithwood, Cousins, Jantzi, & Patsula, 1996). Whereas their study relied on students' perceptions of different aspects of their classroom experience, including teacher support, other research identifies two specific instructional strategies that relate directly to children's experience of relatedness: cooperative

learning and dialogue.

The importance of cooperation in contrast with competition to enhance overall student motivation is well-developed (Anderman & Maehr, 1994; Covington, 1992). Cooperative learning is also particularly significant for the development of peer relations. Cooperative learning directly affects the frequency of student interaction and, if properly implemented, also the nature of student interaction. In theory, structuring the work to require and reward group effort (positive interdependence) for task completion and for the learning of each individual group member insures a greater level and different quality of interaction than under competitive or individualistic learning conditions. The task is structured so that members of the group need each other. The research on cooperative learning and elaborate discussions of the theoretical grounding for the process is extensive. For our purposes here, some of that research demonstrates that cooperative learning affects interpersonal attraction among students and enhances students' personal sense of belongingness (Johnson et al., 1983). Offering evidence from 98 empirical studies conducted between 1944 and 1982, Johnson and colleagues established that in cooperative learning situations, interaction among and between homogeneous and heterogeneous students is more frequent and more positive than in individualistic or competitive learning situations. In cooperative settings there were more incidents of helping behavior, greater satisfaction with the group experience, more frequent perceptions of group cohesiveness, and greater attraction to other group members. The quality of this interaction results in "stronger beliefs that one is personally liked, supported, and accepted by other students, that other students care about how much one learns, and that other students want to help one learn" (p. 33). The belief that one is cared about is, according to Baumeister and Leary (1995), a more important determinant of the sense of relatedness than reciprocity. The nature of interaction in cooperative work groups also incorporates all the descriptive characteristics of community as defined by McMillan and Chavis (1986).

A more recent study (Solomon, Battistich, Kim, & Watson, 1997) directly examined the relationship between teacher practices, various aspects of student behavior, and students' sense of community at the classroom level. Consistent with their model, they determined that teacher practices have an indirect relationship with students' sense of community through intermediate relationships with student engagement, influence, and positive interpersonal behavior. The strongest relationships were between teachers' encouragement of cooperation and students' positive interpersonal behavior and influence, leading the researchers to conclude that "cooperative interaction is a primary mechanism that provides students with opportunities to exert meaningful influence and to display (and experience) positive behavior with their peers" (p. 259).

Jones & Gerig's (1994) study found that many of the silent students (41%) admired those who participated frequently and felt most comfortable when working in small groups with friends: "I learn better in a small group. I don't like to work alone because I don't feel secure with what I'm doing. I like to get other people's input, and I don't like large groups because I feel like I'm talking to the whole world and I feel uncomfortable. But when I am in a small group of three or four people, I can state my ideas and feel comfortable about them" (pp. 179-80). A study by Sharan and Shaulov (1990), however, showed differential affects on achievement related to individual learning preferences, a factor that

should be considered.

Two other studies also examined peer interaction as an outgrowth of cooperative learning. A dissertation study found that middle school students in cooperative learning settings had significantly more and better friends among classmates than those in non-cooperative settings. They developed more positive relationships and fewer negative relationships (Phelps, 1990). A later study (Jules, 1991) also documents the impact of cooperative learning on peer interaction outside of the learning situation preceding and following cooperative learning experiences. Prior to the cooperative learning experience (five weeks, 25 periods of 40 minutes each) the researchers observed students interacting in dyads, triads, and cliques. At the conclusion, cliques were no longer evident, friendship patterns had widened, and same race choices had declined. Seventy-three percent of the students were perceived more positively after the experience than before. In contrast, respondents in a study of dropouts described the depersonalization of traditional classrooms with desks lined up in rows (Altenbaugh et al., 1995); the "silent" students in Jones & Gerig's study longed for small group activities where they would know people better and be less frightened to express their opinions. These structural arrangements in the classroom with their strict rules limiting movement and talking, according to Johnson et al. (1983), prevent students from getting to know their classmates on any but a superficial basis and allow stereotypes to continue unchallenged and unexplored.

