

Teacher Empathy and Its Relationship to the Standardized Test Scores of Diverse Secondary English Students

Timothy B. Bostic
Culinary Institute of Virginia

Correspondence related to this article should be directed to Tim Bostic at tbsotic@chefva.com

Abstract

The purpose of this research study was to ascertain whether there is a relationship between teachers' cognitive role taking aspect of empathy and the Virginia Standards of Learning (VSOL), English/Reading scores of their students. A correlational research design using hierarchical multiple regression was used to look for this relationship. In order to control for variables previous research has shown to contribute to student achievement, a teacher's years of experience, degree level, self-efficacy beliefs about managing classroom behavior and a teacher's expectations for her students were measured and placed into the regression equation. The study attempted to see if the relationship was stronger based on the ethnicity and course level of the students. The results indicate that the null hypothesis cannot be rejected. However, the results also indicated that the other teacher variables for which this study controlled were also not contributing to the variance in the test scores. These findings led to the conclusion that standardized tests, by their very nature, may possibly not be susceptible to teacher attributes or dispositions. Further, it was concluded that teachers may need to acknowledge that the VSOL, English/Reading tests may be measuring a very small part of student achievement which, in many cases, can be considered learning to pass the tests.

Currently, research has become more complex as researchers try to identify the specific personal characteristics and teacher dispositions that help teachers facilitate successful learning in their classrooms. Rice (2003), in her meta-analysis of research on what teacher attributes make teachers effective, found significant gaps in knowledge about which teacher characteristics help to make them most effective, especially at the secondary level. However, one characteristic that proves beneficial to student learning is teachers' empathy. For the purposes of this study empathy is operationalized as understanding a student's perspective. It is assumed that when teachers understand their students, they will care about them, their cognitive and affective growth and well being. Additionally, it is assumed that this understanding will make teachers more effective in terms of helping students achieve academically as measured by standardized tests. Further, for students who have a history of academic failure, teacher empathy and caring is even more important in terms of motivating them and connecting them to academic opportunities.

The purpose of the study was to measure teachers' empathy and to assess its contributions to student performance on the English reading scores on the Virginia Standards of Learning test (VSOL) for eighth and eleventh grade students. The study examined the effects of teacher empathy on academic performance for different student groups. The study also examined

classroom management skills because it was suspected that they might interact with teachers' expectations for their students and empathy for them.

Significance of the research

Sociological research has found that the greater the social difference between teachers and their students, the lower the teacher's expectations will be for those students, and they will be less supportive and positive in their interactions with students they perceive to be of lower social status than themselves (Metz, 1990). Recent research has begun to examine how empathy makes teachers more effective working with diverse student populations (Darling-Hammond, 2000; McAllister and Irvine, 2002). Studies by Noblit, Roger and McCadden (1995) and Noddings (1995) indicate that many students must believe that their teachers care about them and understand them in order for them to be motivated to learn. Teacher empathy is thought to affect students indirectly by altering the learning environment. Empathetic teachers promote a caring climate in the classroom that makes students feel more connected to the school. Also, teachers who understand their students are more likely to be motivated to make lessons relevant to their students, and this then increases students' interest and engagement in learning.

In recent decades, the student population in U.S. schools has increased in diversity. In 2000, 65 percent of the K-12 student population was non-Hispanic white and 35 percent were Hispanic, Black, Asian/Pacific Islander and Native American (Fowler, 2004). While the diversity of the student population has been increasing, the diversity of the teaching staff of elementary and secondary schools has been decreasing. Twelve percent of the graduates of teacher preparation (education) programs in 1977 were African American and by 1993 the proportion had decreased to 10 percent (Ohio State Office of Educational Oversight, 1997). In 2000, 86 percent of all elementary and secondary teachers were white (Gay and Howard, 2000). Given the increasing social and cultural disparity between teachers and students, the need to understand how teacher empathy affects instructional practices and the learning environment is critical. If white middle-class teachers, which comprise the majority of the teaching population, are less empathetic toward ethnic minority students (due to social and cultural factors), then these students will be disadvantaged by exposure to a learning environment that is less supportive of them than that experienced by their white peers. Additional research on teacher empathy is needed to prevent social/cultural disparities between teachers and students from resulting in disparities in instructional support and learning opportunities.

