



Investigating Principal Time Use, Student Demographics and Teacher Perceptions

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Abstract

To better understand how teachers perceive their schools and their principals, the present study utilizes data from the restricted-use 2014-2015 National Center for Educational Statistics (NCES) National Teacher and Principal Survey (NTPS) to examine the relationships between principal time usage, student demographics and teacher perceptions of the effectiveness of their school and their principal. Data from both the teacher and principal questionnaire were analyzed and compared the Texas sample (n=2,480) to the US sample (n=28,500). The preliminary findings show that teacher perceptions of school effectiveness, administrative support, administrative enforcement of school rules and administrative effectiveness of communication were significantly impacted by the demographic composition of their school's student body but were not significantly impacted by principal time use.

Research Questions

How well do principal's time spent on curriculum-related tasks, administrative tasks, student and parent interactions, and percentage of Hispanic, Black and white students in the school, predict the teacher's perception of (1) *liking how things are run at the school?* (2) *having an administration that is supportive of staff?* (3) *having a principal that enforces rules for student conduct and backs up the teachers?* and (4) *having a principal that communicates what he or she wants with the staff?*

Data

The datasets utilized in this study were specifically the responses to the NTPS teacher and principal questionnaires. The NTPS is the newest redesign of the past Schools and Staffing Survey (SASS) and focuses on teachers and principals in greater detail than in the past. For the present study, two surveys were merged using the control number: the Teacher Survey and the Principal Survey. Therefore, the final sample consists of 31,950 teachers and 5,710 principals merged into the same dataset. Table 1 displays demographic characteristics for the sample used in the study.

Table 1: Demographic characteristics of the population used in the study

Characteristic	Teachers	Principals
<i>Gender</i>		
Male	8050 (25.20%)	2830 (49.57%)
Female	23990 (74.80%)	2880 (50.43%)
<i>Hispanic/Latino</i>		
Yes	2650 (8.28%)	440 (7.63%)
No	29300 (91.72%)	5280 (92.37%)
<i>Race</i>		
White	28750 (90.01%)	4940 (86.50%)
Black	2310 (7.22%)	640 (11.14%)
Asian	880 (2.75%)	100 (1.73%)
Native Hawaiian or other Pacific Islander	170 (0.53%)	40 (0.67%)
American Indian or Alaska Native	520 (1.63%)	90 (1.49%)

Note. Percentages may not add up to 100% as teachers were able to choose multiple boxes. Hispanic is a separate item on the survey.

- *prinperadmin* representing the amount of time the principal spends on administrative activities, and
- *prinperparent* representing the amount of time the principal spends on interactions with parents.
- Controls: % Hispanic students, % Black students, and % white students

Dependent variables. The following outcome variables were used in this study were coded on a Likert-type scale where 1 represented “Strongly Disagree” and 4 represented “Strongly Agree”

- *schoolrun* representing the teacher’s perception of liking how things are run at the school
- *suppadmin* representing the teacher’s perception of having an administration that is supportive of staff
- *prinrules* representing the teacher’s perception of having a principal that enforces rules for student conduct and backs up the teachers, and
- *princomm* representing the teacher’s perception of having a principal that communicates what he or she wants with the staff.

For ease of interpretation, all categorical variables are interpreted in the same manner. That is, it represents the odds of the teacher’s perception of that particular variable are “strongly agree”, compared to the reference group (first quartile), all else equal. All numerical variables are also interpreted in the

Statistical Analysis

A series of ordinal logistic regressions were run, as all the dependent variables were categorical (Long & Freese, 2014). Following suggestions made by survey designers, all standard errors reported are jackknife standard errors. All coefficients were converted to odds ratios for ease of interpretation. Different models the full NTPS US sample.

Variables

Independent variables. The following predictor variables used in this study were originally numerical variables that were converted to quartiles:

- *prinpercurr* representing the amount of time the principal spends on curriculum-related activities
- *prinperstud* representing the amount of time the principal spends on student interactions

same manner. That is, for each unit increase in the percent of that ethnicity, the odds of the teacher's perception of that particular variable increase or decrease, all else equal.

Notable Findings

RQ1: For Texas: For each additional % Hispanic students, teachers are 1.5% less likely to like the way things are run at their school. For each additional % Black students, teachers are 2.1% less likely. For the full US sample: For each additional % Black students, teachers are .7% less likely to like the way things are run at their school. For each additional % White students, teachers are .3% MORE likely.

RQ2: For Texas: For each additional % Hispanic students, teachers are 1.4% less likely to perceive having an administration that is supportive of staff. For each additional % Black students, teachers are 2.2% less likely. For the full US sample: For each additional % White students, teachers are .3% MORE likely.

RQ3: For Texas: For each additional % Black students, teachers are 1.6% less likely to perceive having a principal that enforces rules for student conduct and backs up the teacher. For the full US sample: For each additional % Black students, teachers are .2% less likely. For each additional % White students, teachers are .4% MORE likely.

RQ4: For Texas: For each additional % Hispanic students, teachers are 1.5% MORE likely to perceive having a principal that communicates what he or she wants with the staff. For each additional % Black students, teachers are 2.0% MORE likely. For the full US sample: For each additional % White students, teachers are .2% LESS likely.

Possible Implications for Practice (directed at teachers, administrators, school district leaders)

- What are some implications for you, your district, your job?
- Anti-bias or cultural sensitivity training?
- Teachers don't seem concerned with how principals spend their time (in most cases) or are they just not knowledgeable?

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