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THE PSYCHOLOGICAL SENSE OF SCHOOL MEMBERSHIP AMONG ADOLESCENTS: SCALE DEVELOPMENT AND EDUCATIONAL CORRELATES

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This article discusses the development and validation of a measure of adolescent students' perceived belonging or psychological membership in the school environment. An initial set of items was administered to early adolescent students in one suburban middle school ($N=454$) and two multi-ethnic urban junior high schools ($N=301$). Items with low variability and items detracting from scale reliability were dropped, resulting in a final 18-item Psychological Sense of School Membership (PSSM) scale, which had good internal consistency reliability with both urban and suburban students and in both English and Spanish versions. Significant findings of several hypothesized subgroup differences in psychological school membership supported scale construct validity. The quality of psychological membership in school was found to be substantially correlated with self-reported school motivation, and to a lesser degree with grades and with teacher-rated effort in the cross-sectional scale development studies and in a subsequent longitudinal project. Implications for research and for educational practice, especially with at-risk students, are discussed.

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Students' classroom engagement, academic effort, and subsequent school success or failure are influenced not only by individual differences in skills, abilities, and pre-dispositions, but also by many situational and contextual factors. Among these contextual factors, the quality of school social relationships may be especially important. In the past few years, increasing research attention has been directed toward the influence of social relationships on educational outcomes. This attention can be seen in work on cooperative learning and reciprocal teaching (e.g., Johnson & Johnson, 1991; Palincsar & Brown, 1984; Slavin, 1990), in research on social interaction as a major source of cognitive development (Rogoff, 1990; Tharp & Gallimore, 1988; Vygotsky, 1978), in investigations into the effects of friendships on school adaptation (Berndt & Keefe, 1992; Epstein, 1983), and in the use of the metaphor of "community" in current discourse about schools (e.g., Brandt, 1992; Carnegie Council, 1989; Fine, 1990a). Several educational researchers (e.g., Goodenow, 1992a; Pintrich, 1992; Weiner, 1990) have called for further empirical studies of the links between social-context variables and cognitive, motivational, and educational processes.

One aspect of the social context of special relevance to education is students' sense of belonging or psychological membership in the school or classroom, that is, the extent to which students feel personally accepted, respected, included, and supported by others in the school social environment. Belonging, according to Weiner (1990), may be a key influence on motivation, yet little research has been done on this topic and few if any adequate measures of the construct exist (Finn, 1989). This paper discusses the development and validation of a short measure of school belongingness for use with adolescent students, and presents both cross-sectional and longitudinal results concerning the association between the quality of such "psychological membership" and school motivation and achievement.

Social acceptance and the sense of belonging are important throughout life (Maslow, 1962): Their absence often leads to lowered interest and engagement in ordinary life activities (Weiss, 1973). In schools, students from grade school (Batcher, 1981; Zeichner, 1978, 1980) through college (Tinto, 1987) have difficulty sustaining academic engagement and commitment in environments in which they do not feel personally valued and welcome. Such "belongingness" (Finn, 1989) or "school membership" (Wehlage, 1989) has recently been identified as the potentially critical factor in the school retention and participation of at-risk students. Wehlage, discussing school dropouts in general and his own research on 14 schools that have been successful with at-risk students, noted that young people who feel they do not "fit in" at school, those who see themselves as outside the mainstream of the school culture in some way, and those who are socially isolated from other students and especially from school adults, are liable to disengage or drop out of school (Wehlage, 1989; Wehlage, Rutter, Smith, Lesko, & Fernandez, 1990). School membership, in this context, is "more than simple technical enrollment in the school. It means that students have established a social bond between themselves, the adults in the school, and the norms governing the institution" (Wehlage, 1989, p. 10). Membership is achieved through the reciprocal social relations between the student and others in the school.