Review of Literature

Considerable educational research has examined how different teacher characteristics affect learning, including teacher empathy. The most current research is reviewed in this section. A discussion of how empathy is defined and how specific constructs of empathy can be measured also is included.

Teacher Characteristics and the Learning Environment

Prior research indicates that teachers who have mastered their subject matter understand their subject matter and have sound pedagogical training are more successful in helping their students learn. Darling-Hammond (2000) found that teachers who have a thorough understanding of learning theories, teaching methods and curriculum knowledge are more effective in promoting student learning in diverse classrooms, that is “teaching from the perspective of learners who bring diverse experiences and frames of reference to the classroom” (p. 166). There is more to effective teaching, however, than just understanding course content and how to present it. Teachers need to be able to create learning environments that are conducive to learning.

How teachers express caring and concern for their students is not important. What is important is that they let their students know they care (Patterson & Purkey, 1993). Pierce (1994) found that teachers who showed respect, caring and closeness to students at risk lessened the chance that they would fail. By interacting with students in a caring and respectful manner, teachers can motivate students to care about academic success and foster the belief that they can be successful in school. Teachers who enter the profession because they have a desire to make a difference in the lives of their students and want them to succeed academically have better student outcomes (in terms of grades and standardized test scores) than teachers who are motivated by other factors (Gordon, 1999; Kuklinski & Weinstein, 2001).

Empathy and Student Learning

The effect of teacher empathy on learning has been established; teachers who students perceive as empathetic have higher learning outcomes (McAllister & Irvine, 2002). When students feel that their teachers are trying to understand them as individuals and are concerned about them and their life, they work harder and achieve more academically (Coffman, 1981). McAllister and Irvine (2002) found when teachers show tolerance and acceptance of their students, they create a better learning environment. This finding is supported by research that resulted in the Wingspread Declaration, which promotes caring environments in schools (Viadero, 2004). This prior research indicates that a caring school environment not only affects academic performance but also reduces anti-social behavior (Viadero, 2004). Apparently, students learn to treat others in the manner they have been treated.

Teaching can be viewed as a series of social interactions between students and teachers. Because the teacher is the authority figure in the room, the teacher, whether consciously or unconsciously, teaches by example. It is imperative, therefore, that the teacher model for students appropriate ways of interacting with other people. By illustrating empathy, the teacher establishes a positive climate of social interactions in the classroom that are conducive to learning while at the same time modeling positive social interactions for students that reduce anti-social behaviors that disrupt the learning environment (Sandven, 1979). Empathy, then, has an impact on learning both cognitively and affectively. By modeling how to work effectively with different types of people, teachers help students acquire the ability to understand others’ perspectives when the situation requires it and promote cross-cultural understanding. Students are better able to establish a connection with caring teachers, and to internalize their teachers’ values. This then may motivate students to produce better work for their teachers.

Defining Empathy

Demos (1984) defines empathy as an affective psychological stance towards another person. People often react emotionally to the perceived distress of others, but researchers differentiate between empathy, which is an affective psychological stance, and sympathy or pity (Davis, 1990; Batson, Fultz & Schoenrade, 1987). Empathy for the purposes of research, including this study, is defined as the ability to understand another person's perspective. This definition has been used by Everding and Huffaker (1998), Davis (1990), Reed (1984), Ickes (1997), Lanning (1991), as well as Stotland, Mathews, Sherman, Hanson and Richardson (1978). This specificity is in keeping with experts in the field noting the importance of having a clear definition of empathy before attempting to measure it (Feldstein & Gladstein, 1980). Empathy, as a psychological construct, is illustrated in the following two vignettes.

Vignette 1: An Empathetic Teacher

Eric, a student from an economically depressed neighborhood, has been tardy for four days in a row. When his teacher asks him why he has been late he tells his teacher he walks his sister to her middle school first, in order to protect her from local gangs that have threatened her. He gets her to school twenty minutes early, but he gets to school twenty minutes late. The teacher explains to Eric that she can appreciate what he is going through, but he is missing out on important instruction every day. She asks his guidance counselor to alter his schedule so that he has a study hall during the first bell of the day and has him moved to a later section of her English class. In this instance, the teacher was willing to find out the cause of Eric's problem and help find a solution that enabled him to succeed academically.

