P-12 Research Studies

A QUANTITATIVE STUDY ON LEADER BEHAVIORS AND TEACHER WELL-BEING: LOW AND HIGH SOCIOECONOMIC SCHOOLS

Jason A. Bostic, Amy N. England, and Kara Chism Samford University

Abstract

Instructional leaders of the school building influence teachers' well-being. While there have been many studies conducted regarding reasons teachers leave the classroom, very few studies focused on the differences between leader behaviors and teacher well-being. The purpose of this research study was to determine if there were statistically significant differences between leader behaviors and teacher well-being at high and low socioeconomic schools located in Alabama. The study used survey data from the *Multi-factor Leadership Questionnaire* (MLQ-5X) Instrument and the *Teacher Subjective Well-Being Questionnaire* (TSWQ) using an online Qualtrics platform. The study surveyed 46 participants in the high socioeconomic group and 44 participants in the low socioeconomic group. An independent samples *t*-test was conducted to determine if any significant differences exist between high and low socioeconomic schools regarding leader behaviors and teacher well-being. The results indicated that there was a statistically significant difference in the leader behavior between low and high socioeconomic schools but not a statistically significant difference between teacher well-being between low and high socioeconomic schools.

Keywords: leader behaviors, transformational leadership, teacher well-being, socioeconomic status, public school

Lead author's note: The authors provide permission to publish this manuscript. Correspondence concerning this article should be addressed to Jason Bostic: jbostic@samford.edu at 334-430-7779.

Introduction

The National Center for Education Statistics (NCES) (2015) reported that teachers in high-poverty schools, 75% or more students receiving free or reduced lunch, moved between schools at a rate of 12%. Meanwhile, 50% or less students receiving free or reduced lunch teachers in mid to low poverty schools and fewer left for other schools at a 6% rate. While many studies have been conducted to determine why teachers left the classroom, very few focused on the differences between leader behaviors and teacher well-being in low and high socioeconomic schools. Educators' well-being is likely to prosper in environments that embody sustainability principles (Shirley et al., 2020).

Administrators who exhibited toxic behaviors damaged organizations by increasing turnover intentions and reducing job satisfaction of personnel (Bakkal et al., 2019). Darling-Hammond et al. (2007) indicated that the lack of adequate leadership sets up both principals and educators for failure, which contributes to high attrition rates among principals and educators in lower-performing schools. Murakami et al. (2017) concluded that the school principal played a vital role in developing relationships among faculty, staff, and the school community.

Torff and Sessions (2009) mentioned that principals in high and low-performing schools saw similar deficiencies, indicating that teacher ineffectiveness varied little across schools that differed in socioeconomic status. While current research reported factors affecting student achievement in low and high socioeconomic status schools, there was not enough research to support whether leaders behave differently or if teachers feel differently in high and low socioeconomic schools. The studies did not address the differences between schools of both levels of socioeconomic status.

Problem Statement

This quantitative, comparative research study aimed to determine if there were statistically significant differences between leader behaviors and teacher well-being at high and low socioeconomic schools. It was unknown to what extent differences existed between leader behaviors and teacher well-being at different schools of varying socioeconomic statuses. This causal-comparative quantitative study provided data on whether differences existed in leader behaviors and teacher well-being at high and low socioeconomic schools.

Review of Literature

A synthesized research review of literature on leader behaviors and teacher well-being in the current educational environment addressed the underlying reasons teachers chose to stay or leave the teaching profession. Creating a supportive school climate was the school leader's responsibility (Meristo & Eisenschmidt, 2014). School leaders who fostered a community of shared ideas and experiences positively influenced teachers in the learning environment (Meristo & Eisenschmidt, 2014). When school leaders and teachers worked together to solve problems and achieve common goals, teachers felt supported, which directly impacted student achievement, teacher commitment, turnover, and collegiality (Singh & Billingsley, 1998).