Dewey (1958) and Vygotsky (cited in Wertsch, 1985) both emphasize the importance of social interaction as a basis for learning. Dialogue facilitates the development of ideas, but it can also help students to develop a better appreciation of others and to experience themselves as part of a supportive community. Explaining their rationale for emphasizing collaborative discussion as a strategy to enhance prosocial behavior, Battistich, Watson, Solomon, Schaps, & Solomon (1991), incorporating the work of Oser (1986), maintain that discussion in a supportive community where students have the opportunity to express personal opinions gives children the opportunity to discover that others care. Through such experiences they develop feelings of trust, mutual respect, and solidarity. Gamoran & Nystrand (1992) similarly affirm that "regardless of the activity in which students participate, discourse is a critical indicator of the extent to which school offers membership" (p. 40). Although dialogue is an inherent part of cooperative learning, as a learning strategy its use is not restricted to small group activity. Research, however, shows that students seldom get such opportunities as part of their classroom experience. Goodlad (1984) and Anderman and Maehr (1994) report that there is little, if any, time devoted to discussion within classes. Gamoran and Nystrand's (1992) study of discourse in 54 high school classes found that the group discussion incorporating student contributions averaged 15 seconds per 50-minute period. Thirty-three classes had no discussion time at all; only four had more than a minute. These patterns were unaffected by class size: When classes were smaller, students spent more time in individual seatwork. Observing 36 classes over a six-day period, Osterman et al. (1997) noted only four instances of cooperative learning ranging from 6 to 15 minutes. One 12-minute segment accounted for 77% of one student's peer

interactions for the day.

Teacher support

To experience relatedness, students must feel that they are worthy of respect and that the others in their group or social context care for them. Their beliefs about themselves develop through their interactions. If interactions are positive and affirming, students will have a stronger sense of relatedness. This in turn reinforces and encourages similar behavior. On the contrary, if experiences are negative, if students receive information that they are not valued and that their behavior is unwelcome, their sense of relatedness suffers. Because they feel unwelcome or rejected, they are less likely to initiate "prosocial" behaviors, adopting instead patterns of withdrawal or aggression. The student's experience in the classroom, then, shapes self-perceptions and behavior.

With few exceptions, discussions of community building in schools involve changes in the nature of adult-student relationships. Much of the research noted above, and much additional research unreported here, highlights the significance of a caring and supportive relationship between teacher and student. Teachers play a major role in determining whether students feel that they are cared for and that they are a welcome part of the school community. Not all students, however, experience teacher support. Research consistently establishes that students receive differential treatment from teachers on basis of characteristics such as race, gender, class, ability, and appearance, and that differentiation begins early in the school career and increases as students progress through school. Research reviewed here suggests that teachers' perceptions of student engagement, as well as ability, also influence the level of support that students receive.

At the high school level, students in Altenbaugh et al. study (1995) reported teacher favoritism. The favorites, one explained, were "the kids that were real smart in class. The other ones, they just ignored altogether." Those teachers who had favorites would show it in different ways but "They was always nicer to those students and always mean to the others. . . . If a kid missed a day of notes, he would give it to him and help him out, but he wouldn't the other students" (p. 87).

Elliott & Voss (1974), Schwartz (1981), and Gamoran and Berends (1987) all find differential treatment among lower tracked students. Elliott and Voss (1974) described an alienating tracking system for troublemakers and failures. Schwartz (1981) observed teachers distancing themselves from low-ranked pupils and, by examining end-of-the-year elementary student reports, found an increasing polarization between low and high track students with teacher comments about low track students being exceedingly brief and negative. Interestingly, many of the negative descriptors mentioned in the study—"disruptive," "nonconformist," "withdrawn," "daydreamers," "non-participants"—are indicators of disengagement.

Gamoran and Berends (1987) in their review of the research on tracking found that teachers were more positive towards high track than low track students and that prosocial behavior of high track students seemed to have more influence on teacher perceptions than actual achievement. (Although tracking

can contribute to social isolation and alienation, Bryk & Driscoll's, 1988, finding that low track students in parochial schools had very positive school experiences suggests that other aspects of school context are more important psychological determinants.) Using path analysis, the Connell et al. study (1995) found that while engagement predicted academic performance, it also directly influenced the level of perceived support from adults. Their conclusion was that students receive support "depending on their level of engagement, with more engaged students receiving more support" (p.58).