Finn (1989), reviewing the research literature on school dropouts, noted the absence of attention to the *processes* leading to withdrawal from school, and presented a "participation-identification" model to account for these processes. Basically, in this model, students who identify with and have a sense of attachment to the school develop a sense of belongingness that promotes commitment to school goals and to their own engagement

and participation in school life. The social and interactional processes that lead (or fail to lead) to belonging and commitment among at-risk students have been targeted as crucial by other educational researchers as well (Farrell, 1990; Fine, 1990b; Kagan, 1990).

The need for belonging, social support, and acceptance takes on special prominence during adolescence, particularly during early adolescence when young people begin to consider seriously who they are and wish to be, with whom they belong, and where they intend to invest their energies and stake their futures. Because this period involves exploring aspects of personal identity separate from parents and family, youth come to rely more heavily than before on friendships and other non-kin relationships for support and direction (Berndt, 1982; Cauce, 1986; Epstein & Karweit, 1983). Over the course of development, the sense of personal acceptance and of having a rightful and valued place in different social contexts tends to stabilize and take on traitlike features (Sarason, Pierce, & Sarason, 1990). During early adolescence, however, a student's sense of personal "place" is still largely malleable and susceptible to influence in both positive and negative directions, a fact that makes student social integration in schools and classes at this age an especially important concern for educators.

The recent report of the Carnegie Council Task Force on the Education of Young Adolescents (1989) listed as its first basic recommendation the development of supportive school "communities for learning where stable, close, mutually respectful relationships with adults and peers are considered fundamental for intellectual development and personal growth" (p. 9). Unfortunately, many schools for adolescents are not structured to promote the sense of belonging to such a community (Eccles & Midgley, 1989; Fine, 1990b). Also unfortunately, even in generally supportive schools some individual students may feel socially marginal or excluded, for any number of reasons such as poor social skills or stigmatized status as a special education or ethnic minority student. Especially for young people who feel unsupported or "disinvited" by school adults and academically striving fellow students, the appeal of peer groups with antiacademic norms may be strong and may result in gradual disidentification with the school and disinvestment from academic or achievement goals. Whatever the causes of a low or absent sense of psychological membership in the school, the result of a failure to attain a full and legitimate sense of membership in the school as a social system may be lowered motivation, less active engagement, and ultimately diminished academic achievement or even school withdrawal.

Despite the convergence of several themes in recent developmental and educational psychology on the importance of belonging, very little empirical research has directly addressed this issue. An important constraint limiting research on belonging has been the absence of psychometrically sound measures of the construct.

The present paper has two major purposes. First, it reports the procedures used to develop a short scale measuring school belonging intended for use both as a research instrument in studies of social and contextual influences in education and also as a measure of individual differences in belonging/alienation potentially helpful for identifying students at risk. The scale was tested with students from three different schools before final scale reduction. Results of contrasted groups validation analyses that lend support to claims of PSSM construct validity are reported.

Second, correlational analyses investigating the relationships between psychological school membership and theoretically related criterion measures of motivation and academic achievement are also presented. This second set of analyses employed not only the samples used in scale development, but also a fourth new longitudinal sample.

METHOD

Initial scale development procedures. The first step in developing a measure of belonging or psychological school membership was to generate a pool of potential scale items reflecting issues raised by the research literature discussed above. In particular, items were included that involved not only perceived liking, personal acceptance, and inclusion (e.g., "Most teachers at this school are interested in me") but also respect and encouragement for participation (e.g., "People here notice when I'm good at something"), and involved the perceived response of other students (e.g., "Other students in this school take my opinions seriously") as well as of teachers and other school personnel. Items were also included that tapped students' sense of belonging or being a part of the school in general (e.g., "I feel like a real part of this school"). To avoid the development of a "response set" on the part of students, approximately one third of the items were phrased in a negative direction. All items were written in a 5-point Likert format, with choices ranging from *not at all true* (1) to *completely true* (5).

After eliminating ambiguous and redundant items, an initial pool of 42 items was shortened to form an intermediate 28-item "school membership" scale, which was administered in late spring, with several other measures, to three different samples of early adolescent students. Because this measure was intended to be applicable across diverse settings and populations, it was deemed important to test scale items with both urban and suburban samples and with students of several ethnic groups before final scale reduction. Subjects and procedures used in two cross-sectional scale-development studies, as well as in a longitudinal study employing the final scale, are described below.