Vignette 2: An Un-empathetic Teacher

Janice has been more than twenty minutes late almost every day for her English class. The teacher warns her that after twenty minutes she is considered absent even if she shows up, and after ten absences in one semester, she automatically fails the class. When Janice tries to explain, the teacher tells her the explanation is unimportant; she must get to class on time. By the end of the semester Janice has been late more than ten times and her teacher fails her. When Janice appeals the teacher's decision, the appeals committee learns that her mother is a drug addict and that Janice cannot sleep at night because of people constantly entering and exiting the house. The committee excuses her absences, and Janice remains in her English class. Because Janice's teacher was unwilling to understand her perspective and to find out whether she had a valid reason for being late to class, Janice becomes angry and does not put forth much effort during the second semester. Thus, the teacher's lack of empathy hindered Janice's motivation and academic performance in her English class.

Measuring Empathy

As with any psychological construct, obtaining a valid and reliable measure of empathy is a difficult task. Macarov (1978) describes initial efforts to measure it. The first attempt to measure

empathy was in 1949 by Dymond and continued until Truax's effort in 1961. In their review of several different measures, Feldstein and Gladstein (1980) found that none of the instruments were valid and reliable measures of empathy (i.e., "internal and unobservable activation of the counselor's feelings and fantasies") or the communication of the empathic experience (i.e., "checking and altering their [the counselor's] statements to maintain an accurate understanding of the clients"). However, some of the instruments were able to measure other aspects of empathy, such as, cognitive empathy, defined as role-taking skills, which is the aspect of empathy pertinent to this study.

Davis (1979) developed the Interpersonal Reactivity Index (IRI), a 28-item Likert scale that contains sub-scales that measure four aspects of empathy. The aspect most relevant to this study is the Perspective-Taking sub-scale. The IRI has reasonably good psychometric properties: the internal reliabilities range from .71 to .77; the test-retest reliabilities range from .62 to .80 (Davis, 1979). The Perspective Taking sub-scale of the IRI has a Cronbach's alpha of .64 (Constantine and Gainor, 2001). The properties of the IRI, while low, were acceptable for this study, and the Perspective taking sub-scale matched the study's operational definition of empathy.

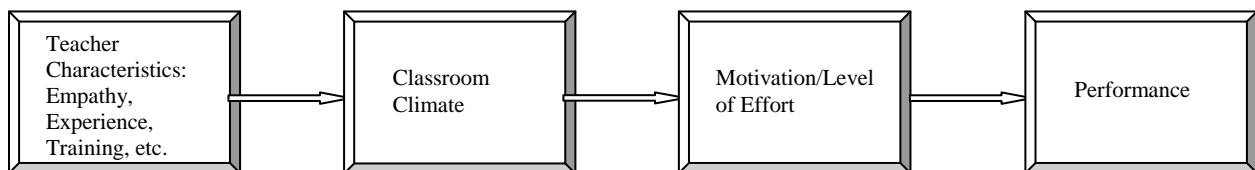
Design and Methods

A non-experimental, correlational design was used to examine the relationship between teacher empathy and students' academic performance as measured by the VSOL's, Virginia's standardized achievement test (McMillan, 2000; Agresti & Finlay, 1997). The study addressed the following questions:

1. What is the effect of teacher empathy on students' academic performance?
2. Is the effect of teacher empathy on student academic performance consistent across all ethnic groups?
3. Is the effect of teacher empathy on student academic performance consistent across academic ability groups?

The underlying logic for these questions is represented in figure 1.

Figure 1. Logic Graphic



Instrumentation

Measures of teacher characteristics

The instruments used to measure teacher characteristics included a self-administered survey to collect background information and several scales developed for the study to measure the teacher attributes of interest. Several teacher background characteristics were measured because they

were expected to affect student academic performance, and therefore, their effect on this outcome variable had to be controlled for in the analysis. These predictor variables included: (a) teaching experience; (b) professional training (i.e., method of certification and graduate training); (c) classroom management ability; and (d) expectations for students. Teachers were surveyed to collect information about their educational background, teacher training, professional credentials, and teaching experience.

