

Are We in This Together? An Analysis of the Impact of Individual and Institutional Characteristics on Teachers' Perceptions

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Abstract

The current study addresses certain limitations in prior analyses of teachers' perceptions of parents' involvement in education. In our analyses, we draw on teachers' responses to the School Community Survey (SCS) as well as information on school characteristics to address two limitations in prior studies. The SCS is a descriptive tool that describes the school community from the viewpoint of parents, students, teachers, and principals. Prior studies have relied on responses to the SCS collected from communities in a limited number of areas. In the current study we assess the generalizability of measures of teachers' perceptions developed within the SCS. Specifically, we assess the internal consistency of nine subscales as well as a complete index of teachers' perceptions developed in prior analyses. In addition, we explore the association between the demographic characteristics of teachers, institutional (i.e., school) characteristics, and teachers' perceptions. Our findings suggest that measures included in the SCS consistently gauge teachers' perceptions and that multiple measures can be combined to form summary measures of distinct elements of overall perceptions. In addition, our linear regression analyses using robust clustered standard errors suggests there are important variations in both the individual and institutional level correlates of elements of teacher perceptions.

Key Words: school community survey, teachers' perceptions, individual, institutional characteristics, parents, students, homework, family involvement

Introduction

Many factors influence the educational success that children have in school. Parental education, household income, physical fitness, diet, student motivation, and the quality of the learning environment are just a few of the external variables that may impact student success (Pirog & Magee, 1997; Potter et al., 2011). In addition, a student's relationship with his or her teacher and school is one of the more powerful connections that youth may experience during their education. Just as there are many explicitly identifiable factors that impact the overall educational success of students prior to entry into the classroom, there are also less noticeable, implicit variables that influence how well children do in school. Variables such as a student's confidence in the teacher and the teacher's perceptions of a student are key to addressing various aspects of student learning (Tyler & Boelter, 2008). Teachers' perceptions may be impacted by a number of factors outside a specific student. In the current study, we explore how teacher and school characteristics impact teachers' perceptions.

Being a quality teacher has much to do with efficacy, knowledge of current research, and teaching from multiple perspectives. However, teachers are likely to have a certain perception or perceptive value placement on the children they teach based on their own characteristics and those of the neighborhoods in which they teach. Perceptive value placement on the American public educational system has been changing dramatically over the past decade (Garcia, Arias, Murri, & Serna, 2010; Pianta et al., 2005). Societal ills that teachers face may impact how they evaluate the development of their students based on the neighborhoods in which the children reside, and a student's relationship with his or her teacher is one of the most critical facets of learning (Garcia et al., 2010; Monzó & Rueda, 2001; Pianta et al., 2005). Noddings (2001) purports that caring is a basic need grounded in relationships in which an individual's needs and perspectives are acknowledged and nurtured. Students define a caring teacher as one that knows the subject matter, teaches for understanding, maintains high expectations, provides constructive feedback, and models a caring attitude (Adler, 2002; Caldwell & Sholtis, 2008; Wentzel, 1997; Wilson & Corbett, 2001). Although teacher care has been identified as a powerful force in success, current national reform initiatives have shifted priorities from developing informed, responsible citizens through caring to arming learners with test-taking knowledge (Schussler & Collins, 2006).

Purpose and Significance

This study aims to examine teachers' attitudes about the communities of children they teach by using the teacher section of the School Community

Survey (SCS), which is one component of the School Community Index (SCI) instrument created by the Academic Development Institute. The SCI is a descriptive tool that describes the school community from the viewpoint of parents, students, teachers, and principals. It enables school communities—including administration, faculty, parent organizations, the school board, and other interested parties—to understand the impressions of three essential populations (parents, students, and teachers) at a particular point in time.

Education is important to parents, teachers, students, and general community members within school districts across America. Take a look at the local evening news, and most weeks there is at least one story that focuses on one school district matter or another. Although contentious at times, this passion among all involved is one reason why the authors of this article decided to take the pulse of teachers' attitudes. Our goals in the current study are two-fold: first, we assess the generalizability of prior measures of teachers' perceptions to a new and diverse school district; second, we add to the extant literature on teachers' perceptions by exploring how individual and institutional characteristics differentially impact distinct elements of teachers' perceptions of different aspects of the learning community.

Implications

A core social work belief is that the design and delivery of services clearly must proceed from a full understanding of an individual's needs, a principle known as starting where the client is. With regard to education, the clients (in this case, students) are byproducts of the neighborhoods in which they reside (Bourdieu, 1977; Hepworth et al., 2010). This research assesses the reliability of previously established measures of teachers' perceptions and investigates the predictors of distinct elements of such perceptions (Redding, 1996, 2001, 2008). In affirming the generalizability of indicators and summary measures of teachers' perceptions drawn from the SCS, the current study provides evidence that such measures can and should be utilized in diverse settings. In addition, our results suggest it is critical that future researchers and those conducting school assessments consider that individual and institutional characteristics may not have a universal effect on teachers' perceptions. Instead, it is critical to investigate correlates and predictors of distinct elements of perceptions.

Literature Review

Teacher Perceptions and Attitudes

The prior literature on teacher perceptions indicates that teachers, knowingly or unknowingly, exhibit different behaviors to students according to

socioeconomic class or status of the parents (Cakmak, Demirkaya, & Derya, 2011; Campbell, 2003; Redding, 1997). This literature also suggests that how well students perform in class influences teacher perceptions and attitudes (Cakmak et al., 2011; Campbell, 2003). The expectations of teaching professionals have been found to be constant predictors of performance outcomes for K–12 students (Alvidrez & Weinstein, 1999; Rubie-Davies, 2010). Despite the fact that much research has been done in this area, there is not a consensus on the specifics as to why this phenomenon actually occurs (Tyler & Boelter, 2008). Since the purpose of this study is to examine teachers' perceptions of different aspects of their learning communities, it is worthwhile to understand how they feel about teaching students who may come from residential neighborhoods that may be socioeconomically diverse compared to the neighborhoods in which the teachers reside.

