

# Teacher perceptions of middle school students' sense of belonging in Southeast Texas

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#### **Abstract**

An extensive review of the literature reveals support for the importance of sense of belonging in student achievement. There is also extensive evidence regarding variation of sense of belonging among minority groups and the important role of teachers in creating a sense of belonging for students. The purpose of this study is to examine students' sense of belonging as compared to the teachers' perceptions of students' sense of belonging in middle schools of Southeast Texas. Conclusions will be presented concerning the gap between the teachers' perceptions of how students feel about themselves in school and what the students actually reported. An analysis of variance revealed that there is a significant difference between the students' sense of belonging and the teachers' perceptions of the students' sense of belonging.

## A Historical Basis of Belonging

According to Jefferson (1801), American public schools were founded so that children would posses the ideals of community that underlie democratic self-governance. An educated citizenry was thought to be the only hope for a fledging democracy. These same sentiments were later reiterated by Dewey (1924), who delineated two primary purposes for schools: to serve the larger community by producing responsible, civic-minded citizens and to help children develop the ethical, social, and moral reasoning skills to function as responsible members of those communities. Schools were to accomplish these purposes by becoming authentic communities in which students had experiences of self-governance and moral decision-making. Students can only be mentored through the development of caring relationships with adults and other students in the school, the basis of which is a sense of belonging.

Providing students with a sense of belonging is becoming increasingly critical for schools as well as the rest of society. Alexis de Tocqueville (1876/2004) made the point that for all of its virtues, one of democracy's vices is a tendency to go to extremes. These extremes produce imbalances in individuals and organizations. In Democracy in America, Tocqueville (1876/2004) said that relationships between self and others would become more difficult to establish and maintain. Democracy undermines the capacity to develop profound connections between one's self and others (Hoyle & Slater, 2001). Tocqueville (1876/2004) was convinced that over time in a democracy, increased opportunity for self-reliance and independence would exist. Eventually this would result in a hyper-individualism that did not allow for the social connections once established through the democracy. Tocqueville (1876/2004) argued that Americans would allow the government more and more control of their lives as they themselves became more enraptured with the maintenance of the self.

According to Hoyle and Slater (2001), the United States now ranks close to the bottom of highly developed countries in voter turnout. In the year 2000, less than 50% of the registered voters went to the polls in the presidential election. However this number did jump in 2004 to 60.3% (United States Election Project, 2005) Participation in labor unions dropped from 32% in 1953 to 12.3% in 2004 (Bureau of Labor Statistics, 2005). Significant drops in memberships in the Boy Scouts, Red Cross, Elks, Shriners, and Jaycees have occurred over the last 40 years (Hoyle & Slater, 2001). These all represent social institutions where individuals meet as a group for interaction and social development. Therefore, perhaps Tocqueville is right in his estimation of the growth of hyper-individualism. Being that schools are a reflection of society, it may seem plausible to believe that schools would experience a drop in students feeling connected to schools. That is to say, students may become more interested in themselves rather than looking to the good of the organization as a whole. It seems plausible that, like many other social organizations, it is possible for different schools to have different levels of social connectedness (Hoyle & Slater, 2001).

Connell and Wellborn (1991) found that a sense of relatedness to a school contributes to students adopting goals defined by the social group. In fact, Connell and Wellborn (1991) purport that a lack of relatedness or a feeling of disaffection is characterized by a rejection of goals.

### What is Belonging?

According to Osterman (2000), a community exists when its members experience a sense of belonging or personal relatedness. Community members feel that the group is important to them and that they are important to the group. Members of the group feel that the community will satisfy their needs; they will be cared for and supported. Further, the community has a shared and emotional sense of belonging. A sense of belonging is considered one of the five major needs in Maslow's (1962) hierarchy of needs. Maslow actually defines this part of his hierarchy as love and belonging. Humans have a desire to belong to groups. This can include but is not limited to clubs, work groups, religious groups, families, and gangs. We need to feel loved by others, to be accepted by others. According to Maslow (1962), until this need is satisfied, no true learning will ever occur. Until a school is able to establish in its students a sense of belonging, community, and a sense of place, maximization of the learning potential of students will be a continuous struggle.