Three scales were developed to measure teacher attributes: (a) teacher empathy; (b) teacher self-assessment of classroom management ability; and (c) teacher expectations for students. The scale used to measure empathy, which was operationally defined as cognitive role-taking (Feldstein & Gladstein, 1980), was an adaptation of a sub-scale from the Interpersonal Reactivity Index developed by Davis (1979). The Cronbach alphas for the adapted scale ranged from .67 to .76. The Teacher Interpersonal Self-Efficacy Scale developed by Emmer & Hickman (1991) was adapted to measure teachers' perceived self-efficacy in managing students' classroom behavior. The adapted scale had a Cronbach alpha of .92. A scale to measure teachers' beliefs about expectations for students' ability to learn was based on research by Gottfredson, Marciniak, Birdseye and Gottfredson (1995), Harris and Rosenthal (1985), and Jussim and Eccles (1992). The adapted scales were field tested with a sample of in-service teachers and the reliability coefficients were comparable to those reported in previous studies.

Measures of student performance

The Virginia Standards of Learning (VSOL) in the areas of English, mathematics, history, social science, and science are intended "to set reasonable targets and expectations for what teachers are expected to teach and students are expected to learn" (see the Virginia SOL Technical Manual, May 2000, page 1). The purposes of the educational assessments at selected grades 3, 5, and 8) and high school subjects are to inform parents and teachers about what students are learning in relation to the VSOL and to hold schools accountable for teaching the VSOL content. For this study, the English, Reading test scores, a criterion-referenced test aimed at assessing the efficacy of instruction on state mandated learning objectives in use word analysis strategies and information resources and demonstrate comprehension of printed material, were used. The eighth grade test consists of forty-five multiple choice items and the eleventh grade test consists of fifty multiple choice items (<http://www.pen.k12.va.us/VDOE/Assessment>). However, the actual number of questions may vary on each administration of the test due to the need to field test some items. The test, from which data for this study were obtained, was administered in the Spring of 2005. Equating was done to ensure that all forms of the test were of equal difficulty. Every time a new test form is constructed, attempts are made to make the new form equal in difficulty to previous forms. This process was accomplished through data collected during field tests. The data collection design was Design IV procedure for common item, non-equivalent groups (Angoff, 1971). To explain this scoring procedure further, item parameters, developed using Rasch equating procedures, for all forms were on the same Rasch ability scale. People within a certain range of ability should have the same ease or difficulty in answering questions on administrations of different tests. "The parameter estimates for each form were placed on a

common metric by using the Rasch equating constant procedure. This resulted in the item parameters for *all* forms being on the same Rasch ability scale.”¹

Sample

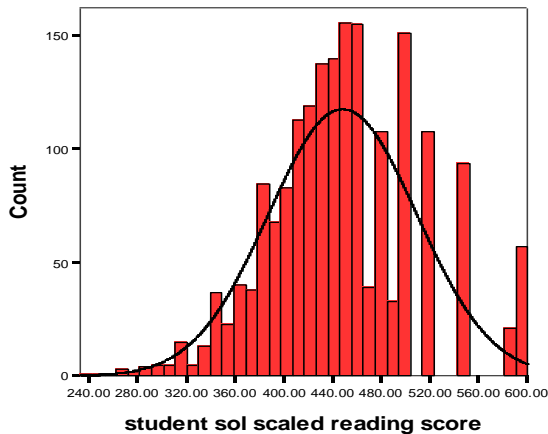
The sample of teachers was drawn from five high schools and eight middle schools located in an urban school district in southeastern Virginia. Twenty-seven of the 178 eighth grade and eleventh grade English teachers volunteered to participate in the study. The study sampled eighth grade and eleventh grade teachers because Virginia assesses student performance in English/Reading at these grade levels. Because all students are required to take the state’s standardized achievement test, it was selected as the measure of student performance. All of the teachers in the sample were licensed and certified to teach English in the Commonwealth of Virginia. Only four of the teachers had received their teacher licensure through alternative means. Thirty percent of the teachers had earned a Master’s degree in education or in English. On average, the teachers had a little over twelve years of teaching experience.

The sample of students included 1,861 students who were enrolled in eighth grade and eleventh grade in the spring of 2005. The sample consisted of 853 males (46%) and 1,008 females (54%), and was ethnically diverse. Slightly more than half (55%) were African American, approximately a third were Caucasian (35%), and a small proportion were Latino (3%), Asian-American (3%) or classified as another ethnic group (4%). Seventy-nine percent of the students in the sample were eighth graders (1,475) and 21 percent (386) were eleventh graders. Sixty-five percent (1,216) of the sample was enrolled in regular English classes, 30 percent (566) was enrolled in honors English, and a small percentage were taking remedial English (79, 4%).