School communities are quite complex, with several factors to consider: average home value in the neighborhood, percentage of single-parent homes, educational attainment of community members, and the overall parental involvement with the school (Little & McLaughlin, 1993). In a study that examined factors that encouraged teachers to be more connected to their community, Little and McLaughlin (1993) identified factors primarily focused on support and collaboration with the school and their peers. Based upon interviews and surveys, they found that teachers work better in school communities that are more associated with the environment. That is, if teachers are more knowledgeable of the neighborhood context and the children they serve, they are more likely to have a positive relationship with their students. Kranz (1970) examined the relationship between teachers' perceptions of pupils and their behavior toward those pupils. She found that teachers were more engaged and taught more substantively to students whom they perceived to have a high achievement level but engaged in less substantive behaviors toward students that were perceived to be average or low achieving.

Teacher Care and Parental Involvement

Teachers' perceptions and behaviors may also be linked to how much they care about student success (Shaunessy & McHatton, 2008). Caring teachers who perceive the school to be a positive force in the neighborhood promote respectful relationships with students. Teachers with a positive perception of the community also foster stronger classroom environments by valuing the diverse strengths of students without placing more value on academic performance and encouraging students to honor diversity (Noddings, 2001) and demonstrate mutual respect (Schussler & Collins, 2006). In school communities where learners feel engaged, feel that teachers care, and parental involvement

is highly supportive, teachers' perceptions of students and the community interact to maximize student performance. Patel and Stevens (2010) examined how perceptions of teachers, parents, and students concerning students' academic performance affected parental involvement and teachers' facilitation of school programs in two low-income urban schools with high Latino populations. They found that as perception differences increased between parents and teachers or parents and students, the parents tended to be less involved and teachers tended to facilitate fewer programs for parental involvement.

The School Community Index

Three studies have been conducted by the Academic Development Institute (ADI). From 1996–1998, the SCS was administered to approximately 7,600 parents and 1,869 teachers in Pennsylvania, Maryland, New Jersey, and Illinois. Prior studies investigated the relationships among various socioeconomic factors, institutional characteristics, a school community, and student learning outcomes. Findings suggested that socioeconomic factors, institutional characteristics, and collaborative school communities were positively correlated with improved average daily attendance, reading scores, and math scores, but negatively correlated with poverty levels (Redding, 1998, 2001).

From 2001 to 2003, ADI investigated the effects of Solid Foundation®, a comprehensive parent engagement program, on student learning outcomes in 129 Illinois elementary schools with high poverty levels (Redding, Langdon, Meyer, & Sheley, 2004). Parent engagement strategies designed to increase parental involvement with their children's education included:

- Parent participation in decision making at the school
- Alignment of the school's policies and procedures regarding homework and parent–teacher conferences with rubrics of research-based practices
- Explicit discussion of the roles of parents, teachers, and students around compacts, learning standards, and homework policies
- Reading school–home links aligned with state standards and in-class instruction
- Parent education focused on home reading and study habits
- Outreach through home visits, family nights, and a family resource library (Redding et al., 2004, p. 3)

To examine the impact of parent–teacher engagement, the investigators analyzed statewide assessment scores for each school with matched controls. They found that increasing the cohesiveness between teachers and parents helped to improve the overall learning environment of schools. By that means, student success was also positively influenced. The schools that participated in the Solid Foundation® parent–teacher engagement program demonstrated a

1.9% achievement gain over other Illinois elementary schools with identical beginning test scores. Solid Foundation[®] schools increased their pass rate from 51.9% in 2001 to 56.3% in 2003—an increase of 4.4%. Schools that were not a part of the program only increased their pass rate of 51.9% in 2001 to 54.4% in 2003—an increase of 2.5% (Redding et al., 2004).

Finally, ADI investigated how parents and teachers view their school communities (Redding, 2008). Specifically, this study examined which aspects of the school community parents and teachers viewed as generally strong or weak, on which areas parents and teachers had divergent opinions, the extent to which the parents' race or ethnicity influenced their own perceptions of the school community, and how parents' and teachers' perceptions about their school communities point to promising paths for improving schools and better educating children (Redding, 2008). From 2003 to 2006, the SCS was administered to 1,571 teachers and 12,364 parents in 63 elementary and middle schools in 5 states (Illinois, Pennsylvania, Delaware, Virginia, Wisconsin). Forty schools were in urban settings, and 23 were in rural areas or small towns. The findings suggested that teachers and parents had similar opinions about academic achievements for students. However, they differed in their perceptions of parents. Teachers' perceptions of the parents were more negative than the parents' perceptions of themselves (Redding, 2008).

The Current Study

The extant literature suggests teachers exhibit different behaviors to students, particularly along socioeconomic status lines (Cakmak et al., 2011; Campbell, 2003). Teachers' perceptions and expectations have also been found to be associated with student performance outcomes (Alvidrez & Weinstein, 1999; Rubie-Davies, 2010). The purpose of the current study is to address certain limitations in prior studies by assessing predictors of teachers' perceptions of students, parents, and the learning community. Specifically, we draw on teachers' responses to the SCS and information on school characteristics to assess the generalizability of indicators of teachers' perceptions of parents, students, and the community developed within the SCS. In addition, we examine the internal consistency of nine subscales and a summary index of teachers' perceptions. Next, we explore the association between the characteristics of teachers, institutions (i.e., schools), and teachers' perceptions. We expect that certain characteristics of teachers and schools will be strongly associated with a summary measure of teachers' perceptions. Moreover, we investigate whether such characteristics have differential effects on distinct elements of teachers' perceptions.

Data, Measures, and Methods

The current study explores data collected from 199 educators from 23 schools within a single school district in a mid-sized southern metropolitan city. Approximately 1,000 teachers were invited by email to participate in an online survey to gauge their perceptions of parents, students, the school, and the community.¹ A response rate of about 20% is less than ideal but comparable to prior studies using web-based surveys (Cook, Heath, & Thompson, 2000; Kaplowitz, Hadlock, & Levine, 2004). This is, in part, a reflection of a general decline in survey response rates since the 1970s (Curtin, Presser, & Singer, 2005; Pew Research Center, 2004). However, the moderate response rate likely does not influence our results as prior studies have shown that response rates are not significantly associated to nonresponse bias (Curtin et al., 2000; Keeter, Kennedy, Dimock, Best, & Craighill, 2006).

