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The Active Voice: The Role of Student Voice in Promoting Students' Engagement in School

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Abstract

There is a good deal of strong theory, yet a relatively limited assortment of empirical studies, which suggest that when students perceive that they are provided opportunities to express their voices in their schools and their opinions are valued, benefits accrue to both the schools and the students. The present study employed survey methodology (N=19,011) to explore whether demographic differences exist in the degree to which students perceive that their schools promote student voice, and whether such perceptions predict greater student engagement in school. It further posits and tests a conceptual model in which relations between student voice and student engagement are mediated by a sense of belonging in school. The results revealed a number of demographic differences in mean levels of student voice, and moderate-to-strong positive relations between student voice and engagement. Sense of belonging significantly mediated these relations. Limitations and practical implications are discussed.

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School leaders in recent years have started to open their eyes to the potential benefits of incorporating student voices into their school reform efforts (e.g., Levin, 2000). Teachers, too, have seen benefits of providing opportunities for students to contribute their perspectives not just to class discussion, but also on class structure and curricula, teacher pedagogy and teaching style (Cook-Sather, 2007). Aside from these classroom-level and broader school-level benefits, one of the most compelling arguments educational researchers have made for the inclusion of student voice in schools is its direct benefits to the students. For example, Mitra (2004) demonstrated that when schools provide students meaningful roles in decision making around important issues, these students are likely to build positive developmental capacities including greater senses of autonomy, belonging, and competence. Others have suggested that when students are provided opportunities for voice, they feel more engaged in their schools in general (e.g., Rudduck, 2007).

The preponderance of the literature on student voice to date has provided conceptual arguments; albeit often compelling, and essential for advancing the field, such a skew toward the theoretical and anecdotal has left wanting educational researchers interested in the topic—not to mention the many school leaders contemplating embarking upon student voice initiatives—for broad empirical evidence of its positive outcomes. While some excellent, rigorous school-level case studies (e.g., Mitra, 2008) and some smaller-scale focus group and interview studies (e.g., Kruse, 2000) have contributed to a depth of understanding, the breadth has been lacking.

The present investigation seeks to fill this void. Specifically, this study addresses three primary research questions. First, are there any gender, race, and age differences in students' perceptions in the degree to which their schools promote student voice? The extant literature is largely mum on this point, but it would seem quite relevant to teachers and school leaders who

are interested in tailoring efforts to integrate student voice into their gender-, race-, and gradevaried classes and schools.

Second, are students who feel their schools promote student voice in fact more likely to feel engaged in school in general? Little empirical evidence has been offered to provide warrants for this claim, intuitive as it may seem. The present work will conceptualize school engagement using Fredricks, Blumenfeld, and Paris's (2004) now commonly accepted framework, which suggests three largely overlapping but distinct forms of engagement: behavioral (putting effort into school), cognitive (being psychologically invested in school), and emotional (experiencing enjoyment in and positive feelings about school). Findings in the affirmative would lend fuel to the argument that not only can students' voices provide valuable information toward school and classroom improvement, but furthermore that in the process of administrators and teachers soliciting and valuing student voice there are likely to be direct benefits to the students.

Third, if in fact students who feel student voice is fostered in their schools are more likely to be engaged, what is the mechanism for this? Combining Mitra's (2004) finding that student voice fosters a sense of belonging, with Osterman's (2000) work which suggests that when students feel they belong they are more likely to be engaged in school, the present study posits a mediational model in which the benefits of student voice toward increased engagement pass through an increased sense of belonging. While important ends in themselves, belonging and engagement have further been linked to increased academic achievement and reduced dropout (e.g., National Research Council, 2004).

Method

The present study used original self-report survey data, collected in the Spring of 2010, assessing students' perceptions of the degree to which student voice was promoted in their school, as well as self-assessments of their own senses of their behavioral, cognitive, and emotional engagement as well as belonging in their schools. All items were rated on a 5-point Likert scale, with additional items measuring demographic variables. Participants included 19,011 students in grades 6 through 12 from 61 different schools in six different states across the United States. The mean age of respondents was 14.01 (SD = 1.89), with a range of 10-19 years old. The sample was 49% female, with a racial/ethnic breakdown as follows: 75% White only, 7% Black only, 3% Hispanic only, 2% Asian American only, 9% mixed race, and 3% other races.