These studies show that teachers' perceptions of student ability, engagement, and academic performance influence the quality of their relationships with students. Other studies suggest that teacher preferences and patterns of interaction with students also influence the nature of peer relationships, with peer acceptance mirroring teacher preferences. Multiple studies show a relationship between teacher preference, peer acceptance, engagement, and academic performance from kindergarten through high school (Green et al., 1980; Kinderman, 1993; Ladd, 1990; Schwartz, 1981; Swift & Spivack, 1969; Wentzel & Asher, 1995). In general, these studies show that peers as well as teachers prefer students who are academically competent and engaged and shun those who are perceived as less capable or less engaged. In a study of peer rejection and academic performance among 423 middle school students, Wentzel and Asher (1995) found that teachers and peers both perceived popular children as good students, while those rejected or preferred less by teachers and peers were also perceived by both as poor students.

Ladd (1990) determined that by the end of the second month in school kindergarten children with higher mental age scores and greater preschool experience tended to receive higher ratings from teachers for academic behaviors and readiness. Again, peer acceptance correlated with school performance, with rejected children having lower levels of school performance and perceptions of perceived teacher support. These rejected children were also less likely to maintain prior friendships over the school year.

In the Swift and Spivack (1969) study, teachers of regular public school and emotionally disturbed students rated them on academically related behaviors including relationships with teacher and peers. For both groups of students, academic achievement was correlated with positive teacher and peer relationships. Higher achievers interacted more and had more positive relationships with teacher and peers.

In a study of 116 third graders in five rural classrooms, Green et al. (1980) found that children who were more accepted by their peers were high on academic achievement, viewed more positively by the teacher, and engaged in more positive interactions with peers. Those disliked and rejected by peers had lower levels of achievement and were preferred less by teachers. Observations found that the rejected children were less on-task and had fewer positive interactions with other students than their more popular peers did.

In a longitudinal study, Kindermann (1993) analyzed the relationship between student engagement and peer group selection. In the beginning of the school year, the researcher gathered data about individual student engagement from fourth- and fifth-grade students and teachers. He also gathered information

about peer group affiliation at the beginning of the year and at the end of the year. The findings were as follows: At the beginning of the year, while the correlation was stronger for teacher reports, peer group affiliation was significantly correlated with self-reported and teacher measures of student engagement. At the end of the year, while there had been significant turnover in group membership (about 50%), the motivational profiles of the groups were still similar with respect to engagement. At the end of the year, however, "self-reported motivation was not any more an important criterion for peer group selection, but teacher reported engagement continued to be" (p. 975). While not the intended purpose of this study, these findings suggest the possibility that teachers may influence student perceptions of others in the group and thereby shape their peer group selections.

It is important to point out that none of the studies mentioned above specifically focused on the relationship between teacher perceptions and peer acceptance. In most cases, researchers gathered information from teachers either to describe behavioral patterns of accepted and rejected children or to confirm information gathered from peer reports. While none of the studies yields any information about causality, inherent in the research designs and discussions is the assumption that levels of teacher and peer acceptance respond to student behavior rather than the reverse. In fact, behavior does play an important part in peer acceptance (Coie, 1990; Taylor, 1989), but in light of other research and theory one could easily interpret the correlation data in a different way, that is, that student behavior is a response to teacher and peer acceptance. Hymel, Wagner, and Butler (1990) offer one explanation in reputational bias. Basically, they argue that status differentials influence how group members perceive and interact with their peers. "Popular children," they argue, "acquire a 'positive halo' and unpopular children acquire a 'negative halo,' which colors how their behavior is perceived, evaluated, and responded to by others" (p. 157). These biases "serve to maintain positive and negative reputations . . . ensuring that status distinctions are preserved" even when behavior of the rejected children shows improvement.

Anderman and Maehr (1994) provide additional support for this position, telling us that children develop self-concepts based on information received from social comparisons with other children, especially as they move into adolescence. Status differentials emerge, as we have seen, from the time children enter kindergarten (perhaps before) and that these differences may influence friendship patterns. For example, in a study of friendship patterns in Trinidadian secondary schools, Jules (1991) found that students predictably chose someone of equal or higher status than themselves whether the status indicator was ethnicity, SES, or academic achievement. While selections leveled after cooperative learning, the same pattern held. While friendship patterns had widened, the significant students remained the same, and they were competent, confident, and socially skilled (Jules, 1991).