The survey was comprised of a number of demographic questions as well as the 65-question “teacher section” of the School Community Survey (SCS). The SCS was explicitly developed to examine the perceptions of both parents and teachers regarding their learning communities. The SCS is one component of the School Community Index that enables various entities in the school community to gauge impressions of parents, students, and teachers at a particular point in time. While characteristics of teachers are likely to influence their perceptions, it is equally plausible that perceptions are influenced by the contextual environment in which they work. As such, we explore the association between certain school characteristics and teachers’ perceptions of students, parents, and the community. Data on schools in the district was collected and made publicly available by the state’s department of education (DOE).

Characteristics and Perceptions of Teachers

Teachers’ perceptions of students, parents, and the community were analyzed through their responses to the 65-question “teacher section” of the SCS. Respondents were asked to rate each item on a five-point Likert-style scale: (1) uncertain; (2) strongly disagree; (3) disagree; (4) agree; and (5) strongly agree. Consistent with prior analyses (Redding, 2008), responses were recoded into dichotomous measures: (0) strongly disagree/disagree/uncertain, and (1) agree/strongly agree. The binary indicators were used to gauge teacher perceptions across nine perception categories. Since all of the items were constructed to have a positive valence for measure of school community, a value of “1” for an item indicates positive perceptions (Redding, 2001). The following is a breakdown of the SCS perception categories: roles of parents and teachers (questions 1–6); responsibilities and opportunities (questions 7–12); studying and homework (questions 13–19); character development (questions 20–26);

reading (questions 27–32); academic development (questions 33–38); school–home communication (questions 39–47); common experience/school climate (questions 48–57); and association/relations of school community members (questions 58–65).

The nine subscales and a full summary index of perceptions serve as the outcome measures in the analyses that follow. Scores were computed using the formula:

$$\text{Score} = \frac{\text{Number of items scored 1}}{\text{Total number of items}} \times 100$$

This formula results in a potential range of values from 0 through 100, with higher scores indicating a higher percentage of agreement (Redding, 2001). Descriptive statistics for each of the perception scales are presented in Table 1. The mean values for each scale indicate the average level of agreement to the questions included in the scale. The scale mean is an average of the respondent specific mean scores for the questions in a respective scale. The mean of 68.42 for the overall scale indicates that, on average, respondents agreed or strongly agreed with more than 68% of all questions in the SCS. The average level of agreement for the scales ranged from a low of approximately 56% for the character development scale to a high of 78% for the responsibilities and opportunities scale. Overall, mean levels of agreement across the perception scales suggest teachers in the school district have rather favorable perceptions of their students and the general learning environment.

Demographic Characteristics of Teachers

In addition to the perception questionnaire, teachers provided demographic information. Means and standard deviation for these measures are also presented in Table 1. Gender (female) is a binary measure, and the mean of .83 indicates that approximately 83% of respondents were female (males = 0; females = 1). Marital status (married) is another dichotomous measure and the mean of .58 indicates that 58% of respondents were married (non-married = 0; married = 1). A majority of respondents (72%) defined their racial identity as White (Non-Hispanic). African Americans comprised the next largest group of respondents (25%). Race (Non-White) is thus measured as a binary measure, and the mean of .28 indicates that 28% of respondents were Non-White (White = 0; Non-White = 1). Respondent's education level ranged from some college to professional degree with most teachers having earned either a four-year (39%) or master's (57%) degree. The mean of 5.6 indicates that the average education level for this sample was between a four-year and master's degree. Finally, teachers were asked to indicate what grade level they were currently teaching. Approximately 44% taught in elementary school (K–5th), 15% in middle school (6th–8th), and 41% in high school (9th–12th).

Table 1. Means and Standard Deviations for All Measures

	Mean	Standard Deviation
Full Index	68.42	18.97
Roles	67.19	27.19
Responsibilities/Opportunities	78.02	25.01
Studying/Homework	66.39	31.13
Character Development	56.36	25.12
Reading	64.74	24.36
Academic Development	69.43	31.61
Communication	71.45	19.67
School Climate	75.39	23.55
Association	60.93	26.01
Female	.83	.38
Married	.58	.49
Non-White	.28	.45
Education	5.60	.60
Grade	7.50	3.81
Years Taught	5.12	2.26
Staff Assaults	.30	.86
% Students Eligible for Free/ Reduced Cost Lunch	71.65	21.45
Attendance	94.72	2.66
% Teachers with MA Degree	56.66	9.85
Literacy	.23	.43
Math	.54	.50

Institutional Characteristics

We include institutional characteristics in our analysis to explore how the contextual environment impacts teachers' perceptions of students, parents, and the community. Characteristics of the 23 school environments included in this sample were obtained from the state's DOE. Because violence is likely to have a negative impact on teachers' perceptions, we control for the number of staff assaulted by students. Staff assaults ranged from 0–5, however, more than 76% of schools reported no assaults. In addition to controlling for an individual teachers' level of education, we control for the overall level of education of teachers in the school. Specifically, we include a measure of the percentage of

teachers that have earned a master's degree. Direct measures of the economic circumstances of students are not available. However, the state does record the percentage of students eligible for free or reduced-cost meal plans. While not a direct measure of economic status, this is a reasonable proxy for levels of poverty among student's families (Epstein & Sheldon, 2002; Thomas, Lemieux, Rhodes, & Vlosky, 2011). On average, more than 71% of students in the sample are eligible for free or reduced cost meal plans. This measure varies considerably from school to school, with a range of 20% to 98% of students eligible for such plans. Finally, we include measures of student performance, both in terms of attendance and proficiency in literacy and math. Compared to national averages, attendance rates are quite high in this sample, ranging between 82% and 99% with an average of nearly 95% (Stillwell & Sables, 2013). Such rates are, in part, the result of a districtwide attendance incentive program that rewards and recognizes students with few absences. We include binary indicators of whether schools currently meet proficiency standards established by the National Assessment of Educational Progress (NAEP) for proficiency in literacy or math.² Only 23% of schools in this sample satisfy state standards for proficiency in literacy, while 54% meet proficiency standards in math. For comparison, national averages are 32% for literacy and 31% for math (Peterson, Woessmann, Hanushek, & Lastra-Anadon, 2011).³

Analytical Technique

In the analyses that follow, we explore teacher and school level predictors of a summary index of teacher perceptions as well as nine perception subscales. These data are not well suited for traditional ordinary least squares regression techniques because the 199 teachers in the sample are nested within 23 schools. As such, the data violate the independence assumption. Ideally, hierarchical linear modeling (HLM) techniques would be used to simultaneously explore the impact of individual and school level measures on teachers' perceptions. However, the traditionally accepted cutoff for HLM analyses is 30 level two units (i.e., schools), which these data do not meet. As a compromise, we use a linear regression technique and, to account for potential non-independence in school-level data, we utilize robust standard errors adjusted for the clustering of teachers within schools.