Kelloway et al. (2012) stated that transformational leaders look beyond their own needs to develop long-term goals, which result in the well-being of the followers and the organization. Shamir et al. (1993) stated that theories of charismatic or transformational leadership had a

profound effect on followers. Charismatic leadership has the effect of emotional attachment to the leader on the part of the followers, emotional and motivational reaction of the followers, and improving the follower's demeanor regarding the mission presented by the leader.

Leadership skills allow leaders to be a resource for changing the workplace with their interactions (Alqahtani, 2015). Stress and emotional exhaustion were evident in most workplace environments when employees were not supported or feared being harassed or bullied by a supervisor. Authentic leadership with relationship-building strategies showed less workplace bullying (Parchment & Andrews, 2019). Leaders that did not build strong relationships with employees were found to have more workplace bullying (Parchment & Andrews, 2019).

According to Dyck (2001), toxic leadership leads to poor employee health, which in turn can increase organizations' benefit costs, absenteeism, employee withdrawal (Macklem, 2005), poor performance, and decreased collaboration (Wilson-Starks, 2003), as well as an increase in teacher turnover (Flynn, 1999). Leadership behaviors and styles influence job factors, including turnover intention, job performance, discipline, responsibility, and lack of staff (Hajdukova et al., 2015). Negative actions in the workplace environment affected the mental stability and emotional well-being of employees affected by others' actions (Humair & Ejaz, 2019).

According to Bass and Avolio (1994a), laissez-faire leadership referred to the absence or lack of leadership and was the most ineffective leadership style. In the conclusion of his study, Nielsen (2013) found a strong relationship between laissez-faire leadership and bullying in the workplace. Transformational and authentic leadership styles were found to have a lower risk of work group bullying, suggesting that leaders who were morally strong and showed compassion and concern for employees in the work environment reduced, workplace bullying (Nielsen, 2013).

School leaders played an integral role in inequities that prevented the academic achievement of students living in poverty (Fortner et al., 2021). Several studies were cited that focused on educational and social science research, poverty based on income inequity was a strong influencing factor that created obstacles for public school students regarding their social, emotional, and academic development and success and the quality of living conditions (Akom, 2011; Almy & Tooley, 2012; Berliner, 2013; Bomer et al., 2008; Johnson et al., 2018). Flint (2018) found that poverty played a huge role in perpetuating the achievement gap in math and English between students raised in low-income families and students from high-income families.

Methods

The participants included teachers from the elementary, middle, and high schools in two different school districts in Alabama. The final sample size was 90 participants- 46 from a high socioeconomic school district and 44 from a low socioeconomic school district. One school district had approximately 2,000 students across six schools with 145 teachers. This school district had 86% free and reduced lunch and represented low socioeconomic schools in the research study. School A (17 teachers), B (21 teachers), C (19 teachers), D (28 teachers), E (19 teachers), and F (42 teachers) were schooled in the research study. The second school district had approximately 4,400 students across six schools with 297 teachers. School G (32 teachers), School H (52 teachers), School I (35 teachers), School J (35 teachers), School K (75 teachers), and School L (66 teachers) were recruited as high socio-economic schools in the research study. Each school G-L had fewer than one percent of students who qualified for free or reduced lunch.

The research study used the Multifactor Leadership Questionnaire (MLQ-5X) transformational leadership subscale and the Teacher Subjective Well-being Questionnaire (TSWQ). An online questionnaire was administered using Qualtrics to a selection of teachers located in two school systems in the same state. Teachers self-reported their perception of leader behaviors and their current state of well-being at school via the questionnaire.

The TSWQ utilizes a four-point Likert scale (1=almost never, 2=sometimes, 3=often, 4=almost always) to determine overall teacher well-being. Two constructs of school connectedness and teaching efficacy can be determined using this instrument by adding every other question for a subtotal within the full scale. This survey supplied information regarding teacher well-being and was used to determine if there were differences between high and low socioeconomic schools regarding teacher well-being.