The sample population of students in this study had an average SOL; English, Reading score of 447.35. The minimum score was 233 and the maximum score was 600. The passing score for this measure is 400; however, students who score above 500 are considered to have “passed advance.” The standard deviation was 60.88. The scores are skewed as illustrated by Figure 2.

¹ For a complete discussion of how the Virginia Standards of Learning are scored, administered and equated please refer to the Virginia Standards of Learning Assessments: Technical Report available at www.pen.k12.va.us/VDOE/Assessment.

Figure 2. Histogram of Students' SOL; Reading, English Scores



For the eighth grade students in the sample population seventy-eight percent (78%) passed the VSOL English/Reading test. For the eleventh grade students in the sample population ninety-four percent (94%) passed the VSOL English/Reading test. For the district as a whole, the eighth grade students had a pass rate of seventy-four percent (74%). The eleventh grade students had a pass rate of ninety percent (90%). Thus, these differences indicate that the sample population outperformed the total population in both the eleventh and eighth grades.

Analysis

A hierarchical multiple regression analysis was performed on the predictor variables and the outcome variables and VSOL English/Reading test to test the relationship between the. Hierarchical regression was used for the analysis because the theory linking the variables of interest requires that variables be placed in the regression equation in a specific order rather than allowing the statistical program to determine the order. The regression equation then had the Teacher Interpersonal Self-Efficacy data added to see if more variance could be accounted for, and the data on teacher expectations for students was added. A regression analysis was conducted to examine possible sub-group differences for students based on their ethnicity and their academic level placement (i.e. regular English, honors, remedial). to look for a relationship between the VSOL, English/Reading scores and the teachers' empathy.

Results and Discussion

The analysis of the teacher data indicate that a teacher's empathy is positively correlated ($p < .01$) to a teacher's years of teaching experience and a teacher's expectation for students. A teacher's empathy is negatively correlated ($p < .01$) to the type of degree they have (i.e. bachelors, masters, etc.), certification and their self-efficacy beliefs about ability to manage classroom behavior. A teacher's belief in her ability to manage classroom behavior is positively correlated ($p < .01$) to years of teaching experience and expectations for students. A teacher's belief in his ability to manage classroom behavior is negatively correlated ($p < .01$) to the type of degree, being regularly certified and teacher empathy. A teacher's expectation for his students is positively correlated ($p < .01$) to years of teaching experience, their type of degree, being

regularly certified, teacher empathy and a teacher's belief in his ability to manage classroom behavior. A teacher's expectation for his students is negatively correlated ($p < .01$) to the teacher's ethnicity. For the twenty-six teachers in this study, their empathy was positively correlated, although it was a low correlation, with their years of teaching experience, thus the more years of teaching the higher the empathy level. While a few of the other characteristics were significantly correlated statistically with empathy, none was above .30. This finding is important because it helps to illustrate that the longer teachers teach, the better able they are to understand their students' perspectives.

Table 1 provides the ANOVA for Teacher Empathy and Course Type. The data indicate a statistically significant difference ($p < .01$) between the three levels of courses offered, remedial, regular and honors. A Bonferroni Post Hoc test was performed which indicated that the mean difference between the remedial teachers' empathy and the regular and honors teachers' empathy was significant ($p < .01$). The mean difference between the regular and honors teachers' empathy was not significant.

Table 1

Means, Standard Deviations and One-Way Analyses of Variance for Teacher Empathy on Course Type with Effect Size between Regular and Workshop and Honors and Workshop

Variable	Teacher Empathy		ANOVA	
	<u>M</u>	<u>SD</u>	<u>F</u> (2, 1858)	<u>η^2</u>
Workshop	4.12	.65	6.48**	
Regular	3.90	.54		.41
Honors	3.89	.52		.44

Note: ** $p < .01$

The effect sizes for these differences, while not large, was .41 for teachers teaching regular sections of English, compared to those working with workshop students and .44 for teachers working with honor students, again compared to the workshop teachers. The moderate effect size does indicate that there is a practical difference between the empathy levels for the teachers working with the different type of students. It is an encouraging sign that teachers who are working with the students who struggle the most possess a higher mean level of empathy. It is possible that because these teachers are able to indicate to their students that they understand their perspectives, they are able to help almost half (39 out of 79) of their students pass the VSOL, English/Reading test.