Results

We begin our analyses by assessing the internal consistency of the entire range of perception indicators as well as the nine subscales developed in prior studies (Redding, 1996, 1998, 2008). That is, we explore whether each of the

65 perception indicators are measuring a single latent construct and if this latent construct can be subdivided into the previously delineated nine subscales. Prior analyses of teachers' perceptions using the SCS have been limited to a few states, primarily located in the northern and northeastern regions of the U.S. As such, the current study adds to the extant literature by exploring the applicability of prior findings to diverse samples of teachers and communities in distinct regions of the U.S.

The examination of Alpha values is an accepted means of assessing the internal consistency or reliability of scales or indices that include a number of measures (George & Mallery, 2003). Alpha values greater than .9 are indicative of excellent scale reliability, while values between .6 and .7 are questionable but acceptable. Alpha values for each of the scales are provided in Table 2. Before combining individual items from the SCS into scales, we first assessed correlations between all measures. In every instance, the perception indicators exhibited positive correlations with all other indicators, and the vast majority of the correlations were statistically significant. When combined into a single index, it appears that all of the perception indicators are measuring an underlying latent construct. An index including all measures exhibits an Alpha value of .939, which indicates a high degree of internal consistency or scale reliability.

Table 2. Assessment of the Internal Consistency of Scales

Scale	Alpha
Complete Index	.939 - E
Roles of Parents and Teachers	.650 - Q
Responsibilities and Opportunities	.698 - Q
Studying and Homework	.811 - G
Character Development	.695 - Q
Reading	.661 - Q
Academic Development	.793 - A
School-Home Communication	.705 - A
School Climate	.763 - A
Association of School Community Members	.754 - A

The nine subscales also appear to be consistent and reliable indicators of distinct components of teachers' perceptions. Alpha values for the subscales range from a low of .650 to a high of .811. Further, the subscales are significantly positively correlated with all other subscales (.4 to .7) and the complete index (.6 to .8). While we follow the lead of prior studies and transform the

Likert scaling of the responses to the SCS questions to binary indicators (Redding, 2001), we also explore the impact of this measurement strategy on the reliability of the scales. When the full range of the Likert scaling for the perception indicators is utilized (i.e., five response options), the internal consistency or reliability of the indices increases. The Alpha value for the complete index increases from .939 to .961, while Alphas for the subscales increase to a range of .738 to .853. These results suggest that the indicators of teachers' perceptions developed in the SCS are consistent and reliable. Moreover, these results provide evidence of the generalizability of the perception indicators and scales among populations and communities in diverse regions of the U.S.

In the second component of our analysis, we explore the individual (i.e., teacher) and institutional (i.e., school) level predictors of teachers' perceptions. The results of our linear regression analyses utilizing robust standard errors adjusted for the clustering of teachers within schools are presented in Table 3. In model 1 of Table 3, we explore the predictors of variation in the full perception index across teachers. The results indicate that teachers with advanced degrees and those who teach higher grades are significantly more likely to have negative perceptions of their students, their work environment, and the school community. In addition, minority and more experienced educators are significantly more likely to have positive perceptions of their students and the school community environment. A number of institutional characteristics are also associated with the complete index of teachers' perceptions. Compared to other schools in the sample, the perceptions of teachers concerning their students and the school community environment are significantly lower in schools with a higher rate of staff assaults as well as those with higher attendance rates and math proficiency scores. Moreover, the results suggest that teachers in schools in which relatively more students are impoverished, as measured by those eligible for free or reduced cost lunches, have significantly lower perceptions of their students and the school community environment. This is disconcerting but consistent with prior research indicating teachers treat students differently along socioeconomic status divisions (Cakmak et al., 2011; Campbell, 2003). Overall, the predictors examined in this analysis explain 42% of the variation in overall scale of teachers' perceptions.

In models 2 through 10 of Table 3, we examine the predictors of the nine perception subscales. While all indicators from the SCS are gauging the same latent construct, teachers' perceptions of the school community environment, there are a number of distinct elements of this environment. As such, it is critical to highlight both the consistencies and inconsistencies in the predictors of teachers' perceptions of these distinct elements of the school community environment. In model 2 of Table 3, the outcome measure is the index

tapping teachers' perceptions of their roles. Questions in this index gauge whether teachers believe their opinions count, if they make a difference in school operations, and if they know what the community expects of them. Unlike the overall perception index, the only individual-level characteristic associated with teachers' perceptions of their roles is education. More educated teachers have lower perceptions of their role in the school and community. In addition, only two school-level measures influence teachers' perceptions of their roles. Such perceptions are significantly lower in schools in which staff members are more likely to be assaulted and those with higher attendance rates. Overall, the predictor measures explain only 15% of the variation in teachers' perceptions of their roles.

In model 3, the outcome measure is the index of teachers' perceptions of the responsibilities for and opportunities available to students. Questions in this index measure perceptions of whether community members encourage students to do their best, behave properly, and encourage them to participate in activities. The results highlight important gender and other differences in such perceptions. Females, minorities, and more experienced educators have significantly more positive perceptions of the responsibilities and opportunities of students. As for institutional characteristics, such perceptions are lower among teachers in schools with relatively more staff assaults as well as higher attendance rates and math proficiency scores. However, teachers in schools in which more of their peers have advanced degrees and students perform better on literacy proficiency exams have significantly more positive perceptions of the responsibilities and opportunities of their students. Overall, teacher- and school-specific characteristics considered in this analysis explain 23% of the variation in teachers' perceptions of student responsibilities and opportunities.