Students desire more than academic instruction from their teachers. Students are longing for a sense of community and bonding in their classroom (Phelan, Locke-Davison, & Thanh, 1992). Teachers in schools where students report a strong sense of belonging tend to express greater warmth and supportiveness toward students and spend much more time listening to and talking with students about personal and social issues (Solomon, Battstich, Kim, & Watson, 1997). These relationships help children derive a sense of belonging and engage in meaningful academic work (Pianta & Walsh, 1996). Caparos, Cetera, Ogden and Rossett (2002) further supported these concepts when they conducted a study with elementary age children to discern the relationship between academics and social skills. The study focused on the teaching of social skills along with a problem solving approach in the classroom that incorporated cooperative learning. The authors' post intervention data indicated academic growth, awareness of appropriate social skills, and a stronger sense of belonging. Meier (1992) cites personalized, caring relationships with teachers as a prerequisite for high school-level reform. When students are asked about teacher qualities that are most influential for students' success, teacher concern and support, not competency and proficiency, have been cited consistently for 30 years (Rogers, 1994; Witty, 1967).

Students experience teacher support (Osterman, 2000). Altenbaugh, Engel and Martin (1995) researched the concept of 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 were 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). Ladd (1990) reported 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 preparedness.

Using path analysis, Connell, Halpren-Felsher, Clifford, Crichlow, and Usinger (1995) found that while engagement was a predictor of academic performance, it also directly influenced the level of perceived support from adults. The researchers summarized that students receive support depending upon their level of engagement. Those who were highly engaged received more support than those who did not. These studies indicate that teachers' perceptions of student ability, engagement, and academic performance influence the quality of the relationships with students and their ability to feel a sense of belonging (Osterman, 2000). Each of these researchers (Altenbaugh et al., 1995; Connell et al., 1995; Ladd, 1990) demonstrates how teachers can inadvertently undermine students' sense of belonging in the classroom. However, the reverse has also been found to be true.

Battistich, Solomon, Kim, Watson, and Schaps (1995) conducted a study of school communities and their effect on sense of belonging. In particular, they focused on students' sense of school community, poverty level, and students' attitudes, motives, beliefs, and behavior among a diverse sample of elementary schools. Their findings indicate that students who experience the school as a caring and supportive environment, in which they actively participate and have opportunities to influence, will feel attached to the school community and will, therefore, come to accept its norms and values.

## Belonging and Race

Goodenow and Grady (1993) took membership of a minority group into consideration when studying belonging and friends' values as they relate to academic motivation in urban students. The authors conducted a study in a mid-sized northeastern city made up of mostly working-class Hispanic and African Americans. The study was conducted in two junior high schools (Grades 7-9) in the city. Students were assessed on the Psychological Sense of School Membership Scale (Goodenow & Grady, 1993) to measure how they felt about school. In addition, students were measured on their expectancy of motivation

through the Motivational Strategies for Learning Questionnaire that measures what motivates students toward academics (Pintrich & DeGroot, 1990).

Goodenow and Grady (1993) report that many urban adolescents, in this case minority students, have a poor sense of school belonging and school motivation that ranks lower than their Caucasian counterparts. Second, students, in general, who do have a strong sense of belonging are more likely to be academically motivated and engaged in learning than those who have a weak sense of belonging. Goodenow and Grady (1993) found in their study of two urban junior highs, that minority students more frequently expressed relatively weak beliefs that they were a part of the school, were respected by teachers and schoolmates, were valued by friends, or that being in school was worthwhile.