Effect of Teacher Empathy

In terms of the first and second question, what is the effect of teacher empathy on students' academic performance and is the effect on student academic performance consistent across all ethnic groups, the following results were found. The type of degree a teacher holds contributes negatively to the variance in test scores as indicated by the negative beta coefficient (-3.14; $p < .01$). The data indicate that the teacher obtaining a higher degree negatively impacts a student's

score for all of the students. The data indicate that teacher empathy is statistically significant for Caucasian students although it contributes negatively to the variance in test scores (-16.61; $p < .01$). Additionally, for Caucasian students the relationship between teacher empathy and the SOL scores contributes as much to the variance in SOL scores as the years of teaching experience, the degree type and whether the teacher received their certification through a regular certification program. Empathy is not statistically significant for African-American students in the sample, nor is it statistically significant for the students in the sample regardless of ethnicity.

The final question of interest to this study was whether the effect on teacher empathy on student academic performance was consistent across academic ability groups. Here the analysis indicates that, for the students enrolled in a regular section of English, years of teaching experience, degree type of the teacher and being regularly certified are statistically significant ($p < .01$). The teachers' self-efficacy beliefs and their expectations for students are also statistically significant ($p < .05$). For the students in the sample enrolled in an honors section of English, years of teaching experience, degree type of the teacher and being regularly certified are statistically significant ($p < .05$). The teachers' expectations and teacher empathy are both statistically significant ($p < .01$). Further, teacher empathy is making the largest contribution to the R^2 (.03; $p < .01$) change. For students enrolled in remedial classes, none of the constructs are making statistically significant contributions to the R^2 change.

The analysis does not indicate that empathy is related to student performance. There are a number of reasons why no association was found. The study had a number of limitations. The first was the method and instrument used to measure empathy. Responses on self reported measures are affected by respondents' feelings about what is socially acceptable. This often affects the variance in responses. The amount of variance on the Empathy scale was small. Also, the student sample was fairly high performing since the vast majority of the sample population passed the test; thus, the amount of variance on the student data was small. Additionally, since the sample population out performed the population as a whole (70% vs. 74% for the 8th graders and 90% vs. 94% for 11th graders), it is possible that the high level of empathy for the teacher sample was a contributing factor. Finally, the measure of achievement used may not be influenced by the teacher variables that previous research studies indicate impact student achievement. By their nature standardized achievement tests may not be as sensitive a measure as needed for the purposes of this study. Other student outcomes, such as level of effort, might be better outcome measures.

When narrowly defining empathy, which is considered an aspect of caring, the small piece of it measured for this study did not make a difference in student achievement as measured by the VSOL, English/Reading test. Other constructs that have been shown repeatedly to make a difference in student achievement also are not making much of a contribution to the variance in the students' scores. It may be an issue centered on the student achievement measure. In an attempt to make school systems accountable for student learning, policy makers have demanded objective measures of achievement. Standardized achievement tests like the VSOL, English/Reading test may not be appropriate for assessing the impact of teacher characteristics on student learning because they are designed to measure instructional effectiveness and presentation of specific curriculum content. These measures may not be influenced by teacher characteristics because they provide results for a very narrow understanding of education. They

are more reflective of the training students receive in a specific content area rather than a deep appreciation for the content in terms of how it helps the students understand themselves and the world in which they live.

Conclusions

This study attempted to ascertain the relationship between teacher empathy and VSOL, English/Reading scores for eighth and eleventh grade students. It did not find a relationship between the standardized test scores and teacher empathy. Teacher characteristics which in past research studies have had a relationship to test scores, such as years of experience and self-efficacy beliefs about managing classroom behavior, also did not have a relationship to the VSOL, Reading/English scores. This fact created some consternation in terms of why this might be the case. While the possible threats to the measurement of teacher empathy are reasons for why the findings were non-supportive of the research hypotheses, the other measures were not subject to those same threats (i.e. years of experience, self-efficacy beliefs, degree attainment, etc.). The small teacher sample does not make it possible to conclude definitively that the VSOL, English/Reading test is or is not a measure that is influenced by these teacher traits.