Differentials solidify as students progress from class to class, and, by the time they enter secondary school, their status has been clearly defined by school authorities. Secondary schools, in general, are less supportive and more impersonal than elementary schools (Hargreaves et al., 1996). For less successful

students, these conditions may be aggravated as "they receive direct messages in terms of track placement regarding their relative position in school" (Altenbaugh et al., 1995, p.92). That students internalize these messages in ways that affect their relationships with peers is particularly well illustrated in the following study.

Schwartz (1981) conducted an ethnographic study to examine the impact of tracking on student social organization. Earlier studies by Lacey and Hargreaves, cited by Schwartz, determined that as high and low tracks are academically differentiated, they become socially polarized as well. High tracks develop a pro-academic subculture that links social status to academic achievement. In low tracks, status comes from defiance of school and teacher norms. This study sought to better understand the processes leading to these outcomes through systematic observation of teacher and student behavior. Schwartz examined student records and gathered additional data through sociograms and interviews with parents and students. The study focused on third- and fourth-grade classes in three elementary schools and seventh- and ninth-grade classes in a junior high school. The schools differed in size and ethnic composition. One New York City elementary school was large (1100) and predominantly Hispanic and black. Two of the schools were ethnically homogeneous but predominantly working class, with one over 99% white and one predominantly black. The third was diverse, approximately 33% black, white, and Hispanic. Despite differences in level and ethnicity, interaction patterns in the four schools were similar. During teacher-directed activities, top track students engaged in "sneaking behavior" appearing to conform to behavioral expectations while actually interacting covertly with peers. Low-track students engaged in openly disruptive behavior, blatantly defying the classroom rules. In informal class time, while students are working on their own or in groups, high track students work cooperatively with their peers in academic classes, but adopt challenging behaviors in non-academic classes where their behavior won't jeopardize their academic status. In conversations with peers, the high track students provided a lot of support to one another and expressed their feelings of identity. Students in the low tracks, however, criticized one another and tried to differentiate themselves from their low track peers whom they labeled as stupid.

From this data Schwartz theorized that the tracking system constitutes a formal hierarchy in which rank predominates. The students' understanding of their own status in this system affects how they evaluate their classroom situation and their classmates, how others rank them socially and educationally, and how teachers perceive and interact with them. "The higher the rank, the more likely they are to be satisfied with academic placement, to choose like-ranked peers as friends, to be popular with grade mates as well as classmates, and to be the object of their teachers' positive expectations" (p. 109). Probably the most important finding and a unique contribution of the study deals with relationships among lower track students. As Schwartz explains, "their perception of the worth and attractiveness of these peers determines if and how they choose to interact with them" (p.110) As sociogram data indicated, high track students chose others of the same rank. Those in the lower track also picked peers from the higher track but these choices were not reciprocated. High track students

clustered into dense reciprocal groups and exclusive cliques, while low-track students were linked, not in groups but in reciprocal pairs. Consistent with other studies cited above, academic rank and peer acceptance went hand in hand:

> High-tracked students come to view their classmates as individuals whose high social status is linked to their own academic success. Group identification and solidarity become equated with academic superiority. Popularity with peers and their treatment by teachers set them apart from others socially as well as academically. Students see themselves collectively as individuals whose prize position is both demonstrated and maintained by their social grouping into exclusive cliques. (Schwartz, 1981, p. 116)

Low track students, in comparison, found their social worth by distancing themselves from their peers, just as teachers distance themselves from less capable students. Students seemed to incorporate negative teacher messages into their interactions with each other and the lack of esteem that they receive from teachers and students in other tracks affected their ability to establish positive relationships with their own peers. They rejected those who are like themselves, separated themselves from the group, and satisfied their social needs by seeking out a single friend, like themselves but unlike the others. Their lack of popularity with even their own classmates promoted competitive, disruptive, and largely dyadic interaction. As Schwartz explains: "group activity would belie the very label they seek to deny" (p. 117).