In model 4, we examine predictors of perceptions of studying and homework. Questions in this index center on perceptions of whether students are taught to study, if parents expect children to do their homework, if teachers regularly assign homework, and whether homework practices are consistent across teachers. Minority and more experienced teachers have significantly more positive perceptions, while more educated teachers and those that teach advanced grades have lower perceptions of support for and consistency in studying and homework. In addition, teachers in schools with more staff assaults and those in which students scored higher on math proficiency exams have lower perceptions, while teachers in schools in which their peers are more educated and students perform better on literacy proficiency exams have significantly more positive perceptions concerning topics of studying and homework. Overall, the measures explain nearly half of the variation in teachers' perceptions centered on studying and homework.

Table 3. Regression Models Predicting Teacher Perception Scales (robust clustered standard errors in parentheses)

	Model 1 Full Index (N=100)	Model 2 Roles (N=148)	Model 3 Resp./ Opp. (N=141)	Model 4 Studying / Homework (N=150)	Model 5 Character Dev. (N=138)	Model 6 Reading (N=139)	Model 7 Academic Dev. (N=149)	Model 8 Communica- tion (N=139)	Model 9 School Climate (N=148)	Model 10 Relations (N=141)
Female	-.44 (4.53)	-.81 (5.21)	9.58** (3.37)	3.26 (6.22)	11.05* (4.86)	2.19 (4.96)	3.11 (7.73)	3.55 (5.36)	-.76 (5.05)	5.21 (4.35)
Married	3.76 (3.77)	1.28 (7.28)	-4.78 (4.25)	-.00 (3.99)	6.40+ (3.70)	-.07 (3.04)	4.68 (6.33)	3.17 (3.79)	1.99 (3.31)	1.90 (4.79)
Non-White	4.61+ (2.44)	-.15 (4.48)	6.74* (3.19)	15.00** (4.74)	1.30 (3.58)	8.05** (2.47)	2.47 (3.54)	5.41* (2.60)	7.34* (2.92)	4.29 (3.81)
Education	-9.87* (4.25)	-7.71* (3.77)	-5.50 (4.49)	-10.69* (4.20)	-.76 (3.78)	-6.49+ (3.82)	-10.68* (4.49)	-5.01* (2.38)	-8.23* (3.37)	-3.32 (3.89)
Grade	-2.24** (.63)	-2.09 (1.27)	-.77 (.84)	-1.66+ (.93)	-1.34 (1.03)	-2.33** (.76)	-2.40+ (1.33)	-2.20** (.56)	-3.12* (1.28)	-2.43* (.67)
Years Taught	1.79** (.64)	-.09 (.86)	2.50** (.87)	1.33* (.62)	1.85* (.78)	1.67 (1.01)	1.43 (1.16)	.83 (.94)	1.25+ (.73)	.72 (.81)
Staff Assaults	-10.35** (1.49)	-7.19** (2.61)	-10.02** (1.79)	-15.51** (1.79)	-8.27** (1.89)	-5.44** (1.67)	-14.25** (4.10)	-6.81** (1.25)	-15.11** (3.24)	-5.44** (1.90)
% Students Eligible for Free Lunch	-.16** (.06)	.09 (.14)	-.11 (.10)	-.10 (.11)	-.34** (.12)	-.05 (.13)	-.46** (.13)	-.26** (.05)	-.25+ (.13)	-.30** (.11)
Attendance	-2.05** (.52)	-2.59* (1.06)	-1.83* (.73)	-1.12 (.71)	-1.79** (.61)	-1.38* (.59)	-2.96* (1.37)	-1.57** (.33)	-3.89** (1.31)	.11 (.59)
% Teachers with MA Degree	.13 (.15)	.25 (.33)	.63* (.27)	.59** (.22)	-.30 (.26)	.37 (.32)	.52 (.35)	.09 (.15)	.24 (.34)	.19 (.21)
Literacy	7.04 (4.69)	3.45 (10.00)	14.62* (6.42)	28.86** (6.83)	14.74 (8.83)	9.69 (6.26)	13.55+ (7.62)	2.14 (4.78)	2.23 (5.46)	15.28* (5.98)
Math	-5.88+ (3.03)	-2.69 (6.72)	-14.73** (5.15)	-23.99** (4.60)	-4.63 (5.48)	-13.55** (4.36)	-20.62** (7.43)	-5.89 (3.69)	-4.47 (6.49)	-11.89** (4.12)
Constant	330.25** (61.33)	351.31** (108.36)	247.08** (75.75)	216.95** (72.76)	259.85** (65.64)	225.21** (68.06)	430.11** (140.72)	271.99** (32.49)	514.08** (133.25)	91.92 (68.73)
R ²	.42	.15	.23	.48	.33	.27	.28	.28	.40	.34

* $p \leq .05$; ** $p \leq .01$; + $p \leq .10$

In model 5, we assess predictors of teachers' perceptions of the character development of parents and students. Questions in this index gauge whether parents and students are respectful and responsible. Female, married, and more experienced educators perceive parents and students to be more respectful and responsible. However, teachers in schools with more staff assaults, higher attendance rates, and those with more impoverished students have significantly lower perceptions of the character development of students and parents. Interestingly, the relative prevalence of impoverished students does not significantly influence perceptions of roles, opportunities, or studying but does have a negative association with perceptions of respect and responsibility among parents and teachers. Overall, the predictor measures explain 33% of the variation in teachers' perceptions of the character of parents and students.