Though the study's findings did not support the expected connection between teacher empathy and student achievement, the difference in the percentage of students who passed in the district and the percentage of students who passed in the sample population may be attributable to the high level of empathy of the teacher sample. The eighth grade African-American students in the district had a pass rate of seventy percent (70%), and the eighth grade African-American students in the sample population had a pass rate of seventy-nine percent (79%). The eleventh grade African-American students in the district had a pass rate of seventy-eight percent (78%), and the eleventh grade African-American students in the sample population had a pass rate of eighty-eight percent (88%). This finding may be practically significant for the district if they are concerned with finding ways to close the achievement gap between their Caucasian and African-American students. With the increasing disparity between the teacher population and the student population for the nation as a whole, teacher empathy needs to continue to be studied in terms of its ability to affect student achievement. Future studies should attempt to avoid the limitations of this study. Special attention should be placed on obtaining a more varied sample of teachers on the construct of interest. Additionally, it would be recommended that more than one measure of student achievement be used.

Empathy, as operationalized and measured for this study, did not contribute to the variance in the test scores of diverse students in practically significant ways. However, it is important to note that teachers who work with students in remedial sections of English eight and eleven had higher mean empathy scores than those working with students in honor and regular sections of English. This finding seems to illustrate the reciprocal nature of the relationship between students and teachers because teachers working with these types of students may be better able to understand their students' perspectives. As a classroom teacher and a researcher, I still believe that students need to believe their teachers care about them and their academic progress. The qualitative research and the anecdotal findings are too strong to indicate otherwise.

The fact that the research hypotheses were not proven should not dissuade researchers from continuing to explore and research the connection between caring and academic achievement. Noddings (1992, 1995, 2002) argues that even the meager success of academic achievement can not be attained if students do not feel cared for. We have a responsibility to ensure that all students in our nation's public school system receive the type of education that will prepare them to become who ever and what ever they so desire. Students are entering a world that is becoming extremely complex and competitive. It is not that the tests in themselves are problematic. Policy makers have the right to require that students can prove themselves trained to accomplish basic reading and writing tasks. However, when policy makers place so many negative consequences on schools and students who are unable to pass these tests, it promotes teachers and administrators to solely focus on helping the students pass these tests. For students who struggle to pass these tests, it is understandable that schools may inadvertently become so caught up in getting the students to pass that they lose sight of the overarching goals of education.

References

- Angoff, W. H. (1971). *Educational Measurement 2nd edition*. Washington, DC: American Council on Education.
- Agresti, A. & Finlay, B. (1997). *Statistical methods for the social sciences* (3rd ed.). Upper Saddle River: Prentice Hall.
- Batson, C.D., Fultz, J., & Schoenrade, P.A. (1987). Adults' emotional reactions to the distress of others. In N. Eisenberg & J. Strayer (Eds.), *Empathy and its development* (pp.163-184). Cambridge: Cambridge.
- Coffman, S. L. (1981). Empathy as a relevant instructor variable in the experiential classroom. *Group & Organization Studies*, 6(1), 114-120.
- Constantine, M. G. & Gainor, K. A. (2001). Emotional intelligence and empathy: Their relation to multi-cultural counseling knowledge and awareness. *Professional School Counseling*, 5(2),131-137.
- Darling-Hammond, L. (2000). How teacher education matters. *Journal of Teacher Education*, 51(3).
- Davis, C.M. (1990, November). What is empathy, and can empathy be taught? *Physical Therapy*, 70(11), 707.
- Davis, M. H. (1979). Individual differences in empathy: A multidimensional approach (Doctoral dissertation, University of Texas, Austin, 1979). *Dissertation Abstracts International*, 40, 07B.
- Demos, V. (1984). Empathy and affect: Reflections on infant experience. In J. Lichtenberg, M. Bornstein & D. Silver (Eds.), *Empathy II* (pp. 9-34). Hillsdale, NJ: Erlbaum.
- Emmer, E. T., & Hickman, J. (1991). Teacher efficacy in classroom management and discipline.

Educational and Psychological Measurement, 51, 755-765.

Everding, H. E. & Huffaker, L. A. (1998). Educating adults for empathy: Implications of cognitive role-taking and identity formation. *Religious Education*, 93(4), 413-430.