While not conclusive, these findings in context of theory suggest that teachers influence peer relationships by establishing values, standards, and norms in the classroom. According to Maehr and Midgley (1996), there is a predominant focus in schools on ability. We want children to succeed; we reward those who do. Unfortunately, this is an orientation that fosters competition and differentiation, and one which teachers convey through their interaction with students.

If some teachers inadvertently undermine students' sense of community in the classroom, the reverse is also true. Prosocial behavior can be learned and is best learned in an environment of caring. Experimental studies of children from infancy through eight years found that children learn through imitation and that learning was greatest when experimenter and child had a nurturing relationship and when the adult modeled caring behavior for others in real interactions with those in need. Exposure to hypothetical or vicarious experiences was ineffective (Radke-Yarrow & Zahn-Waxler, 1984). This suggests that, if students are to develop and adopt prosocial behaviors, they need to see these behaviors encouraged, explained, and modeled in the classroom. An earlier experimental study by Flanders and Havumaki (1960), cited in Schmuck and Schmuck (1997), demonstrated how communication and supportive responses from teachers affect peer-group friendship nominations. In classrooms, teachers directed supportive comments only to selected students and not to others. At the completion of the week, these students received significantly more friendship group nominations than those students who had not received support.

In a far more extensive way, the CDP has demonstrated that it is possible to change the culture of classrooms and schools in ways that affect students' values, attitudes, and behavior regarding the nature of peer interaction in the classroom. Several assumptions shaped their effort. One was that teachers indirectly

control peer socialization experiences by determining the conditions under which children interact. Another was that adults can encourage prosocial behavior by communicating and enforcing prosocial norms and values and by providing opportunities for students to exercise autonomy, work collaboratively with others, and participate in group problem-solving and decision making. By encouraging teachers to facilitate dialogue about democratic values, provide opportunities for supportive interaction in and out of the classroom, and support students' autonomy within and outside of the classroom, this change effort shows that it is possible to enhance students' sense of community. While program changes were not fully implemented in all of the schools, where design strategies were implemented, there were significant changes in students' sense of community as well as a wide range of motivational and behavioral outcomes. The difficulty of their endeavor, however, speaks to the predominant value system that shapes educators' assumptions and practices.

Authority relations/autonomy

In theory, the three basic needs for competence, autonomy, and relatedness are integral and interdependent. The previous section noted that supportive relations facilitate the psychological experience of autonomy. Researchers argue the reverse as well. Just as relatedness enhances autonomy, the experience of autonomy supports the development of the sense of relatedness. When children experience autonomy in relations with parents, teachers, and other adults, these relationships will be stronger. They are more likely to accept adult authority and adopt acceptable social behaviors in the classroom. This is an important point because it challenges an assumption that fostering independence among adolescents requires a reduction in personal closeness, a point that can be disputed theoretically and empirically (Ryan, 1991; Ryan & Lynch, 1989; Ryan & Powelson, 1991).

From their reviews of the research Kagan (1990) and Battistich et al., (1991, 1995) assert that the children of parents who use power-assertive techniques are less social, more hostile, more disaffiliated, and less well adjusted. In addition, high demand for compliance, combined with low concern for the child's needs, is associated with low social competence, low esteem and aggressiveness. Conversely, as other studies demonstrate, autonomy support is associated with social competence as well as favorable attitudes toward school and teacher.

In studies described earlier, Grolnick and Ryan (1989) and Grolnick et al., (1991) examined the importance of parental autonomy support focusing on parents' expressions of value for autonomy (in contrast to obedience and conformity); use of autonomy support techniques (reasoning, encouragement, empathic limit setting vs. punishment and controlling use of rewards); and nondirectiveness (inclusion of child in decisions and problem solving, as opposed to imposition of parental agenda without choice). In both, autonomy support, whether based on parent interviews or student reports, was significantly correlated with students' perceptions of control understanding, autonomy, and competence. In the 1989 study, parental autonomy support was also significantly correlated with teacher reports regarding students' competence and classroom behavior. According to teachers, children who experienced autonomy in the home demonstrated greater competence and had fewer behavioral or learning

problems, characteristics that are linked to teacher and peer acceptance. Regarding control strategies in schools, we know several things: Students are well aware of their influence in the classroom; teacher control orientations affect students' motivation and self-perceptions; teacher control strategies differ depending on certain student characteristics; and secondary classrooms typically provide few opportunities for students to experience autonomy.