Model 6 examines teachers' perceptions of whether parents, fellow teachers, and members of the community encourage students to read for pleasure. Minority teachers perceive the school community environment as more supportive of reading for pleasure, while such perceptions were lower among teachers with more education and those that teach advanced grades. Further, teachers that work in schools with a higher staff assault rate, higher attendance rates, and those meeting standards in math proficiency exams have significantly lower perceptions concerning community support for reading. In model 7, we turn our attention to teachers' perceptions of the academic development of students. More educated teachers and those working in advanced grades have significantly lower perceptions of the academic development of their students. A number of institutional characteristics also impacted perceptions of student academic development. Such perceptions are higher among teachers in schools meeting standards in literacy proficiency but significantly lower among teachers in schools with higher staff assault and attendance rates and those meeting standards in math proficiency. Further, teachers in schools with relatively more impoverished students have significantly lower perceptions of the academic development of their students. In model 8, we examine predictors of teachers' perceptions of their communication with parents. Minority teachers have significantly more positive perceptions of their communication with parents, but those with advanced degrees and those working in advanced grades have significantly lower perceptions of communication. In addition, perceptions of communication patterns with parents are significantly lower among teachers in schools with more staff assaults, high attendance rates, and those with relatively more impoverished students. Overall, these predictors explain 27–28% of the variation in teachers' perceptions of support for reading, academic development, and communication.

In models 9 and 10 we turn our attention to teachers' perceptions of the general school climate and relations between parents and teachers. Minority and more experienced educators have significantly more positive perceptions of the overall school climate. Conversely, teachers with higher levels of education and those teaching advanced grades have significantly lower perceptions of their school's general climate. Further, those teaching more advanced grades have significantly lower perceptions of general parent–teacher relations. In regards to institutional characteristics, teachers in schools in which staff assaults are more prevalent and relatively more students are impoverished have significantly lower perceptions of both the overall school climate and parent–teacher relations. In addition, teachers have negative perceptions of the school climate in institutions with higher attendance rates, while perceptions of parent–teacher relations are significantly more positive in schools meeting standards for proficiency in literacy. However, perceptions of parent–teacher relations are significantly lower in schools meeting standards for proficiency in math. Overall, these characteristics of teachers and schools explain 34–40% of the variation in teachers' perceptions of the general school climate and parent–teacher relations.

Discussion

Prior studies have documented the association between teachers' perceptions and differential academic expectations and outcomes for students, associations between teachers and parents, parent participation in the education process, and the overall school climate. However, few studies have simultaneously examined the individual and institutional predictors of teachers' perceptions. The purpose of this study was to address this limitation and advance the literature by examining variation in the individual and institutional level predictors of distinct elements of perceptions.

We gathered data from about 200 teachers within a single school district in a mid-sized southern metropolitan city. In addition to providing demographic information, teachers' perceptions in a number of areas were measured using the “teacher section” of the School Community Survey. While individual's characteristics are likely to influence perceptions, it is equally plausible that perceptions are influenced by the contextual environment, particularly school characteristics. To explore this possibility, we obtained data on school characteristics from the state's department of education. Ideally, such data (teachers nested within schools) would be analyzed using multilevel modeling techniques, however, data limitations precluded such an approach. Instead, we used a linear regression technique and report standard errors adjusted for clustering within schools.

Consistent with prior studies, our analysis suggests that all 65 perception indicators are measuring an underlying latent construct. All indicators were positively associated with one another and most correlations were statistically significant. In addition, an Alpha value in excess of .9 indicates that a single scale is an internally consistent and reliable index of teachers' perceptions of students, parents, and the overall learning community. Our regression analysis revealed that this comprehensive index of teacher perceptions is influenced by a number of individual and institutional characteristics. Perceptions did not vary significantly across gender or marital status lines; however, perceptions were significantly more positive among minority and experienced educators. Further, teachers with more extensive education and those teaching advanced grades exhibited significantly lower perceptions of their learning community. In terms of the impact of institutional characteristics, violence against staff members, relatively more impoverished students, higher attendance rates, and attaining NAEP standards for proficiency in math were associated with significantly lower perceptions of the overall learning community.

One limitation of a comprehensive perception index is that combining many indicators into a single scale limits our ability to examine variations in perceptions of distinct components or elements of the learning community. For example, there may be critical differences in factors that influence teachers' perceptions of their students reading ability compared to the overall school climate. Consistent with prior research, we divided the perception indicators into nine correlated subscales measuring distinct components of perceptions of the learning community. Our analysis revealed a number of important distinctions in the predictors of the perception subscales.

The individual and institutional measures explained between 15% and 48% of the variation in the perception subscales. While the predictor measures, when significant, were consistently in the same direction, only our measure of school violence was associated with every index. A teacher's level of education and the grade they teach were consistently related to lower scores on the different perception indices. However, neither factor influenced perceptions of the responsibilities and opportunities or the character development of students and parents. An educator's experience, on the other hand, was significantly associated with fewer than half of the perception indices but is positively related to perceptions of the responsibilities and opportunities as well as the character development of students and parents.

While a teacher's race was marginally significantly associated with the overall perception index ($p \leq .10$), minorities were found to have significantly more positive perceptions in a number of key areas. Race was not a factor in variation in teachers' perceptions of their roles, student character, academic

development, or parent–teacher associations. However, race was a key correlate of perceptions of student responsibilities and opportunities, studying, reading, communication with parents, and the overall school climate. Such results are promising and, considering the high proportion of minority students in the school district, likely indicate that minority educators are more familiar with the attitudes, values, and beliefs of their students and parents. Further, minority teachers likely utilize interpersonal association and teaching styles better suited to the population they serve, thus increasing the inclusiveness of the learning community. As such, minority teachers in the school district may be able to establish stronger bonds with the learning community, which leads to positive teacher perceptions and student outcomes.

There was also considerable variation in the effect of institutional characteristics across the perception indices. Staff assaults and attendance rates were consistently associated with negative perceptions. While it is logical that violence would lower perceptions of the learning community, it is somewhat perplexing why increased attendance rates would be associated with negative perceptions. The current analysis cannot definitively answer this question, but there are potential explanations. The results may be linked to restricted variation in attendance rates across schools in the sample. Rates varied between 82% and 99%, with the majority of schools having attendance rates in excess of 92%. Such rates are notably higher than national averages (Stillwell & Sable, 2013; UNICEF, 2008) and are likely a product of both calculation methods and a districtwide attendance incentive program that rewards and recognizes students with few absences. As such, the results may not accurately capture the influence of attendance or truancy on teachers' perceptions at the national level. Further, in the context of exceptional attendance, teachers are consistently in contact with the vast majority of both advanced and developmentally delayed students. In contrast, when attendance rates are low, the least committed and most challenging students comprise the majority of truant students (Corville-Smith, Ryan, Adams, & Dalicandro, 1998). Under such circumstances, teachers' perceptions of students, parents, and the learning community may be more positive.