While feelings of lack of belonging and its associated behaviors are pressed by white and minority students alike, some researchers have suggested that this problem is even more common among African-American students (Voelkl, 1995). Arhar and Kromrey (1993) studied at-risk middle school students and their sense of belonging in middle school settings. Results of the study indicated that middle school students, especially those who are economically disadvantaged, benefited from teaming concepts in school in that those students experienced a greater sense of belonging when they were a part of a group. Steele (1992) suggested that the lack of belonging among African-American students develops from a psychic alienation or defense which serves to prevent academic achievement outcomes from affecting their self-view. This imperviousness to poor academic performance may possibly be accomplished by de-emphasizing school achievement as a basis of self-esteem and giving preference to peergroup relations. That is to say, the students go where they feel good about themselves. Goodenow's study of middle school students (1993a) lent support to this suggestion by claiming that those stigmatized minority students may feel unsupported and discouraged by school staff and academically striving students in school. Consequently, the appeal of those peer groups with nonacademic norms may be strong and result in a loss of belonging with the school and a disinvestment from academic and achievement goals. African-American students have been described as feeling hostility toward and distrusting of school. The African-American students may be skeptical about their ability to succeed in school, given that they believe the system to be unfair. The result is anger, resistance, and disaffection (Taylor, 1991).

### Teachers Ability to Perceive

There is very little known about teachers' ability to perceive students' sense of belonging. However, other research has been conducted to study a teacher's ability to perceive other issues related to their students. For example, one study set out to measure teachers' ability to perceive student learning preferences. According to the results teachers were not able to correctly guess their students' learning style at a rate much higher than blind guessing. The teachers studied correctly assessed their students learning styles on average, 30.3% of the time whereas random guessing would have been 25% (Holt, Denny, Capps, & DeVore, 2005). Another study by Daly, Jacob, King, and Cheramie (1984) found that teachers did not do well at predicting the rewards or incentives for which students will work. When it comes to some academic issues, however, teachers have been reported to do quite well. Bates and Nettlebeck (2001) studied teachers' ability to predict reading achievement in early elementary students and found correlations of .77 and .62 for reading accuracy and comprehension, respectively.

The literature suggests that many students have varying degrees of sense of belonging in schools. This sense of belonging may fluctuate depending upon the age, ethnicity, quality of school, socioeconomic status, and personal experiences. These factors may combine with one another to, in effect, lower a student's sense of belonging below that of his/her classmates. In regard to a teacher's ability to predict anything about his/her students, research is mixed. There are some cases in which some teachers can predict attributes about their students and there are some cases where they cannot. For this research study, one may ask whether or not the teachers of these students truly know how they feel about school. In addition, are there variances in sense of belonging for students versus that perceived by their teachers depending upon the performance of the school or other factors such as socioeconomic status or ethnicity. More exactly is there a relationship between the students' self reported sense of belonging and the teachers' perceptions of belonging in selected middle schools?

### **Method**

This study was designed to determine students' sense of belonging as perceived by students in junior high schools in a southern state. Secondly, teachers' perceptions of students' sense of belonging was measured using a modified version of the same instrument used for the students. Finally, this information was compared to the demographics and academic performance of the schools as identified through the Academic Excellence Indicator System

(AEIS). AEIS is used to publish information about schools in Texas in regard to academics, populations, finances, and personnel. It allows anybody to seek out information about how well a school is performing in regard to state standardized test. This information is further broken down by various identifiers such as grade level, ethnicity, and socioeconomic status. All data reported is confidential. No student names appear.

## **Population**

The population for this study was 6,820 students who attended middle schools, grades 6-8, in a southern state along with 1,500 teachers in the respective buildings. Schools for the study were identified through random sampling from the AEIS. A sample of 2,000 students and 700 teachers were randomly selected from the twenty schools. Ten schools were randomly chosen from those campuses that are considered exemplary or recognized on the AEIS. Ten schools were randomly chosen from those that are considered acceptable or low-performing on the AEIS. A school is considered exemplary if at least 90% of the tested students pass every subject test. A school is considered recognized if at least 70% of students tested pass every subject. Academically acceptable in most cases means that at least 50% of the students tested passed each subject test. The exception to this is mathematics, which requires 35% passing and science which requires 25% passing. Unacceptable would be anything that falls below the academically acceptable cutoff (Texas Education Agency, 2004).