In an interview study, Allen (1995) explored elementary students' views on decision-making in their classrooms and schools finding that students were well aware of the ability to influence decisions. Between schools and classes there were wide variations in students' perceptions of their autonomy ranging from absolute powerlessness to feelings that they could change almost anything. The interview data also illustrates how these feelings might affect their relationships with their teachers, their enthusiasm about school, and their involvement in the classroom, but the study did not specifically examine this point.

Deci et al. (1981) found that children in classes of teachers who were autonomy supportive were more intrinsically motivated and had higher perceptions of their cognitive competence and self-worth than did students in classrooms with controlling teachers. Each of these outcomes could also predictably affect student's relationships with peers.

As in the case with teacher support, a study by Connell and Wellborn (1991) shows that the level of autonomy support from teachers and parents varies depending on certain student characteristics. As part of their studies examining self-system processes and engagement in the school context, the researchers surveyed teachers and parents about the level of their involvement with students and the autonomy support that they provide them. Both teachers and parents reported that they provided less autonomy and were less involved with students who were disaffected. Their findings again showed that parent and teacher interaction differed depending on the student's level of engagement and that the enacted strategies (withholding support and autonomy) are those that predictably contribute further to disengagement.

Critiques of secondary education often focus on the contrast between adolescents' growing needs for autonomy and actual decreases in opportunities for student autonomy within the classroom as children enter (Anderman & Maehr, 1994; Eccles et al., 1993; Goodlad, 1984; Hargreaves et al., 1996). Regardless of the predominant patterns, several intervention strategies have demonstrated both the possibility and the importance of change. According to deCharms (1968), the experience of being a pawn (having little control or autonomy) leads to a sense of alienation. He also convincingly showed that teachers could learn to utilize autonomy supportive strategies in the classroom and that students' experience of themselves as origins led to gains in motivation and achievement (deCharms, 1976).

Research from the CDP is also particularly illuminating regarding the importance of autonomy support as well as both the possibility and the difficulty of bringing about change. Autonomy support was a key component of the CDP intervention. As part of the training program, teachers were introduced to developmental discipline. In this approach to classroom management, teachers would shift from reliance on extrinsic controls in an effort to support the development of self-regulation. Accordingly, there was an emphasis on developing warm and

supportive relations with students, adjusting demands to students' abilities, and involving children in problem solving, helping them to understand reasons and develop techniques for self-control. In theory, this disciplinary strategy, combined with other program elements, should have enhanced students' experience of relatedness as well as their perception of autonomy, both integral to students' sense of community as defined in the study. As sense of community increased, one would expect to find more evidence of prosocial behavior among peers. As mentioned earlier, however, in the first CDP study, this was the case in program schools but not in comparison schools (Solomon et al, 1996). Sense of community was positively associated with multiple prosocial values in program schools, but in comparison schools, students' sense of community was negatively associated with prosocial values and positively associated with competitive relationships among peers. What accounts for these findings? There are several explanations. The researchers reexamined the data from the sense of community measure and determined that differences were largely due to the autonomy component. While responses were similar regarding supportiveness, they differed significantly with respect to perceptions of student autonomy. In comparison classes, support scores were similar but autonomy scores were significantly lower than in program classes. Observations confirmed that class environments differed, with program classes stressing autonomy and consideration while the primary emphasis in comparison classes was compliance to teachers. These findings highlight the importance of autonomy as well as the important role that social norms and values play in determining the nature of communal interaction and the pervasiveness of students' belonging. As the researchers explain, the experience of support appears to promote adherence to group norms. Program classes intentionally fostered supportive interaction among students. This was not the case in comparison classes. Individuals who experience autonomy and support may have a greater propensity for prosocial behavior but the extent to which this is realized in a communal setting will depend on the predominant norms. If those norms support positive interaction, students as a group are more likely to experience school or classroom as community.

