

## **Examining the Importance of Students' Sense of Belonging in School**

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## **Examining the Importance of Students' Sense of Belonging in School**

The purpose of this study was to evaluate sense of belonging of students in school in relation to individual characteristics (i.e., gender, ethnicity, socioeconomic status) and academic achievement (as measured by grade point average). Data from the Minnesota Student Survey (MSS) was used to evaluate the sense of belonging of 6<sup>th</sup> grade students (N = 143,999) from three survey administration years (2004, 2007, and 2010). Preliminary results confirmed the association of the degree of school sense of belonging with academic achievement, highlighting significant differences for gender, ethnicity, school location, and status as a member of the majority ethnic group within a school.

### **Objective**

The purpose of the current paper is to examine the importance of sense of belonging of students in school. The degree of a student's sense of belonging in school is important to students during their adolescent years (Anderman, 2003). The social aspect or "psychological membership" strongly influences students' motivation for school (Goodenow, 1993). A student's sense of belonging gives insight into a student's perception of where they fit in the social context of the school environment (Anderman, 2003).

One key relationship in attempts to understanding a student's connectedness or disconnect from school may lie in the teacher-student relationship and perceived support that is grounded in fairness and respect in the classroom (Anderman, 2003). A positive sense of school and classroom belonging is essential for students to perceive support, which can help with school retention and participation (Akos & Galassi, 2004a). In the current study we evaluate the sense of belonging of students in school in relation to individual characteristics and academic achievement (as measured by grade point average) using a large survey dataset from a Midwestern state of the United States.

### **Perspective**

Schools are continually pressured to prepare and support their students academically, socially, and emotionally (Abdulmalik, 2010). School adjustments are comprised of academic, procedural, and social components, influenced by situational and contextual factors (Goodenow, 1993) and discontinuity can have a negative impact on student performance (Rice, 2001), including achievement loss and dropping out of school (Mizelle & Irvin, 2000). Substantial changes in educational settings may include new physical spaces; unfamiliar peers and non-parental adults; and differing expectations, norms, and rules, which may lead to a disconnect from school completely (Barber & Olsen, 2004; Grossman & Cooney, 2009). Several research studies suggest that numerous outcomes can stem from unsuccessful adaptation including a decrease in desire for, and attitude towards, school, motivation, self-esteem, participation in school and extracurricular activities, monitoring from teachers, and support from school personnel, in addition to increased anticipation, anxiety (e.g. bullying, getting lost, failing to get to class on time), discipline problems, and stress (Akos & Galassi, 2004a, 2004b; Anderman et al, 2009; McCallumore & Sparapani, 2010; Reyes et al., 2000).

The importance of proactively addressing these undesirable outcomes may have more of an impact earlier in a student's academic years. Early adolescence is a time when student perceptions are still malleable; students are in the process of finding out who they are, who and what they want to be, and where they should focus their energy (Goodenow, 1993). Developmentally, early adolescent students are more susceptible to being self-conscious and sensitive to social comparisons and demonstrate a higher interest and need for positive and supportive relationships from both peers in the classroom as well as non-parental adults, such as teachers and administrators they encounter at school (Anderman, 2003).

The presence of a student's sense of belonging in school is significant during the

adolescent years (Anderman, 2003). For example, Resnick et al. (1997), noted that both family and school connectedness were associated with lower levels of risky behaviors. Student perceptions, more than the reality, of educational experiences, influence their motivations for school (Anderman & Midgley, 1998). For example, a student's perceived change in teacher support significantly predicted a decrease in psychological functioning in the transition from eighth to ninth grade (Barber & Olsen, 2004).

A student can be influenced positively or negatively depending upon personal experiences and influences of others. Based on Maslow's (1943) theory of motivation, feelings of belonging and self-esteem are part of the basic needs in life. Fulfilling these needs can lead to greater success and achievement through feelings of confidence, respect, capability, and sense of worth (Maslow, 1943). In the social context of education, one prominent facet is a student's sense of belonging, in other words, the perception and degree to which students feel accepted, valued, respected, and supported by peers and non-parental adults (Goodenow, 1993). A sense of belonging in school is more than simply fitting in, there is a need to sense one's own importance and perceive that other members in the school community can be relied on in a sense of attachment and security to that community (Hamm & Faircloth, 2005). One key relationship in attempts to understanding a student's connectedness or disconnect from school in terms of a classroom environment may lie in the teacher-student relationship and the perceived support from teachers (Anderman, 2003). Responses from students indicate that students who perceive less teacher and administrator support have a decrease in their like of school (Kennelly & Monrad, 2007) and students who reported a lack of belonging associated this absence largely to their perception of a lack of acceptance from peers (Hamm & Faircloth, 2005). For students at all grade levels, positive school environments, such as perceived support in classroom

communities from peers and teachers and facilitation from teachers in the development of belonging, are essential for students to perceive support and lend themselves to positive academic outcomes including school retention and participation (McMahon, Wernsman, & Rose, 2009; Tillery, Varjas, Roach, Kuperminc, & Meyers, 2013).