The first research question considered high and low socioeconomic schools' differences in transformational leadership characteristics. The second research question involved the differences in high and low socioeconomic schools on key components of well-being, including school connectedness and teaching efficacy.

The MLQ-5X was used to determine the level of leader behaviors that exhibit transformational leadership, transactional leadership, passive avoidant behavior, and leadership outcomes. For this study, the researchers focused on transformational leadership behaviors and the differences between teacher perceptions at low and high-socioeconomic schools. This instrument used a Likert scale (0=Not at all, 1=once in a while, 2=sometimes, 3=fairly often, 4=frequently, if not always) to determine leadership styles when rated by followers. Idealized influence or attributes (II or IA), inspirational motivation (IM), intellectual stimulation (IS), and individualized consideration (IC) are measured on the MLQ-5X short form to demonstrate the impact of this leadership style on the organizational structure. A confirmatory factor analysis (CFA) was conducted to ensure that the construct reliabilities were consistent. These reliabilities ranged from 0.63 to 0.90 for the complete six-factor MLQ-5X. None of the constructs II, IC, IM, IS, or IC were measured as less than 0.70. The goodness of fit was .84, which led to a "reasonable fit" to the data in the Confirmatory Factor Analysis for the MLQ-5X (Muenjohn & Armstrong, 2008).

Table 1 *Transformational Leadership Characteristics*

Characteristics	Question numbers
Idealized Influence (Attributes)- IA	10, 18, 21, & 25
Idealized Influence (Behaviors)- IB	6, 14, 23, & 34
Inspirational Motivation-I IM	9, 13, 26, & 36
Intellectual Stimulation- IS	2, 8, 30, & 32
Individual Consideration- IC	15, 19, 29, & 31

The researchers, in employing is comparative quantitative design, determined if there were differences between leader behaviors and teacher well-being in low and high-socioeconomic schools. Data were collected from 90 teachers. The SPSS v. 28 was used to analyze the data descriptively and inferentially (via independent *t*-tests for two research questions). The first research question addressed the differences between the independent variable of school status (low

or high socioeconomic status) and the leader behaviors in the ratings of teachers' perceptions. The second research question addressed the differences between the independent variable of school status (low or high socioeconomic status) and the overall well-being of teachers.

The independent variable of school status represented whether a school was categorized as low socioeconomic or high socioeconomic. The operational level of the independent variable was socioeconomic status, where schools have 75% or higher percentage of students who qualified for free or reduced lunch were considered low socioeconomic status. Schools with 25% or fewer students who qualified for free and reduced lunch were considered high socioeconomic status. The measurement level of the independent variable was nominal.

The dependent variables came from the self-concept theory, and characteristics of transformational leadership focused on the leader's behaviors. Conceptually, leaders' tone and support for followers, ability to communicate the mission and vision, and school culture and climate influenced followers' feelings and perceptions of the school environment. The operational level of the dependent variables was transformational leadership characteristics and how highly teachers rated their well-being. The measurement level of the dependent variables was the score derived from the transformational leadership scale of the (MLQ-5X and overall teacher well-being from the TSWQ.

Limitations/Delimitations

The researchers recognized that the sample size was small, so the generalizability of the findings and conclusions was limited. The reason for the small sample size is that many participants, from both high and low socioeconomic schools, did not complete the survey in its entirety. The survey was administered a few weeks after the new school year began. Many teachers were busy setting routines, getting to know their new students and families, and completing beginning-of-the-year items for their schools. This may have caused some teachers not to participate.

Results

In testing null hypothesis #1 (there is no statistically significant differences in leader behaviors between high and low socioeconomic schools exist), the researchers ran the Shapiro-Wilk test and a Q-Q plot to test for normality of the data that found a significance value of less than .05 indicating that there was not a normal distribution of data violating the assumption of normality. To test the assumption of homogeneity of variance, the researchers used Levene's Test for Equality of Variances. Based on Levene's Test for Equality of Variances, the assumption of homogeneity of variances was not violated, F(.000) = .997, p = .039. An alpha of .05 was used to interpret this result. Equal variances can be assumed.