Subjects and Procedures

Study 1. Participants in the first scale-development study consisted of all of the 6th-, 7th-, and 8th-grade students ($N = 454$) in a suburban middle school in the North-east. Study participants included 234 boys and 220 girls. Although students were not asked directly about their ethnic identification, the school population as a whole was predominantly White and middle class. The few ethnic minority students in the school were mostly Asian-Americans; a small number were African-American or Latin American in origin. The average age of students participating in this study was 12.65 years ($SD = .98$).

In Study 1, questionnaires containing the preliminary school membership scale and several other measures were completed in English class under the supervision of English teachers. Using procedures that concealed student identities from the researcher, teachers indicated each student's probable end-of-year English grade. Using high, medium, or low rating categories, teachers also rated each student's effort in English class and social standing with peers in the class. Finally, teachers indicated which student questionnaires had been completed by ethnic minority students ($n = 32$, 7% of sample) and by mainstreamed special education students ($n = 34$, 7% of the sample).

Study 2. The second scale-development study was conducted in two urban junior high schools in a medium-sized city in the same northeastern state as Study 1. The city's public school system enrolls approximately equal numbers of African-American, Hispanic, and White/Anglo students. The average per capita income of the city is in the lowest quartile for the state. At the time of this study, school assignment for junior high school students was based on area of residence within the city, resulting in a pattern of de facto ethnic segregation.

In School A, a randomly chosen half of the student body participated in the study by filling out a questionnaire. (The other students also completed a questionnaire, but for a different study.) One hundred and ninety-eight students completed the survey; 104 identified themselves as boys and 87 as girls (7 did not answer). In School A, the largest group of students identified themselves as African-American or Black ($n = 89$, 45% of the total); 33 (16%) identified themselves as Hispanic; 66 (33%) were White; 2 (1%) were Asian; and 9 did not indicate any ethnic identification. Student ages ranged from 12 to 16, averaging 13.80 years ($SD = 1.0$).

School B participants consisted of a randomly chosen half of the 7th-grade students in another junior high school in the same city ($N = 103$). The 54 boys and 43 girls (6 did not identify gender) completing the questionnaire in School B were primarily Hispanic ($n = 77$, 75% of total); 16 of these students completed a Spanish-language translation of the questionnaire. Additionally, 7 students (7%) identified themselves as Black or African-American, 16 students (15%) as White, and 1 (1%) as Asian. Two students did not indicate an ethnic identification. Student ages ranged from 12 to 15, with a mean age of 13.11 years ($SD = .89$).

In both schools, questionnaires were administered by classroom teachers; students completed the surveys during an extended homeroom period in School A and during a "special subjects" period in School B. In addition to the preliminary school membership scale, aspects of students' school motivation were also assessed. An expectancy-value approach to motivation was taken, that is, an approach based on the assumption that achievement motives are the joint function of expectations for success in a particular activity and valuing of success in that endeavor (Atkinson, 1964). Two short motivation-related measures were included: a 5-item scale concerning the students' expectations regarding success in schoolwork, and a 6-item scale concerning the intrinsic value, interest, and importance students attributed to academic schoolwork. Both Expectancy and Value scales were adapted from those used by Pintrich and DeGroot (1990) in studying academic motivation in science and English among junior high school students. Items from the Pintrich and DeGroot measures were rephrased to refer to school subjects or schoolwork in general rather than English or science specifically; a few items that could not be adapted successfully were dropped. Internal consistency reliability (Cronbach's alpha) for this sample was .74 for Expectancy and .81 for Value.

A Spanish version of the questionnaire, including the school membership scale, was also prepared for use in Study 2, in particular for those Hispanic students in School B who were not yet fully proficient in English. A psychology graduate student whose native language was Spanish made the initial translation from English into Spanish; this translation was then checked for clarity and idiomatic accuracy by two secondary school teachers, one a teacher of Spanish who had lived extensively in Puerto Rico (the birthplace of many School B students) and the other a School B teacher whose native language was Spanish.