The purpose of the current paper is to examine the importance of a sense of school belonging and its relationship with other factors found in previous studies, such as academic achievement, gender, ethnicity, and socioeconomic status (SES). Previous studies have demonstrated that the sense of school belonging or membership is higher in females than in males (Goodenow, 1993; Sari, 2012). Goodenow (1993) indicated that suburban students had a stronger sense of school membership because they live in a more homogenous community and, in general, in more highly educated families; and that the status of belonging to the majority ethnic group within the school was associated with higher levels of belonging. Anderman (2003) found that GPA positively predicted a student's sense of belonging and Sari (2012) found that there are differences in the degree of student belonging depending upon the level of GPA. Sari also indicated that students of lower SES had the lowest mean score on the sense of belonging scale. In this paper we will replicate these findings regarding a student's sense of belonging in school, but simultaneously, as the data utilized allow us to do these analyses.

## **Method**

### **Data**

Data for this study come from the Minnesota Student Survey (MSS). The MSS is administered to 6<sup>th</sup>, 9<sup>th</sup>, and 12<sup>th</sup> grade students every three years, for which we have data from 2004, 2007, and 2010. This study includes the 143,999 6<sup>th</sup> grade students from all three years. This sample includes 50.25% female students, 5.47% African American, 6.25% Hispanic

American, 4.94% Asian American, 2.11% American Indian, and 65.62% Caucasian. There were 684 schools that took part in the survey collection, with 107 schools that had a non-white majority (52 African American, 16 Hispanic American, 25 Asian American, and 15 American Indian).

### **Sense of Belonging Scale**

Three scales from the MSS, along with another related question from the survey, were scaled to create a measure of sense of belonging for each student using confirmatory factor analysis. The three scales were Teacher and Community Support, Family Support, and School Safety Climate. These scales were constructed from a pool of relevant items and have demonstrated excellent reliability and validity (Author, 2011; Author, 2013). Responses to the question “How do you feel about going to school?” were also included in the sense of belonging scaled score (see Appendix A).

### **Analysis**

The current study is a secondary analysis of the MSS dataset. To examine the sense of school belonging, as indicated above, questions from the survey were used to create factor scores to model the school belonging. Another variable was created that indicated whether or not a student was a member of the ethnic majority group within that school. For these multiple regression analyses, a preliminary assumption was made that the racial profile for the majority ethnic group was the same or similar for all three administration years and was based on the ethnic group totals for 6<sup>th</sup> grade students at the school level in 2010.

## **Results**

### **Sense of belonging**

Females were found to have a higher sense of sense of belonging (see Model 1, Table 1) compared to males. Ethnic minority groups have a lower sense of belonging in comparison to Whites, with Hispanics having the greatest disparity ( $b = -0.16$ ,  $SE = 0.01$ ). Those in town and rural schools have a lower sense of sense of belonging in comparison to suburban schools, but those in city schools have a higher sense of belonging than suburban schools. Lastly, those with low SES (as measured by free and reduced lunch status) have a lower sense of belonging than high SES students.

Majority status was included in the model just described, and was found to be a statistically significant incremental factor ( $F(4) = 78.93$ ,  $p < 0.001$ ). By including majority member status in the model (Model 2), sense of belonging of city students increased by three-fold (from 0.025 to 0.073). Controlling for other majority statuses, all ethnic groups had a slight increase in sense of belonging in comparison to Whites. It is clear that in comparison with schools where Whites are the majority, schools where the ethnic minority groups are the majority are affected negatively in their sense of belonging (see Model 2, Table 1).

### **Academic Achievement**

Model 3 (Table 1) shows the results for the multiple regression analysis that used academic achievement (as measured by GPA) as the dependent variable. Controlling for ethnicity, school location, SES, and school belonging scale scores, females have higher GPAs than males ( $b = 0.12$ ,  $SE = 0.01$ ). Ethnic minority groups have lower GPAs in comparison to Whites except for Asian American students. In comparison to suburban schools, students from rural/town/city schools have lower GPAs. Low SES students have lower GPAs in comparison to high SES students. Most importantly, a higher sense of belonging is strongly associated with

GPA's ( $b = 0.23$ ,  $SE = 0.003$ ); the zero-order correlation between sense of belonging and academic achievement was 0.303 in this model.