#### Instrumentation

Students and teachers who were selected were asked to fill out the Psychological Sense of School Membership instrument. The instrument, developed by Carol Goodenow (1993b), was designed to measure the level of belonging that a student feels at school. The survey consists of 18 questions that are answered on a 5-point Likert scale, with choices including: not at all true 1), not very true 2), neither not at all true nor completely true 3), somewhat true 4), or completely true 5); these were then averaged to produce a scaled score mean. The Psychological Sense of School Membership includes items that involve not only perceived liking, personal acceptance, and inclusions but also respect and encouragement for participation. The student version of this instrument only asked for students to answer the questions that were already provided on the instrument. The teacher version of this instrument was slightly altered, with the permission of the survey creator, in order to gain an understanding of the teachers' perceptions of the students' sense of belonging.

The responses were changed so that, for example, teachers would respond to a statement such as "Students at (blank) middle school feel like they are a part of it." As opposed to the student response which said, "I feel like I am a part of (blank) middle school." The changes made in most case were changes of first person to third person. Internal consistency reliability (Cronbach's alpha) for the sample was .803.

#### **Procedures**

Review of information in the AEIS allowed the researcher to determine which middle school campuses in the area of study had low-performing, acceptable, recognized, and exemplary ratings. Once a list of all these schools was compiled, further analysis was conducted to select 20 matched schools to participate in the study. Schools were selected from districts where enough middle schools were located that two could be chosen for the study. Because these schools were matched within a district, schools had similar distribution of funds. Schools were also matched based upon ethnic breakdown. A school that had a low-performing or acceptable rating on the AEIS was matched with a school within the same district that had a recognized or exemplary rating. This was done because of the limited number of unacceptable schools. There was a risk of not getting enough sample schools to soundly represent a population, therefore the schools were condensed from four categories to two; one category being exemplary/recognized, the other being acceptable/unacceptable. Careful consideration was given to the selection of schools to ensure that both schools were as equal as possible in all categories. Schools tended to fall within a few percentage points of each other in terms of the ethnic breakdown. A cover letter was written to the parents describing the purpose of the study and assuring that all information would be kept anonymous. Each survey sent out to a child had an agreement to participate form that required the student's signature and the parent's signature. Any survey that was received by the researcher that was not accompanied by the parent permission form was not used in the study. This information was conveyed to the parents as well. All teachers received a letter explaining that in filling out the survey, they are giving permission for their information to be used in the study.

### **Results**

The primary purpose of this study was to investigate the relationship between students' sense of belonging and teachers' perception of the students' sense of belonging as reported on the Psychological Sense of School Membership (PSSM).

Table 1 shows an analysis of variance with sense of belonging as a dependent variable. In this analysis, group and performance were fixed factors. The covariates for this analysis were socioeconomic status, ethnicity, performance of school computed by ethnicity, performance of the school computed by socioeconomic status, and performance of the school computed by the group. The results and analysis of the study indicate that a students' sense of belonging does not have a relationship to the performance of the school as an independent factor.

According to the analysis, the percentage of minority students in the selected middle schools is a significant factor in the reported students' sense of belonging. In addition, the percentage of low-socioeconomic students is a significant factor for students' sense of belonging as reported on the PSSM. There is a significant difference for sense of belonging for the performance of the school nested within ethnicity, performance of the school nested within socioeconomic status, socioeconomic status on its own, ethnicity on it own, the group reporting, and the performance of the school nested within the group. Schools that are low-performing are in performance level 1. Schools that are high-performing are in performance level 2. These scores are further divided by students, indicated by group 1, and teachers, indicated by group 2.

Table 1 indicates a significant difference in the students' reported sense of belonging and the teachers' perception of students' sense of belonging as recorded on the PSSM. The computed value of performance multiplied by ethnicity and the computed value of performance multiplied by socioeconomic status were analyzed as covariates against the dependent value of belonging. These were both significant factors for sense of belonging indicating that high-performing schools and low-performing schools have a different relationship between the percentage of minority students and their reported sense of belonging. There is also a difference in the relationship between the percentage of students of low socioeconomic status and their sense of belonging.