Study 3. In October during the school year following initial scale development, a final shorter Psychological Sense of School Membership (PSSM) scale was administered as part of a larger project to all 5th-, 6th-, 7th-, and 8th-grade students ($N = 611$) then attending the suburban school that had participated in Study 1. Participants were 312 boys and 294 girls (5 did not answer); no information was collected regarding ethnicity. At the time of the scale administration, participating students ranged in age from 9 to 14 years (mean = 11.60 years, $SD = 1.18$). Official report card records from the first

quarter of the school year were obtained 5 weeks after the scale administration; final grade reports were also available at the end of the school year.

RESULTS

Scale reduction. Means and standard deviations for all school membership items were computed separately for student samples from Studies 1 and 2. Also, internal consistency reliability was calculated for the set of school membership items. Two criteria were used to eliminate items in the creation of a final, shorter scale. First, items were eliminated that substantially reduced internal consistency reliability in either the suburban or the urban samples. Second, items with low variability were removed. The 18 best items, summed and divided by 18, constitute the final Psychological Sense of School Membership (PSSM) scale, which has a possible scale range from 1.0 to 5.0. This final shorter scale was also used in Study 3. (See Table 1 for PSSM scale items.)

Table 1
The Psychological Sense of School Membership (PSSM) Scale

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1. I feel like a real part of (name of school).
 2. People here notice when I'm good at something.
 3. It is hard for people like me to be accepted here. (*reversed*)
 4. Other students in this school take my opinions seriously.
 5. Most teachers at (name of school) are interested in me.
 6. Sometimes I feel as if I don't belong here. (*reversed*)
 7. There's at least one teacher or other adult in this school I can talk to if I have a problem.
 8. People at this school are friendly to me.
 9. Teachers here are not interested in people like me. (*reversed*)
 10. I am included in lots of activities at (name of school).
 11. I am treated with as much respect as other students.
 12. I feel very different from most other students here. (*reversed*)
 13. I can really be myself at this school.
 14. The teachers here respect me.
 15. People here know I can do good work.
 16. I wish I were in a different school. (*reversed*)
 17. I feel proud of belonging to (name of school).
 18. Other students here like me the way I am.
-

Descriptive statistics. In Study 1, the mean PSSM score was 3.86, with a standard deviation of .72. In the same suburban school the following fall, Study 3 students obtained an average PSSM score of 3.84 ($SD = .72$), virtually the same as the previous year. (Although there was a substantial overlap in student participants from Study 1 to Study 3, unfortunately it was not possible to match students' responses from the two studies.) Study 2 urban students from Schools A and B had means of 3.11 ($SD = .70$) and 3.09 ($SD = .61$), respectively. The two urban groups were not significantly different, $t(299) = 0.21$, *ns*, from each other; these two city school populations were combined as a single urban sample for subsequent analyses.

Reliability. Internal consistency reliability for the PSSM was computed separately for suburban and urban samples. Using Cronbach's alpha as an indicator, PSSM scale reliability was .875 for suburban students in Study 1 and .884 the following year in

Study 3. When scale reliability was calculated separately for Study 3 5th-grade students, an age group that had not been included in the previous year's study, it was found to be .817. PSSM internal consistency reliability was .803 for urban students responding to the English version of the scale and .771 for the Spanish version. Although these reliabilities are somewhat lower than those typically found for standardized ability or achievement measures, they are quite comparable to the .79 reported by Helmstadter (1964) as a median reliability for published scales measuring attitudes, and thus indicate acceptable reliability for the PSSM.

Construct validity. Contrasted groups validation procedures were used as a means of establishing construct validity for the PSSM. Several predictions were made about likely group and subgroup differences in students' sense of belonging or psychological membership in school settings.