Lastly, for Model 4, we added the majority status variable to Model 3. The same pattern of relationships for females, ethnic minority groups, and sense of belonging with GPA emerged. The estimate for Asian Americans in comparison to Whites in terms of GPA increased slightly (from 0.03 to 0.05). In comparison to suburban schools, rural and town schools still have lower GPAs. The most striking difference was that when adding the majority member status variable, students from city schools were found to have similar GPAs to students from suburban schools (in Model 3, the estimate was  $b = -0.02$ ,  $p = 0.01$ , in Model 4, the estimate became positive,  $b = 0.001$ ,  $p = 0.89$ ).



Table 1

Regression analysis results for an overall model and for individual models

Predictor	Model 1		Predictor	Model 2		Predictor	Model 3		Predictor	Model 4	
	<i>B</i>	<i>SE</i>		<i>B</i>	<i>SE</i>		<i>B</i>	<i>SE</i>		<i>B</i>	<i>SE</i>
Intercept	0.027	0.006		0.021	0.006		3.166	0.005		3.164	0.005
Gender	0.19***	0.006		0.191***	0.006		0.119***	0.005		0.120***	0.005
American Indian	-0.26***	0.021		-0.230***	0.021		-0.386***	0.018		-0.388***	0.018
African American	-0.098***	0.014		-0.055***	0.014		-0.249***	0.012		-0.232***	0.012
Hispanic	-0.158***	0.012		-0.127***	0.012		-0.293***	0.010		0.278***	0.011
Asian	-0.118***	0.014		-0.077***	0.014		0.036**	0.012		0.049***	0.012
Town	-0.046***	0.008		-0.049***	0.008		-0.066***	0.006		-0.067***	0.007
Rural	-0.058***	0.008		-0.058***	0.008		-0.051***	0.007		-0.052***	0.006
City	0.025**	0.008		0.073***	0.009		-0.019*	0.007		0.001	0.007
Free/Reduced Lunch	-0.203***	0.007		-0.186***	0.007		-0.264***	0.006		-0.259***	0.006
			Maj. Am Indian	-0.240***	0.052					0.054	0.047
			Maj. African Am	-0.237***	0.019					-0.085***	0.017
			Maj. Hispanic	-0.286***	0.029					-0.193***	0.027
			Maj. Asian	-0.258***	0.025					-0.136***	0.300
						Sense of Belonging	0.231***	0.003		0.230***	0.003

Note: \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$

## **Discussion**

The results both confirm and contradict findings found in previous research but demonstrate the importance of considering a student's sense of school belonging as well as its association with being a member of the majority in their school. Like previous studies, females were found to have a higher sense of school belonging than males. Unlike previous studies, city students had a higher sense of belonging than suburban students in several models and being a member of the majority within a school did not align with a higher sense of school belonging for most minority groups when that group was the majority within the school. Limitations of these analyses include the availability of the ethnic breakdown at the school level for each year of administration and this should be explored further. The inclusion of city schools creates many speculations as to why they are different than the other schools, one explanation may be due to school choice, however, the rate of school choice at a particular school is not taken into account in these analyses. The scales constructed are also limited to the data collected from one state of the United States, which may not be generalizable to other states. Future analyses will address these limitations as well as include an analysis that addresses the other findings in the previous research regarding differing levels of academic achievement and SES.

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## Appendix A

### Scale and item information for the Minnesota Student Survey (MSS) to model school belonging

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#### Scale Name and Item Stem

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##### Teacher Community Support

1-4 How much do you feel...

1. Friends care about you?
2. Teachers/other adults at school care about you?
3. Religious or spiritual leaders care about you?
4. Other adults in your community care about you?

5-6 How many of your teachers...

5. Are interested in you as a person?\*
6. Show respect for the students?\*

##### Family Support

1-2 How much do you feel...

1. Your parents care about you?
2. Other adult relatives care about you?
3. Can you talk to your father about problems you are having?\*
4. Can you talk to your mother about problems you are having?\*

##### School Climate

1-3 How many students in your school...

1. Are friendly?
2. Behave well in the hallways and lunchroom?
3. Have made fun of or threatened students of different races or backgrounds?\*

4-7 How much do you agree or disagree with the following statements?

4. I feel safe going to and from school
5. I feel safe at school
6. Bathrooms in this school are a safe place to be
7. Students use of alcohol or drugs is a problem at this school\*
8. During the last 30 days, how many days did you not go to school because you felt you would be unsafe at school or on your way to or from school?

##### Other

How do you feel about going to school?\*

- I like school very much
- I like school quite a bit
- I like school a little
- I don't like school very much
- I hate school

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*Note:* \*Indicates that items were reverse coded.