That autonomy plays an important part in growth and development is established. The research reviewed here suggests that students' experience of autonomy at home and at school influences motivation and classroom behavior. We know that behavioral characteristics affect teacher and peer acceptance in the classroom and the level of autonomy support that students receive. That autonomy may influence peer relationships through its effects on self-perceptions and behavior seems possible, and even likely, but it is not established empirically. Additional studies specifically examining the relationship between teacher control strategies, students' perceptions of autonomy, and prosocial behavior would be useful.

Organizational Characteristics

While the preceding discussion focused primarily on classroom practices, it is important to at least note some school-wide organizational practices that affect the nature and quality of student interaction. Within schools, tracking or ability grouping is one organizational practice that appears to reduce student interaction and have negative effects on peer relationships. With respect to tracking or ability grouping, Oakes (1985) has described tracking as a "legiti-

mation of inequality" (p. 137), a practice that, as Schwartz (1981) illustrates, affects very directly the nature and quality of peer relationships. Departmentalization, almost a universal given in secondary schools, is another organizational pattern that is associated both with academic rigor and depersonalization (Hargreaves et al., 1996). While different disciplines vary in their preference for instructional strategies (Siskin & Little, 1995), departmentalization, while it may support teacher collegiality within the department, does little to support the development of positive relationships among peers. Other critics have highlighted the negative impact of school size and traditional scheduling practices that correspond to academic needs but fragment students' experience and reduce opportunities for sustained and cooperative interaction within the classroom.

Other organizational options intended to increase sense of community include smaller schools, block scheduling, departmental teaming, houses, interage grouping, and looping (maintaining intact classes over several grade levels). All of these changes would extend the time that students remained with the same peers and teachers. Theoretically, this would increase interaction and give students and teachers the opportunity to develop a more personal sense of understanding. While classroom practices are extremely important, the culture of the school as a whole plays an important and perhaps more important role in shaping students' experience (Anderman & Maehr, 1994). Yet researchers and reformers are beginning to question the efficacy of structural change alone as a means of school reform because it often has little effect on assumptions that shape the processes and practices of schooling (Lipman, 1998; Maehr & Midgeley, 1996; Wideen, 1994). Nevertheless, while beyond the scope of this paper, it would be interesting and worthwhile to determine if, how, and under what conditions, changes in these structural characteristics affect peer relationships and students' experience of schools as communities.

Conclusion

There were three questions framing this synthesis: Is the sense of belonging important in an educational setting? Do students currently experience themselves as members of a community and how do schools influence students' sense of community? The research and related research on this topic is extensive and extends well beyond the scope of this paper; however, from a review of even these limited sources it is possible to conclude that belongingness is an extremely important concept. As a psychological phenomenon, it has far reaching impact on human motivation and behavior. Although the research in the context of schools is less extensive, findings are strong and consistent: Students who experience acceptance are more highly motivated and engaged in learning and more committed to school. These concepts of commitment and engagement are closely linked to student performance, and more importantly, to the quality of student learning. From an individual standpoint, the benefits are clear. There is also evidence that this individual sense of acceptance extends into and affects the quality of relationships with others, particularly if the norms and values of the social context encourage and facilitate supportive student interaction. If students transfer the interpersonal skills and attitudes they learn in school to their relationships with other individuals and groups as members of the larger

society, this is an important consideration.

Research also tells us that conditions in the classroom and school influence students' feelings about themselves; these in turn are reflected in student engagement and achievement. Not all students experience alienation to the same extent, yet, for the most part, students and researchers describe schools as alienating institutions (Anderman & Maehr, 1994; Hargreaves et al., 1996; Johnson, Farkas, & Bers, 1997, Newmann, 1981; Wehlage, Rutter, Smith, Lesko, & Fernandez, 1989). While the "peer culture" may establish norms for dress and behavior, it is not necessarily one that satisfies students' need for belongingness. Harassment, whether in the form of sexual harassment (Shakeshaft et al., 1997, 1998) or bullying (McNamara & McNamara, 1997), tends to be pervasive and certain groups of students experience rejection not only from peers but from adults as well. Although there is relatively little research on student's sense of belongingness within the school community, from the work reported here it would seem many students fail to experience the sense of belongingness that McMillan and Chavis (1986) or Furman (1998) identify as the essence of community. They do not sense their own importance, and cannot rely on other members of the school community, whether teachers or peers, to meet their needs. While they may have a shared emotional connection and recognize the group's importance to them, their needs to experience relatedness are not always addressed. There is clearly a need for descriptive and analytic studies that focus specifically on this phenomenon in schools.