Table 2 further supports the data analysis of the difference between students' reported sense of belonging and the teachers' perception of sense of belonging. Table 2 describes the mean score for students and teachers. Scores are first divided by the performance of the school. In addition to reporting the mean student and teacher scores as reported on PSSM, a standard deviation was calculated along with a total number of respondents. These scores indicate a

Analysis of Variance for Students' Sense of Belonging Indicating Sum of Squares, Degree of Freedom, Mean Square, F Ratio and Significance Level for Data as Reported on PSSM by Selected Middle Schools

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	67.181ª	7	9.597	49.097	.000
Intercept	2652.315	1	6252.315	13568.518	.000
PERXETHN	5.892	1	5.892	30.143	*000
PERXSES	5.381	1	5.381	27.527	*000
SES	1.217	1	1.217	6.226	.013*
<b>ETHNICITY</b>	1.560	1	1.560	7.982	.005*
PERFORMANCE	.026	1	.026	.133	.715
GROUP	37.632	1	37.632	192.513	*000
PERFORMANCI	E* 2.289	1	2.289	11.712	.001*
GROUP					
Error	257.246	13	16 .195		
Total 14	4149.999	13	24		
Corrected Total	324.427	13	23		

Note: This table shows an analysis of variance with sense of belonging as a dependent variable. In this analysis, group (GROUP) and performance (PERFORMANCE) were fixed factors. The covariates for this analysis were socioeconomic status (SES), ethnicity (ETHNICITY), performance of school computed by ethnicity (PERXETHN), performance of the school computed by socioeconomic status (PERXSES), and performance of the school computed by the group (PERFORMANCE\*GROUP). It is included as part of an original study to indicate the significant difference between groups

 $^{a}$ ·R squared = .207 (Adjusted R Squared = .203), \*p<.05

larger discrepancy between students and teachers for low-performing schools than for high performing schools.

Table 3 indicates the observed power of each unit of analysis as it relates to the dependent variable of sense of belonging. Observed power must be at a level of at least .80 in order to be considered significant. This table provides another analysis of the relationship between a sense of belonging and other factors recorded in this study. It is simply included to provide a different way of looking

Table 2

Mean Score of Students' Sense of Belonging and Teachers' Perception of Students' Sense of Belonging Categorized by Low and High Performing Schools as Reported on PSSM by Selected Middle School Students and Teachers

Performance	Group	M	SD	N
1	1	3.0054	.52542	448
	2	3.4686	.35392	190
	Total	3.1433	.52579	638
2	1	3.2182	.41087	448
	2	3.4926	.34583	238
	Total	3.3134	.45072	686
Total	1	3.1118	.50985	896
	2	3.4820	.34924	428
	Total	3.2315	.49520	1324

at the factors that may be related to a student's sense of belonging. According to Table 3, the group a person is in has a significant impact on how he/she rates students' sense of belonging.

There is a different relationship between the percentage of minority students and the reported sense of belonging depending on whether the school is high performing or low performing. In addition, the low-socioeconomic students reported sense of belonging has a different interaction with performance than does that of students who are not of low-socioeconomic status. Minority status and socioeconomic status do have a significant interaction with reported sense of belonging as well.

Table 4 describes the significant difference between the students' reported sense of belonging and the teachers' perception of the students' sense of belonging at selected middle schools. Table 4 is provided to indicate the mean score on the PSSM, standard deviation and a confidence interval for the students, indicated as Group 1, and the teachers, indicated as Group 2.

The mean score on the PSSM for students, Group 1, versus the teachers' mean score, Group 2, indicates a difference in sense of belonging. The students,

Test of Between-Subjects Effects Indicating the Observed Power of Each Unit of Analysis as They Relate to Sense of Belonging as Reported on PSSM at Selected Middle Schools

Source	Noncent Parameter.	Observed Power
Corrected Model	343.679	1.000
Intercept	13568.518	1.000
PERXETHNICITY	30.143	1.000*
ETHNICITY	7.982	.806*
PERXSES	27.527	.999*
SES	6.226	.703*
PERFORMANCE	.133	.065
GROUP	192.513	1.000*
PERFORMANCE* GROUP	11.712	.928*

*Note*: <sup>a</sup>Computed using alpha = .05; *R* squared = .207 (Adjusted *R* Squared = .203); \*power > .80.