Though the scales were not based on any existing measures, confirmatory factor analysis and reliability and validity checks provided evidence of good psychometric properties. The five scales used in the present study were student voice (3 items, composite reliability [CR] = .69, average variance extracted [AVE] = .42; sample item: Students have a voice in decision making at school), behavioral engagement (3 items, CR = .81, AVE = .59; sample item: I put forth my best effort at school), cognitive engagement (3 items, CR = .84, AVE = .47; sample item: Getting good grades is important to me), emotional engagement (6 items, CR = .80, AVE = .57; sample item: I enjoy being at school), and sense of belonging (4 items, CR = .72, AVE = .40; sample item: The teacher expects me to be successful. The CFA including these five constructs across all subject areas in the study showed acceptable model fit (Satorra-Bentler χ^2 (df = 142, n = 19,011) = 7388.72, p < .001; RMSEA = 0.052 (0.051-0.053); CFI = 0.98; TFI = 0.98). All indicator variable loadings were at least .56, and none cross-loaded. Though the present data are hierarchical (students nested within schools), since the multivariate analyses focused only on student-level data and the school-level intraclass correlations for each construct were relatively low (rs < .05), the hierarchical nature of the data was controlled for rather than integrated into these analyses. To do so, a pooled-within-school covariance matrix was used wherein all indicator means were group-centered by school, removing all between-school variation (see Marsh, Trautwein, Lüdtke, Köller, & Baumert, 2006). Additionally, since many of the items exhibited significant skewness, all structural equation modeling analyses were run using the Diagonally Weighted Least Squares method of estimation (which provides more accurate parameter estimates and a model fit that is robust to non-normality; Mîndrilă, 2010).

As the sample size for this study was quite large, only results that met the p < .001 threshold were considered statistically significant.

Results

Research Question #1

To test whether these data revealed any gender, race, and age differences in students' perceptions in the degree to which their schools promote student voice, an analysis of variance with the student voice measure as the dependent variable and gender, race, and age (along with all interactions among them) as independent variables was run. These analyses, followed by Tukey's HSD post-hoc tests, showed that females (M = 3.46, SD = .83) reported higher voice than males (M = 3.40, SD = .89), Tukey's HSD = 6.68, p < .001, Cohen's d = .07. They also showed that showed that whites (M = 3.40, SD = .86) reported lower voice than non-whites (M = 3.52, SD = .87), Tukey's HSD = 10.36, p < .001, Cohen's d = .14; and those of mixed race (M = 3.36, SD = .90) reported lower voice than those not of mixed race (M = 3.43, SD = .86), Tukey's

HSD = 5.02, p < .001, Cohen's d = .08. It should be noted that, while these results are statistically significant, the effect sizes were of relatively low practical significance.

Age was a significant negative predictor of student voice ($\beta = -.15$; p < .001, Cohen's d = -.30), suggesting that on average students' perceptions that their schools promote expression of voice decline from middle through high school. Upon closer inspection, the age trend was non-linear; adding an age-squared term to the equation showed a significant positive (U-shaped) curve. This effect was further explored by running regression analyses separately for middle school and high school subsamples. The downward age trend only held for middle school students ($\beta = -.16$; p < .001, Cohen's d = -.32); there was no significant association between age and student voice in high school.

There were no significant interactions among any of the variables.

Research Question #2

Are students who feel their schools promote student voice more likely to feel behaviorally, cognitively, and emotionally engaged in school? To test this, a structural equation model was run with student voice as the exogenous variable and the three types of engagement as the endogenous variables (which were allowed to covary). The results of this analysis can be found in Figure 1. The model fit was good: Satorra-Bentler χ^2 (df = 84, N = 19,011) = 4639.27, p< .001; RMSEA = 0.053 (0.052-0.054); CFI = 0.99; TFI = 0.98). Each of the three paths from student voice to the engagement variables was significantly positive and of moderate-to-strong effect size. Model comparisons showed that the association between student voice and emotional engagement was the strongest, and the strength of the relations between behavioral and cognitive engagement were no different from each other. Additionally, the model was rerun with controls for gender, race, and age, and did not differ.

Research Question #3

To test whether sense of belonging functioned as a mediator of the three paths between student voice and each of the forms of engagement, first a check was performed to ensure sense of belonging was related to each of the variables (a prerequisite to mediation). This was confirmed—correlations for belonging ranged from rs = .54-.80.

Sense of belonging was then entered into the model as an endogenous variable between student voice and each of the three engagement latent constructs. The results of this analysis with standardized coefficients can be found in Figure 2. The model fit was good: Satorra-Bentler $\chi 2$ (df = 142, N = 19,011) = 7388.72, p < .001; RMSEA = 0.052 (0.051-0.053); CFI = 0.98; TFI = 0.98). Sobel tests were run on each of the three sets of mediated paths to test whether the mediation was significant. In all three cases, sense of belonging served as a significant mediator: for student voice \rightarrow sense of belonging \rightarrow behavioral engagement, Sobel test = 18.66, p < .001; for student voice \rightarrow sense of belonging \rightarrow cognitive engagement, Sobel test = 21.01, p < .001; for student voice \rightarrow sense of belonging \rightarrow emotional engagement, Sobel test = 14.30, p < .001. However, these only showed partial mediation; the remainders of the direct effects of student voice on each form of engagement were all statistically significant, albeit of relatively small magnitudes for behavioral and cognitive engagement and moderate magnitude for emotional engagement.