Teaching in a school that meets standards for proficiency in literacy did not significantly influence the full perception index, however, literacy proficiency is related to significantly more positive perceptions of student responsibilities, studying, academic development, and teacher–parent associations. This finding would be overlooked in an analysis of only a single summary perception index, underscoring the importance of examining indices tapping distinct elements of perceptions. In contrast, teachers' overall perceptions and their perceptions of student's responsibilities, studying, academic development, and parent–teacher

associations were significantly lower in schools meeting proficiency standards in mathematics. It is unclear why meeting standards in literacy and math would differentially impact teachers' perceptions. Schools in this sample are doing significantly better than the national average in math proficiency. This is, in part, due to the efforts of dedicated teachers who work with their students both after school and during the summer. In fact, the school district has made a concerted effort to support sustained participation in structured and well-implemented out-of-school academic activities (AOSN, 2009). While such efforts have been integral to student success, prior literature suggests such extra assistance may be viewed by other teachers as a function of the low ability of the students, which may explain the association between higher math achievement and lower teacher perceptions (Graham & Barker, 1990). In addition, it is possible that teachers feel their extensive efforts are not being matched by students, parents, or the general learning community. To the extent that teachers feel their efforts are not being matched, they are likely to harbor negative perceptions.

Finally, our results suggest teachers' perceptions are significantly lower in schools that serve relatively more economically disadvantaged students. When a greater proportion of students are eligible for free or reduced-cost lunches, teachers have significantly lower perceptions of the character and academic development of students, communications and associations with parents, and the overall school climate. These findings support prior literature in suggesting that socioeconomic status is a critical predictor of teachers' expectations and perceptions of families (Redding, 1997). However, it is possible that such findings are the result of a selection effect by which teachers with a more negative outlook or those less adept at working with socially and culturally diverse populations are more likely to secure employment in economically disadvantaged schools. Further, teachers serving disadvantaged populations may not be meeting their own career expectations which manifests as negative perceptions of their school, students, and parents.

There are certain limitations of this research that should be addressed in future studies. The response rate of 20% is not optimal but is comparable to prior studies utilizing web-based surveys (Cook et al., 2000; Kaplowitz et al., 2004). Future research should assess similar questions utilizing larger samples of educators and schools. Such data would allow for more detailed multilevel analyses of additional individual and institutional characteristics. Future researchers should also explore potential nonlinear and conditioning effects. It is possible that individual and institutional characteristics interact to create unique effects that would advance our understanding of teachers' perceptions. Future research would also do well to simultaneously examine perceptions of additional stakeholders in the learning community to elucidate the interwoven

nature of teachers', students', and parents' perceptions. Overall, the current study contributes to the extant literature by identifying important differences in the key predictors of distinct elements of teachers' perceptions. While the data are limited, the results nonetheless suggest a line of research questions that should be examined in future studies.

Endnotes

¹Teachers were recruited through email messages sent to a listserv including all teachers in the district as well as certain staff and administration personnel. Between 900–1,000 of the email recipients are full-time district teachers.

²Students are assessed in 4th, 8th, and 12th grades, and proficiency standards are publicly available through the National Center for Educational Statistics.

³Additional measures available through the DOE were explored, including school level (i.e., elementary, middle, or high school), whether a school was state directed, student on student assaults, and alternative indicators of teacher education and student proficiency in literacy and math. These measures were not significantly associated to the perception scales or the results did not differ substantively from those presented.

References

- Alvidrez, J., & Weinstein, R. S. (1999). Early teacher perceptions and later student academic achievement. *Journal of Educational Psychology, 91*, 731–746.
- Adler, J. (2002). Global and local challenges of teacher development. In J. Adler & Y. Reed (Eds.), *Challenges of teacher development: An investigation of take-up in South Africa* (pp. 1–16). Pretoria, South Africa: Van Schaik.
- Arkansas Out-of-School Network (AOSN). (2009). *Arkansas standards for quality afterschool programs*. Little Rock, AR: Arkansas Department of Education. Retrieved from <https://workspaces.acrobat.com/app.html#d=MdStfAcKB8slnxSgeHwh0w>
- Bourdieu, P. (1977). *Outline of a theory of practice*. Cambridge, UK: Cambridge University Press.
- Cakmak, D., Demirkaya, H., & Derya, C. (2011). Perception of teachers of primary school students' parents. *e-Journal of New World Sciences Academy, 6*(1), 1309–1317.
- Caldwell, P. E., & Sholtis, S. A. (2008). Developing an ethic of care in the classroom. *Kappa Delta Pi Record, 44*(2), 85–89.
- Campbell, E. (2003). Moral lessons: The ethical role of teachers. *Educational Research and Evaluation: An International Journal on Theory and Practice, 9*(1), 25–50.
- Cook, C., Heath, F., & Thompson, R. (2000). A meta-analysis of response rates in web- or internet-based surveys. *Educational and Psychological Measurement, 60*(6), 821–836.
- Corville-Smith, J., Ryan, B., Adams, G., & Dalicandro, T. (1998). Distinguishing absentee students from regular attenders: The combined influence of personal, family, and school factors. *Journal of Youth and Adolescence, 27*(5), 629–640.
- Curtin, R., Presser, S., & Singer, E. (2000). The effects of response rate changes on the index of consumer sentiment. *Public Opinion Quarterly, 64*(4), 413–428.
- Curtin, R., Presser, S., & Singer, E. (2005). Changes in telephone survey nonresponse over the past quarter century. *Public Opinion Quarterly, 69*(1), 87–98.