Feldstein, J. C. & Gladstein, G. A. (1980). A comparison of the construct validities of four measures of empathy. *Measurement and Evaluation in Guidance*, 13(1), 49-57.

Fowler, F. C. (2004). *Policy studies for educational leaders: An introduction* (3rd ed.). Upper Saddle River, NJ: Pearson Education.

Gay, G. & Howard, T. C. (2000). Multicultural teacher education in the 21st century. *Teacher Educator*, 36(1), 1-16.

Gordon, G. L. (1999). Teacher talent and urban schools [Electronic version] *Phi Delta Kappan*, 81(4), 304.

Gottfredson, D. C., Marciniak, E. M., Birdseye, A. T., & Gottfredson, G. D. (1995). Increasing teacher expectations for student achievement. *The Journal of Educational Research*, 88(3), 155-163.

Harris, M. J. & Rosenthal, R. (1985). Mediation of interpersonal expectancy effects: 31 meta analyses. *Psychological Bulletin*, 97(3) 363-386.

Ickes, W. (1997). Introduction. In W. Ickes (Ed.). *Empathic Accuracy*, (pp. 1-16). New York, NY: Guilford Press.

Jussim, L. & Eccles, J. S. (1992). Teacher expectations II: Construction and reflection on student achievement. *Journal of Personality and Social Psychology*, 63(6), 947-961.

Kuklinski, M. R. & Weinstein, R. S. (2001). Classroom and developmental differences in a path model of teacher expectancy effects. *Child Development*, 72(5), 1554-1578.

Lanning, K. (1991). *Consistency, Scalability, and Personality Measurement*. New York, NY: Springer-Verlag.

Legislative Office of Education Oversight (1997). *Availability of minority teachers* (Report No. SP037-417). East Lansing, MI: National Center for Research on Teacher Learning. (ERIC Document Reproduction Service No. ED409902).

Macarov, D. (1978). Empathy: The charismatic chimera. *Journal of Education for Social Work*, 14(3), 86-91.

McAllister, G. & Irvine, J. J. (2002). The role of empathy in teaching culturally diverse students: A qualitative study of teachers' beliefs. *Journal of Teacher Education*, 53(5), 433.

- Metz, M. H. (1990). How social class differences shape teachers' work. In M. W. Mclaughlin, J. E. Talbert, & N. Bascia (Eds.), *The context of teaching in secondary schools: Teachers' Realities* pp. 40-107). New York, NY: Teachers College Press
- Noblit, G. W., Rogers, D. L., & McCadden, B. M. (1995). In the meantime: The possibilities of caring. *Phi Delta Kappan*, 76(9), 680. Retrieved from <http://pdkintl.org/publications/kappan/>
- Noddings, N. (1992). *The challenge to care in schools*. New York: Teachers College Press.
- Noddings, N. (1995). Teaching themes of care. *Phi Delta Kappan*, 76(9), 675. Retrieved from <http://pdkintl.org/publications/kappan/>
- Noddings, N. (2002). *Starting at home: caring and social policy*. Berkeley: University of California Press.
- Patterson, C. H. & Purkey, W. W. (1993). The preparation of humanistic teachers for Schools of the next century. *Journal of Humanistic Education and Development*, 31, 147-155.
- Pierce, C. (1994). Importance of classroom climate for at-risk learners. *Journal of Educational Research*, 88(1), 37-42.
- Reed, G. S. (1984). The antithetical meaning of the term 'empathy' in psychoanalytic discourse. In J. Lichtenberg, M. Bornstein, & D. Silver (Eds.), *Empathy I* (pp.7-24). Hillsdale, NJ: The Analytic Press.
- Rice, J. K. (2003). *Teacher quality: Understanding the effectiveness of teacher attributes*. Washington, D.C.: Economic Policy Institute.
- Sandven, J. (1979). Social sensitivity as a factor in the teacher process. A theoretical Discussion and an experimental contribution. *Scandinavian Journal of Educational Research*, 23(3), 131-150.
- Stotland, E., Mathews, K. E. Jr., Sherman, S. E., Hansson, R. O., & Richardson, B. Z. (1978). *Empathy, Fantasy and Helping*. Beverly Hills, CA: Sage Publications.
- Viadero, D. (2004, September 8). Declaration calls for more caring environments in schools. *Education Week*, 10.