Discussion

In summary, the findings suggest there are some, albeit relatively small, gender and race differences in perceptions of student voice in school. Though the data are cross-sectional rather than the preferred longitudinal, they do provide some insights into what appears to be a general decline in student voice through middle school, and a leveling off in high school. Middle school

teachers and administrators may want to be attentive to this trend by providing more opportunities for meaningful roles in school-level decision-making processes particularly in the latter middle school years. Rudduck (2007) and Mitra (2008), among others, provide excellent suggestions for promoting voice in schools.

The multivariate analyses suggest two main conclusions. First, schools that promote student voice are very likely to also be schools in which the three forms of engagement, especially the emotional form, are high. Second, at least part of the process through which this happens is, when students feel their opinions are valued and they can have a role in making their school a better place, a sense of broader school belonging is cultivated. This sense of belonging, in turn, is likely to lead them to feel more engaged (again, especially emotionally). With the well-established links between engagement and desirable academic outcomes, not to mention the psychological benefits of belonging and engagement in themselves, school leaders would do well to heed the call to start providing students opportunities to contribute their perspectives and play meaningful parts in their school improvement efforts . . . in the end, everyone benefits.

References

- Cook-Sather, A. (2006). Sound, presence, and power: "Student voice" in educational research and reform. *Curriculum Inquiry*, *36*(4), 359–390.
- Cook-Sather, A. (2007). What would happen if we treated students as those with opinions that matter? The benefits to principals and teachers of supporting youth engagement in school. *NASSP Bulletin*, *91*(4), 343–363.
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74, 59–109.
- Kruse, S. (2000). Student voices: A report from focus group data. *NASSP Bulletin*, 84(617), 77–85.
- Levin, B. (2000). Putting students at the centre in education reform. *International Journal of Educational Change*, 1(2), 155–172.
- Marsh, H. W., Trautwein, U., Lüdtke, O., Köller, O., & Baumert, J. (2006). Integration of multidimensional self-concept and core personality constructs: Construct validation and relations to well-being and achievement. *Journal of Personality*, 74(2), 403–456.
- Mitra, D. L. (2004). The significance of students: Can increasing "student voice" in schools lead to gains in youth development? *Teachers College Record*, *106*(4), 651–688.

Mitra, D. L. (2008). Student voice in school reform. Albany, NY: SUNY Press.

Mîndrilă, D. (2010). Maximum Likelihood (ML) and Diagonally Weighted Least Squares (DWLS) estimation procedures: A comparison of estimation bias with ordinal and multivariate non-normality. *International Journal for Digital Society*, *1*, 93–102. Retrieved from http://infonomics-society.org/IJDS/Maximum Likelihood (ML) and Diagonally Weighted Least Squares (DWLS) Estimation Procedures A Comparison of Estimation Bias with Ordinal and Multivariate Non-Normal Data.pdf

- National Research Council. (2004). Engaging schools: Fostering high school students' motivation to learn. Washington, DC: National Academies Press.
- Osterman, K. F. (2000). Students' need for belonging in the school community. *Review of Educational Research*, 70(3), 323–367.
- Rudduck, J. (2007). Student voice, student engagement, and school reform. In D. Thiessen & A. Cook-Sather (Eds.), *International handbook of student experience in elementary and secondary school* (pp. 587–610). Dordrecht, The Netherlands: Springer.



Model fit: Satorra-Bentler χ^2 (*df* = 84, *N* = 19,011) = 4639.27, *p* < .001; RMSEA = 0.053 (0.052-0.054); CFI = 0.99;

TFI = 0.98

Note. * = p < .05

Figure 1. Structural model of student voice predicting behavioral, cognitive, and emotional engagement, with standardized path coefficients.



- Model fit: Satorra-Bentler χ^2 (*df* = 142, *N* = 19,011) = 7388.72, *p* < .001; RMSEA = 0.052 (0.051-0.053); CFI = 0.98; TFI = 0.98)
- Note. * = p < .05. Dotted lines represent mediated paths.
- *Figure 2.* Mediational model of student voice predicting behavioral, cognitive, and emotional engagement mediated by sense of belonging, with standardized path coefficients.