- Epstein, J., & Sheldon, S. (2002). Present and accounted for: Improving student attendance through family and community involvement. *The Journal of Educational Research*, *95*, 380–327.
- García, E., Arias, M. D., Murri, N. J. H., & Serna, C. (2010). Developing responsive teachers: A challenge for a demographic reality. *Journal of Teacher Education*, *61*(1/2), 132–142.
- George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference. 11.0 update* (4th ed.). Boston, MA: Allyn & Bacon.
- Graham, S., & Barker, G. (1990). The down side of help: An attributional developmental analysis of helping behavior as a low-ability cue. *Journal of Educational Psychology*, *82*(1), 7–14.
- Hepworth, D. H., Rooney, R. H., Rooney, G. D., Strom-Gottfried, K., & Larsen, J. A. (2010). *Direct social work practice: Theory and skills*. Belmont, CA: Brooks-Cole.
- Kaplowitz, M. D., Hadlock, T. D., & Levine, R. (2004). A comparison of web and mail survey response rates. *Public opinion quarterly*, *68*(1), 94–101.
- Keeter, S., Kennedy, C., Dimock, M., Best, J., & Craighill, P. (2006). Gauging the impact of growing nonresponse on estimates from a national RDD telephone survey. *Public Opinion Quarterly*, *70*(5), 759–779.
- Kranz, P. L. (1970). *The relationships between teacher perception of pupils and teacher behavior toward those pupils*. Washington, DC: ERIC Clearinghouse.
- Little, J. W., & McLaughlin, M. W. (1993). *Teachers' work*. New York, NY: Teachers College Press.
- Monzó, L. D., & Rueda, R. (2003). Shaping education through diverse funds of knowledge: A look at one Latina paraeducator's lived experiences, beliefs, and teaching practice. *Anthropology & Education Quarterly*, *34*, 72–95. doi: 10.1525/aeq.2003.34.1.72
- Noddings, N. (2001). The care tradition: Beyond “add women and stir.” *Theory Into Practice*, *40*, 29–34.
- Patel, N., & Stevens, S. (2010). Parent–teacher–student discrepancies in academic ability beliefs: Influences on parent involvement. *School Community Journal*, *20*(2), 115–136. Retrieved from <http://www.schoolcommunitynetwork.org/SCJ.aspx>
- Peterson, P., Woessmann, L., Hanushek, E., & Lastra-Anadon, C. (2011). *Globally challenged: Are U.S. students ready to compete? The latest on each state's international standing in math and reading* (Report No. 11-03). Prepared for Harvard's Program on Education Policy and Governance & Education Next, Taubman Center for State and Local Government, Harvard Kennedy School.
- Pew Research Center. (2004). *Survey experiment shows polls face growing resistance, but still representative*. Washington, DC: Pew Research Center.
- Pianta, R. C., Howes, C., Burchinal, M., Bryant, D. M., Clifford, R. M., Early, D. M., & Barbarin, O. (2005). Features of pre-kindergarten programs, classrooms, and teachers: Do they predict observed classroom quality and child–teacher interactions? *Applied Developmental Science*, *9*, 144–159. doi:10.1207/s1532480xads0903_2
- Pirog, M. A., & Magee, C. (1997). High school completion: The influence of schools, families, and adolescent parenting. *Social Science Quarterly (University Of Texas Press)*, *78*(3), 710–724.
- Potter, S. C., Schneider, D., Coyle, K. K., May, G., Robin, L., & Seymour, J. (2011). What works? Process evaluation of a school-based fruit and vegetable distribution program in Mississippi. *Journal of School Health*, *81*(4), 202–211. doi:10.1111/j.1746-1561.2010.00580.x
- Redding, S. (1996). Quantifying the components of school community. *School Community Journal*, *6*(2), 131–147. Retrieved from <http://www.schoolcommunitynetwork.org/SCJ.aspx>

- Redding, S. (1997). Academic achievement, poverty, and the expectations of parents and teachers. *School Community Journal*, 7(2), 87–103. Retrieved from <http://www.schoolcommunitynetwork.org/SCJ.aspx>
- Redding, S. (1998). The community of the school: An overview of the literature. *School Community Journal*, 8(2), 85–100. Retrieved from <http://www.schoolcommunitynetwork.org/SCJ.aspx>
- Redding, S. (2001). The community of the school. *School Community Journal*, 11(1), 1–24. Retrieved from <http://www.schoolcommunitynetwork.org/SCJ.aspx>
- Redding, S. (2008). How parents and teachers view their school communities. *Marriage & Family Review*, 43(3), 269–288.
- Redding, S., Langdon, J., Meyer, J., & Sheley, P. (2004). *The effects of comprehensive parent engagement on student learning outcomes*. Paper presented at the annual meeting of the American Educational Research Association. Retrieved from <http://www.hfrp.org/publications-resources/browse-our-publications/the-effects-of-comprehensive-parent-engagement-on-student-learning-outcomes>
- Rubie-Davies, C. M. (2010). Teacher expectations and perceptions of student attributes: Is there a relationship? *British Journal of Educational Psychology*, 80(1), 121–135.
- Schussler, D. L., & Collins, A. (2006). An empirical exploration of the who, what, and how of school care. *Teachers College Record*, 108, 1460–1495.
- Shaunessy, E., & McHatton, P. A. (2008). Urban students' perceptions of teachers: Views of student in general, special, and honors education. *Urban Review*, 41, 486–503.
- Stillwell, R., & Sable, J. (2013). *Public school graduates and dropouts from the common core of data: School year 2009–10: First look* (NCES 2013-309rev). Washington, DC: National Center for Education Statistics, U.S. Department of Education. Retrieved from <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2013309rev>
- Thomas, J. M., Lemieux, C. M., Rhodes, J. L. F., & Vlosky, D. A. (2011). Early truancy intervention: Results of an evaluation using a regression discontinuity design. *Children and Youth Services Review*, 33(9), 1563–1572.
- Tyler, K. M., & Boelter, C. M. (2008). Linking Black middle school students' perceptions of teachers' expectations to academic engagement and efficacy. *Negro Educational Review*, 59(1/2), 27–44.
- UNICEF. (2008). *Education statistics: United States*. New York, NY: UNICEF Division of Policy and Practice. Retrieved from http://www.childinfo.org/files/IND_United_States.pdf
- Wentzel, K. R. (1997). Student motivation in middle school: The role of perceived pedagogical caring. *Journal of Educational Psychology*, 89(3), 411.
- Wilson, B. L., & Corbett, H. D. (2001). *Listening to urban kids: School reform and the teachers they want*. Albany, NY: State University of New York Press.

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