The researchers used descriptive statistics for the first research question: Are there differences in perceived leader behaviors between high and low socioeconomic schools? The independent variable was socioeconomic status. Transformational Leadership subscale on the MLQ-5X had Cronbach's $\alpha = .79$ in previous research studies in MLQ Manual compared to the Cronbach's $\alpha = .976$ found by the researchers in this study. Due to the violation of the normality assumption, a Mann-Whitney U was conducted to determine if significance was found. A significance level of less than .05 was found on the transformational leadership behavior data confirming the significance found in the independent samples *t*-test. The effect size according to

Cohen's *d* result of 1.16. indicates that the difference between the high and low socioeconomic groups was significant.

Table 2Transformational Leadership Behavior- Mann-Whitney U

1 ransjormationat Leaders	Asymp. sig. (2-tailed)
Overall transformational leadership	.010

Then, an independent Mann Whitney t-test to analyze null hypothesis 2. (There is no statistically significant differences exist between self-reported teacher well-being in high and low socioeconomic schools.) The researchers ran the Shapiro-Wilk test and a Q-Q plot to test for normality of the data that found a significance value of less than .05 indicating that there was not a normal distribution of data violating the assumption of normality. The researcher used Levene's Test for Equality of Variances to test the assumption of homogeneity of variance. Based on Levene's Test for Equality of Variances, the assumption of homogeneity of variances was not violated, F(1.636) = .204, p = .435. An alpha of .05 was used to interpret this result. Equal variances can be assumed.

Due to the violation of the normality assumption, a Mann-Whitney U was conducted to determine if significance was found. A significance level of more than .05 was found on the teacher well-being data, confirming the lack of significance in the independent samples *t*-test. The null hypothesis was confirmed as there are no statistically significant differences in teacher well-being between high and low socioeconomic schools.

Table 3 *Group Statistics*

	Group size	TL Mean	SD	TW Mean	SD	
Low socioeconomic	44	2.88	1.14	3.39	.64	
High socioeconomic	46	2.37	1.17	3.29	.55	
Total group	90	2.62	1.18	3.34	.59	

Recommendations for Future Research and Practice

In this described study, the researchers found that the data showed a difference in leader behavior between high and low socioeconomic schools, but it did not show a difference in the well-being of teachers. When creating true equity, the disposition of the educational leaders may play an important role in developing, fostering, and enhancing the socially-just transformation of the school culture in attending to the needs of children living in poverty (Fortner et al., 2021). The following is a list of recommendations for future research concerning leader behavior and teacher well-being in low and high-socioeconomic schools.

The researchers recommend quantitative research as the appropriate choice for this study. For example, interview questions related to transformational leadership would allow the researchers to see feelings, and behaviors, and hear personal experiences from the participants. The qualitative portion seeks to understand the social issues by answering the study's how, why, and what (Hesse-Biber, 2017). Conduct a comparison study of transformational leadership classes within an administrator preparation program at the university level with administrator preparation programs that do not include transformational leadership instruction.

Conclusions

The findings of this study have contributed new information regarding differences in leader behaviors and teacher well-being based on the socioeconomic status of their schools that were not discovered in the literature review. Leadership and job satisfaction are the basic elements that determine how an organization can reach its goals (Bakkal et al., 2019). Leadership behaviors influence job satisfaction, and leadership style influences, factors such as turnover intention and job performance (Hajdukova et al., 2015). Leaders should be available to observe students in the learning environment and talk with students about what they are learning. As a follow-up, leaders need to meet with teachers to collaboratively reflect on student observations to determine which areas teachers feel need more support. Instructional leadership and distributed leadership are significantly and directly associated with teacher job satisfaction and self-efficacy (Liu et al., 2021). Teachers feel valued, appreciated, and important when included in conversations regarding achievement and effective practices.

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