It was predicted that the suburban students, because they lived in a small relatively homogeneous community and in general came from more highly educated families, would report a stronger sense of school membership than would urban students. The prediction was confirmed: The Study 1 suburban average was significantly higher than that of the combined urban schools (3.86 vs. 3.10, $t[753] = 20.0, p < .001$). Viewed another way, in the suburban Study 1 sample only 59 students (13%) reported a psychological sense of school membership at the scale midpoint (3.00) or below, whereas 138 (45.4%) of the urban students did so.

Considering the suburban students alone, it was predicted that experience and familiarity with the town and school would promote a stronger sense of belonging or psychological membership. A two-way ANOVA that was used to investigate the effects of grade level (6th, 7th, or 8th grade) and of being a newcomer (students who had lived in the town 2 years or less versus longer residents) had a significant overall F ratio ($F = 2.64, p < .05$). A main effect was found for length of residence: Newcomers to the town scored significantly lower than longer residents ($F = 7.16, p < .01$). Grade level did not have a significant main effect on belonging, and there was no interaction between grade level and length of residence.

Additionally, students in certain social categories, specifically ethnic minority and mainstreamed special education students, were hypothesized to exhibit lower levels of psychological membership than their ethnic majority and non-special-education counterparts. Also, since some research literature suggests that at this age girls are more comfortable and involved in schools than boys (e.g., Berndt & Miller, 1990), it was hypothesized that boys' scores on PSSM would be lower than those of girls. A three-way (Minority Status \times Special Education Status \times Gender) ANOVA found a significant overall F ratio ($F = 5.41, p < .001$). This result was due to a main effect for sex differences ($F = 12.17, p < .001$) in the predicted direction. Neither minority nor special education status significantly influenced the sense of belonging in this school, and there were no significant interaction effects.

Finally, as a direct assessment of construct validity, it was hypothesized that students rated by their English teachers as having different levels of social standing with peers would also exhibit significantly different levels of self-reported psychological membership. A one-way analysis of variance confirmed this hypothesis: Students rated as having high, medium, or low social standing were different in their PSSM scores (4.23, 3.87, and 3.32, respectively, $F[2, 451] = 26.59, < .001$); post hoc Scheffé tests found each of these scores to be significantly different from the others.

A similar set of predictions was made about results among the urban students. Several expected group differences, however, did not appear. A newcomer (2 years or less of city residence versus longer residence) by grade level (7th, 8th, or 9th grade) analysis of variance was not significant for the urban sample. A sex by ethnicity (Black, White/Anglo, or Hispanic) ANOVA exhibited a trend toward significance ($F = 2.34$, $p = .073$), a result attributable to significant sex differences reflecting girls' higher levels of belonging (3.20 vs. 3.02, $F = 4.80$, $p < .05$). No ethnic differences appeared in psychological sense of membership when the two urban schools were considered together.

On the other hand, it seemed probable that the subjective sense of belonging as opposed to feeling like an outsider might have more to do with representation within the school than with ethnicity per se. This proved to be the case: Status as a member of the majority ethnic group within the school was associated with significantly higher levels of belonging. When School B was considered by itself, Hispanic students (75% of the student body) expressed higher levels of school membership than did non-Hispanic students (3.16 vs. 2.89, $t[99] = 2.01$, $p < .05$). In School A, where no single ethnic group had a clear numerical majority, there were no significant differences between ethnic groups in terms of school membership.

One additional aspect of the urban schools provided significant evidence of PSSM construct validity. The city in which these two schools are located had announced system-wide school restructuring for the next year, including a controlled citywide choice plan and a new middle school structure (Grades 6 through 8) to replace the current junior highs. Although the current 8th- and 9th-grade students would thus both be moving on to high school, for the first time the 7th-grade students could choose which of the newly restructured schools they wished to attend the following year. At the time of the study, students and their families had indicated their choices. Predictably, students who had chosen to stay in their current school ($n = 91$) reported a significantly higher average sense of school membership than did those ($n = 79$) who had chosen an alternative school (3.17 vs. 2.91, $t[168] = 2.52$, $p < .05$).