Table 4

Mean Score, Standard Error and Confidence Interval of Students' Sense of Belonging as Compared to Teachers' Perception of Sense of Belonging as reported on PSSM by Selected Middle Schools

Group	Mean	Standard Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	3.115 <sup>a</sup>	.015	3.086	3.144
2	$3.478^{a}$	.022	3.436	3.521

*Note*: <sup>a</sup>Variates appearing in the model are evaluated at the following values: PERXETHN = .8077, ETHNIC = .5555, PERXSES = .7665, SES = .5240

Table 5

Sense of Belonging Reported by Students and Perceptions of Belonging as Reported by Teachers Nested within Low- and High-Performing Schools as Reported on the PSSM by Selected Middle Schools

Performance	Group	Mean	Std. Error	95 % Confidence Interval	
	•			Lower	Upper
				Bound	Bound
1	1	3.060a	.034	2.993	3.127
	2	3.512a	.042	3.430	3.595
2	1	$3.174^{a}$	.032	3.107	3.234
	2	3.444ª	.039	3.368	3.520

*Note:* aVariates appearing in the model are evaluated at the following values: PERXETHN = .8077, ETHNIC = .5555, PERXSES = .7665, SES = .5240

as a group, report their sense of belonging at a much lower level, than the teachers who work with them. This table also shows that for the 95% confidence interval, the upper bound of the students' reported sense of belonging does not overlap with the lower bound of teachers' reported perception of students' sense of belonging.

Table 5 provides a mean score of students' sense of belonging as reported on the PSSM and teachers' perception of students' sense of belonging. The scores are divided into two categories of low-performing schools, indicated as performance 1, and high-performing schools, indicated as performance 2. In addition, the standard error is given for all categories. Table 5 indicates that a statistically significant larger discrepancy exists between the teachers' perception of sense of belonging and the students' reported sense of belonging at a low performing school than occurs at a higher performing school.

## **Discussion and Summary**

The purpose of this study was to examine the relationship between students' sense of belonging and the teachers' perception of the students' sense of belonging.

The data analysis revealed that teachers believe students have a stronger sense of belonging than they actually do. This is true of all schools; however, it is important to take into account that the discrepancy between the teachers' perception and the students' self-report is greater in low performing schools than in high performing schools. This may suggest that teachers in lowperforming schools may understand less about how students feel about their school than do teachers in high-performing schools. Ryan and Powelson (1991) suggest that children have become isolated from adults and, to a large degree, from children of other ages, creating youth and school cultures that are out of touch with the work and social worlds of adults. The evidence gathered in this study seems to partially lend support to the argument of Ryan and Powelson (1991) in that students at low performing schools report a lower sense of belonging than that of their counterparts at high performing schools. Also, due to the data reported in this study, it seems that teachers and students are 'disconnected' in terms of how the students feel about themselves. In addition, the hypothesis that Tocqueville (1966) made in regard to people in the United States becoming more isolated seems to be coming to fruition in some public schools.

Many educators and the public in general suggest that children are our future and training and education is critical to the development of our nation. Therefore, if the sense of belonging is weak at a young age, then the goals of creating an educated citizenry may very well be in jeopardy. The question must be raised; if a child does not feel connected to something at such a young age, how will they ever feel connected to and make decisions for our nation?

The data also reveal some important implications for minority students. It seems that students of minority descent that go to a low-performing school will tend to have an even lower sense of belonging than their counterparts at high performing schools. Also, the same can be said for students from low-socioeconomic backgrounds. Schools that have large numbers of low-income students and are low-performing tend to have lower measures of sense of belonging than schools with large numbers of low-income students from higher performing schools. In other words, if a minority student comes from a low-income background and attends a low-performing school, he/she will probably not have as strong of sense of belonging as if he/she were attending a better school. This supports the work of Goodenow and Grady (1993) who found that students who do have a strong sense of belonging are much more likely to be academically motivated and engaged in learning than those students who have a weak sense of belonging.

Administrators may want to gauge the level of belonging students may or may not have especially if their school is low performing. It seems reasonable that students may do better if the staff and faculty of the school are doing things to make the students feel a part of the campus. There are a number of actions school faculties can take to assist in this. Battsistich et al. (1995) maintained that discussion in a supportive classroom environment where students have the opportunity to express personal opinions give children the opportunity to discover that others care about them. Gamoran and Nystrand (1992, p 40) suggest that "regardless of the activity in which students participate, discourse is a critical indicator of the extent to which school offers membership."