The least developed area deals with those organizational practices and policies that affect the development of students' sense of community in schools. Research establishes that there are instructional policies and practices that can influence students' sense of community; it also identifies directions for further research on the part of academicians as well as practitioners. In general, interpersonal, instructional, and organizational strategies that support positive interaction among students and other members of the school community should enhance students' sense of community.

Unfortunately, many of the changes necessary to satisfy students' needs for belongingness involve drastic changes in the cultural values, norms, policies, and practices that dominate schooling, particularly at the secondary level. While research has established a strong theoretical and empirical base showing the importance of addressing students' needs for relatedness within the context of the school, there is still much to be learned if the significance of the issue is to be recognized and addressed. While the research also suggests numerous ways in which schools can support the development of community and enhance student learning, there is a great discrepancy between theory and practice. A developing body of research on this topic may be helpful in further identifying directions for change and illustrating both the possibility and significance of that change.

There is also a need to incorporate, extend, and apply this research beyond the disciplinary boundaries of educational psychology. Society is confronted with what should be viewed as devastating indicators of serious emotional problems among students. Teen suicide, in general, is the second leading cause of adolescent death in the U.S. and Canada; many of these suicides are triggered

by school-based incidents. Incidents of student violence towards other students and teachers, regardless of their frequency, stun us as a society. Combined with drugs, eating problems, depression, drop outs, teen pregnancy, these, too, are "symptoms of a society in which self-hatred has become an epidemic" (Kunc, 1992, p.37). According to Baumeister and Leary (1995) many emotional problems such as these "result from people's failure to meet their belongingness needs" (p. 521). As Jones (1996) describes the problem, "too many of our youth have crawled beneath the blanket of despair and are suffocating from a lack of human connections" (p. 2).

Discussions of these problems on a policy level seldom focus on students' need for belongingness or the role of the school in meeting these belongingness needs, although there are notable exceptions (Anderman & Maehr, 1994; Hargreaves et al., 1996; Kunc, 1992; Newmann, 1981; Noddings, 1992). Even among those educators who strongly endorse the need for school community, the predominant focus is on changing the nature of teacher/student relationships, and there is relatively little attention to developing sense of community by enhancing peer relationships among students themselves. While the teacher/student relationship is clearly a crucial one, peer relationships also have a significant impact on the emotional well-being of students. As Deci et al. (1991) reported, there are no studies that examine student relationships as a source of belongingness. Similarly, there is little research that examines the role of the school in shaping peer relationships and thereby satisfying students' needs for belongingness. Although the sole focus of this paper has been on the need for relatedness, there are other basic psychological needs that must also be satisfied as a precondition for motivation. The important role of autonomy is discussed here, but of equal importance is the need for competence. Theoretically, these needs are integral and complementary, and their relationship should also be examined and addressed within the school context. The research here suggests that the need for relatedness and autonomy are generally ignored within schools and that students with the greatest needs may be least likely to experience belongingness or autonomy. Theory suggests that addressing these needs may go a long way towards improving motivation, behavior, and learning.

Organizational research, as indicated earlier, has consistently emphasized the interplay between work conditions and worker performance. Motivational research has also developed a new appreciation of this interplay, recognizing the impact of context on motivation. Organizational research in different organizational settings including schools has identified worker relationships, collegiality, and collaboration as important dimensions affecting worker motivation and performance. Underlying collegiality is this need for relatedness and belonging.

As Weiner (1990) explained, the need for belongingness is very important. There is a need to cross paradigms, to combine forces, and to begin to look at students' motivational needs in the context of schools:

> Belongingness must be brought into play when examining school motivation. This has been implicitly part of the trend toward cooperative learning, but it must be explicitly recognized and studied. In sum, school motivation cannot be divorced from the social fabric in which it is em-

bedded, which is one reason that claims made upon motivational psychologists to produce achievement change must be modest. There will be no "person-in-space" for the field of classroom motivation unless there is corresponding social change. (p. 621)

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