To summarize, although some predicted group differences in psychological membership did not appear, results in general support scale validity. Grade level and ethnicity, for example, were not significantly associated with belongingness. Being a long-time resident was positively associated with psychological membership for the suburban but not the urban students, whereas being a member of the ethnic majority group in the school predicted higher psychological membership among urban students but not among suburban students. In both settings, girls scored higher than boys in sense of belonging. Most importantly, PSSM was significantly different for the subgroups of students most logically differentiated in terms of subjective belonging: Suburban students rated as having low social standing had significantly lower PSSM scores than did their peers with higher ratings, and urban students who had chosen to transfer to a different school the following year reported significantly lower school belonging than did their peers who had opted to stay in the same school.

Educational correlates of psychological membership in school. In order to examine the association between school membership and educational outcomes, criterion measures were included in both scale development studies as well as in Study 3, the longitudinal project. On the basis of theory discussed above (especially Finn, 1989), belonging or sense of psychological membership was hypothesized to influence motivation, and through motivation to influence effort, participation, and subsequent achievement.

In Study 1, the English teachers who had administered the questionnaires also indicated probable year-end English grades and gave ratings for students' level of effort in English class. Although these were not complete measures of either general school motivation or school achievement, they can be viewed as reasonable approximations. Further, they have the advantage of being "objective" rather than self-report measures. The correlation between PSSM and English grade was $.36$ ($p < .001$). A one-way analysis of variance found both overall, $F(2, 452) = 23.67$, $p < .001$, and post hoc differences (Scheffé test, $p < .05$) in PSSM among students rated as exhibiting high (4.04 , $SD = .65$), medium (3.69 , $SD = .72$), and low (3.30 , $SD = .73$) effort in English class.

For the urban students in Study 2, the psychological sense of school membership was significantly correlated with both self-report motivation measures, Expectancies for school success ($r = .42$, $p < .001$) and the subjective Value of schoolwork and school achievement ($r = .55$, $p < .001$). (See Goodenow, 1992b, for a more detailed discussion of these results.)

In Study 3, report-card records, ID-coded to match student questionnaires, were made available at the end of the first quarter and at the end of the school year. At the end of the first term, students' PSSM Scores were found to be significantly correlated with the average "effort" rating given by teachers in the five major academic courses ($r = .25$, $p < .001$), and with absences ($r = -.18$, $p < .001$) and tardiness ($r = -.14$, $p < .01$) for the quarter. Although these correlations are quite small, with PSSM accounting for only approximately 6%, 3%, and 2% of the variance in effort, absences, and tardiness, respectively, the results do suggest that the sense of school belonging may make some contribution to these rough indices of behavioral engagement in school. Additionally, PSSM was a significant predictor of first-quarter grade point average in academic courses ($r = .27$, $p < .001$) and of the grade point average for the year ($r = .33$, $p < .001$).

Overall, then, the correlations obtained in these three studies suggest that school belongingness or psychological membership is only weakly associated with measures of effort or behavior; that it is somewhat more strongly related to academic achievement as measured by class grades (with variance accounted for ranging from 7% to 13%); and that it makes a substantial contribution to variance in motivation-related measures ($r^2 = .18$ and $.30$ for Expectancy and Value, respectively). These results, as well as those from a parallel classroom-focused study (Goodenow, in press), suggest the possibility that the psychological sense of membership may affect school behavior and academic achievement indirectly through its influence on motivation.

DISCUSSION

The 18-item Psychological Sense of School Membership scale discussed here was developed through testing with both urban and suburban students. Internal consistency reliability was acceptable for an attitude scale, ranging from $.77$ to $.88$ for different samples. Contrasted groups validation procedures found, as predicted, that girls exhibited a higher sense of membership or belonging than did boys.

The studies discussed in this paper focus on a construct of increasing concern to educators, psychologists, and researchers – belongingness or the psychological sense of membership in school. Psychological membership is seen here neither as a purely personal intrapsychic phenomenon nor as entirely the function of the school environment, but rather as arising from the person *within* a particular school environment. Whereas interest has grown rapidly in the effects of the proximate social context of the school

on individual students' motivation, behavior, and learning, research has been hampered to date by the absence of strong measures.