Larrivee (2000) suggests that schools must be caring communities where caring is a goal in itself, not a means to an end. Furthermore, the author suggests that schools function as a surrogate family, based on the underlying assumption that students today have fragmented home lives and require greater nurturance in the school. In addition, a fundamental need common to all models for healthy psychological development is the need to belong. Students need to develop a sense of belonging as a member of their school community (Larrivee, 2000).

### Limitations of the Research

The study of belonging is not a new practice. A number of studies have been conducted using the PSSM created by Goodenow (1993b). Most of the studies conducted using this instrument or a variation of the instrument are 3 years old or older. The survey itself is 10 years old. Therefore, although the validity and reliability of the instrument were established, those studies may need to be repeated.

One of the findings of this research study revealed that the percentage of minority students has a significant interaction with the students' sense of belonging. However, this was discovered through an analysis of covariance. When an attempt was made to glean data from the analysis of covariance to complete a regression analysis, the significance was lost. This was due to the fact that performance interacted with the number of minorities and this combined factor, along with percentage of minority students itself, were covariates in the original analysis. The same problem arose when trying to complete a linear regression between the percentage of low socioeconomic students and their reported sense of belonging. The design of the research study did not allow for students to report their minority status when completing the survey. The percentage of minority students was taken from the school data as a whole, while the sense of belonging was reported individually by students.

Another limitation of this line of research is the teachers' perception. Even though essentially the same survey was used for both teachers and students, there is bound to be some error in teachers recording how they think students feel. This may or may not be accurate.

Some students may have had difficulty in completing the survey. Two factors could have contributed to this problem. One, the vocabulary in the PSSM may have created some problems for students in trying to determine what the statement was saying. In addition, Likert-type scale may have created some problems. If students are not familiar with Likert-type scales or if students have a difficult time discerning between the point system, there could have been an inaccurate reporting of their scores.

### Recommendations for Future Research

Future research needs to be conducted in order to better understand the PSSM. The PSSM gives an overall score of sense of belonging. A factor analysis of this survey may provide more in-depth understanding of how students feel about going to school. A researcher may be able to narrow down specific concepts within the PSSM to understand if specific areas lead to a stronger sense of belonging in school.

Further research needs to be conducted in the area of minority status and students' sense of belonging. Rather than taking a mean score of sense of belonging for a school and comparing it to the percentage of minority students, it may be more useful to determine each students' individual minority status and their corresponding sense of belonging. This would provide the researcher more specific understanding of the subtle differences between minority groups and their feelings toward school. In addition, individual student achievement could be compared to that student's sense of belonging.

Additional research could be conducted to determine how students' sense of belonging changes as they grow older in school. It may be helpful to know at what age students begin to feel less a part of school and with what those feelings are associated. This type of survey could be conducted as a longitudinal study or a one time survey of students at different grade levels both within the same school and between schools. This type of study could be combined with a factor analysis to determine if specific areas within the PSSM change as the student grows older.

### **Conclusions**

Schools are a reflection of society. Those events and attitudes that exist in our nation as whole can be seen and/or exhibited by the schools that educate the future leaders of our country. There appears to be a national trend towards becoming more concerned about one's self rather than a larger group as a whole. Alexis de Tocqueville (1966) warned of this hyper-individualism and it's role in democracy. Given that schools were designed to help foster a democracy and as stated previously, are a reflection of the society that maintains our democracy, it seems reasonable to assume schools would have a similar problem.

This study was an attempt to measure students' sense of belonging or community that exists within the school as compared to teachers' perceptions of their sense of belonging. What was learned was that teachers believe students feel more a part of school than they actually do. In addition, if students and teachers are measured in high-performing schools versus low-performing schools, it appears that the gap between students self reported scores and the perceptions of the teachers is greater.

This may prove significant as administrators and teachers look to ways to improve academic achievement of students and the schools they comprise. Of the many factors that influence performance in a school, it may appear that a student's sense of belonging is another that should be taken into consideration.

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