Taken together, the studies presented here support claims to reliability and validity for the PSSM scale as a measure of perceived belonging. The scale has good internal consistency reliability across samples, with working-class urban as well as middle-class suburban students, with students as young as 5th grade as well as those nearing high school, and in Spanish translation as well as in the original English version. Furthermore, it has been shown to discriminate between groups predicted to be different in terms of the sense of belonging in school. Because psychological membership is a construct at the intersection between individual psychology and social context, the PSSM scale may be a useful instrument for research and for planning interventions at both the individual and the organizational level.

At the level of the individual student, psychological membership is influenced by both personal traits and situational and contextual factors. That is, a particular young person may be generally predisposed to view others in most situations as accepting, friendly, and supportive or as rejecting and cold. On the other hand, such a student would probably also report significant variations across situations and settings, feeling more accepted and valued in one context but less so in another. Certain situations, such as being the newcomer in an otherwise established group or having a strikingly different background and set of personal characteristics than others in the school, are likely to result in a lowered sense of belonging for most individuals.

Regardless of the factors contributing to a sense of belonging, results presented here suggest that psychological membership itself may be an important contributor to school motivation, effort, participation, and subsequent achievement. Although the exact psychological mechanism at work cannot be resolved by the current studies, similar research at the classroom level (e.g., Goodenow, *in press*) suggests that the sense of belonging increases both expectations of success (by bolstering the belief that one has not only the individual skills but also the available social resources to overcome difficulties and succeed) and students' belief in the value of their academic work. Psychological membership, then, may exert more influence through its effects of motivation than on achievement directly.

From a more sociological perspective, discussions of group development suggest that issues of inclusion and belonging predominate in early stages, and that until members resolve where they stand in the particular social setting they have difficulty in attending to the official tasks at hand (see Schumuck & Schumuck, 1992, for a review of this literature). For early and mid-adolescents in particular, the need to belong and to have a legitimate and valued membership in a setting may take precedence over virtually all other concerns.

Although belonging or its absence may influence motivation and participation for most adolescents, its effects are likely to be especially crucial at the low end of the spectrum and relatively less important at the high end. That is, although increments in ratings of psychological school membership may have little or no effect on young people who are basically sure that others in school value and support them (it might even be argued that extremely high levels of such perceived social acceptance might lead to complacency and diminished striving), it is possible that some modest but critical level must be reached before students will be willing to expend energy and risk failure by engaging in school. Finn (1989), in fact, argued that belongingness might be more significant as

a dichotomous variable than as a continuous one. One potential “tipping point” is the PSSM scale midpoint of 3.0, below which students were more negative than positive in their responses regarding the school. It will be important in future research to conduct more extensive investigations of the effects of psychological membership with students whose commitment to education and whose social intergration in the school setting place them at risk.

Interventions aimed at increasing adolescent students' sense of belonging in school can be focused at both the individual and the organizational level. Individually, training in social skills may be especially useful in cases in which students' perceived low level of psychological membership is the real result of inability to get along with others or to participate with others in a constructive and socially appropriate way. In other instances, targeting individual students for increased supportive contact with staff and faculty and for special efforts to increase inclusion in school activities and groups may be more useful. School and classroom level changes are also likely to affect students' sense of belonging; possibilities include the increased use of cooperative learning tasks, smaller interdisciplinary teaching teams, peer tutoring, and school projects and activities calling on the participation of many students working together.

Recognition of the importance of psychological membership has been implicit in much recent educational and psychological literature concerning school “communities” and the importance of the social context in learning, but research has been hampered by the lack of measures directly focused on this intersection between the personal and the social. The Psychological Sense of School Membership scale investigated in the three studies presented here may be a valuable tool both for identifying adolescent students at risk for disengaging from participation in school and for conducting research on social and contextual influences in education.

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