# Social Justice Leadership of Educational Leaders in Appalachia Kentucky: Why Context Matters

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*Critical consciousness is a crucial component of social justice leadership. This quantitative research focused on the perceptions of social justice leadership of principals and assistant principals in Central Appalachia as measured by the Social Justice Leadership Questionnaire (SJQ2). The research was inspired by the theoretical framework of the International School Leadership Development Network to examine if personal (years of experience as an administrator, years living in Appalachia, and current position) and school predictor variables (Title 1 status and grade-level) affect the social justice leadership propensity of school administrators. Multiple regression analysis was utilized determine if personal and school predictor variables had any effect on the perceptions of assistant principals and principals in Appalachian counties of Kentucky. The results suggest the critical need for quantitative instruments that are more inclusive of diverse populations and contextual factors.*

*Keywords:* Critical Consciousness, Social Justice Educational Leadership, Appalachian Education, Principals and Assistant Principals

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The International School Leadership Development Network developed a conceptual framework of social justice leadership, which reveals the complexity of the context in which social justice leadership is occurring (Zhang, et al., 2018). The context of social justice leadership includes a sociocultural dimension, the school community, school specific context, socio-political discourse and the school leader's lived experience and identity (Oldham et al., 2020; Zhang et al., 2018). The extant research reveals that an educational leaders' critical consciousness of students' sociocultural and socio-political background is vital for socially just leadership (Thompson, & Catapono, 2017; Zembylas & Iasonos, 2017; Zhang, et al., 2018). According to Radd and Groslans (2018) the critical consciousness of a leader is "as an active and persistent state of awareness that consistently seeks to unearth the taken-for-granted, and examine it for the ways that it masks institutionalized inequality, privilege, and oppression" (p. 414).

The extant literature emphasizes the influence of the school's context on an administrator's decisions (Li, et al., 2018; Oldham et al., 2020; Roegman, 2017). Additionally, leaders should also be introspective about their own identity and experiences and the biases and prejudices they possess (Thompson & Catapono, 2017; Zembylas & Iasonos, 2017) and how that can influence their leadership praxis (Liu et al., 2018; Oldham, et al., 2020; Roegman, 2017). According to Klar et al. (2020) context-responsive leaders "leaders demonstrated an acute sense of contextual literacy, which they utilized to both react to and proactively shape their contexts" (p. 66).

This study involves principals and assistant principals of Kentucky schools in Appalachian[1] counties. Appalachian people have been stereotyped as "uneducated hillbillies and mountain people" (Chavira-Prado, 2018, p. 9) and have experienced a great deal of poverty throughout the region's history. Appalachia's long history of economic woes (ARC, 2019b), deficit stereotypes (Chavira-Prado, 2018), and higher than the average rate of children living in poverty (Wright et al., 2016) constitutes it as a context that could create insight into how the personal experiences of school leaders and the school context affect the perceptions of social justice leadership of school administrators.

## Literature Review

Since the Great Recession of 2008, 1 in 4 children in rural communities in the United States is living in poverty (USDA, 2019). This study focuses on the context of Appalachia[2] where the poverty rate is 16.3% compared to the national average of 14.6% (Appalachian Regional Commission, 2019b) and 80 of 420 counties in Appalachia are designated as economically distressed by the Appalachian Regional Commission (n.d. b) with the majority of these being in Central Appalachia (Kentucky, West Virginia, Virginia, and Tennessee). According to Wright, Cunningham, and Stangle (2016), "In West Virginia and Kentucky in particular, 1 in every 10 children live in extreme poverty or below 50 percent of the poverty line" (p. 1). Minority students in Appalachia, as throughout the United States, are also identified as a gap population (Wrigh, et al., 2016). Although the majority of Appalachia is white, the minority population in the region has grown from 16.4% in 2010 to 18.6% in 2017 (Appalachian Regional Commission, 2019a), and ultimately translates to growth of minorities within Appalachian school districts.

[1] Appalachia is a 205,000-square-mile region that follows the spine of the Appalachian Mountains from southern New York to northern Mississippi. It includes all of West Virginia and parts of 12 other states: Alabama, Georgia, Kentucky, Maryland, Mississippi, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, and Virginia" (Appalachian Regional Commission, n.d. a, para. 1).

## Critical Consciousness and the Importance of Context

Paulo Freire (2000), conceived critical consciousness as "learning to perceive social, political, and economic contradictions, and to take actions against the oppressive elements of reality" (p. 35). Educational leaders must be acutely aware of the social, political, and economic structures which create inequalities within their schools and their communities (Brown & Evans, 2017; Dodd, 2017; Mattheis, 2017). Additionally, critical consciousness includes understanding and confronting biases, prejudices, and deficit thinking (Bertand & Rodela, 2017; Thompson & Catapono, 2017). The critical consciousness of school administrators is crucial because the effective implementation of equity and social justice in schools will be ineffective without the practice of such skills by leadership (Brooks et al., 2017).

Critical consciousness is a deliberate act of a leader to better educate themselves about the lived experiences of students and families so that they can ensure an education that will meet the unique needs of each pupil (Feng & Chen, 2018; Zang et al., 2018). Leaders with an awareness that students' social habitus affects their perceptions of their school, community, and the opportunities they believe are achievable (Klar et al., 2020). Thus, they are not only aware of these inequalities, but they also model their behaviors and the structures of their schools to ensure the equitable treatment of all students. Research has shown that educational leaders are the most effective when they demonstrate critical consciousness and behave according to the needs of their students within their context (Zembylas & Iasonos, 2017).

The contexts of schools are shown by empirical research to have a strong effect on school outcomes include the socio-economic status of the student body, ethnic and social homogeneity, the dominant political and social ideologies of the community, and geographic location (Klar et. al., 2020; Liu et al., 2018; Oldham et al. 2020; Roegman, 2017). Klar et al. (2020), in their study of two high-needs schools in the Southeastern United States, concluded that those schools were successful because principals exhibited contextual literacy and modified their knowledge, skills, and dispositions of leadership to their contexts. Roegman (2017), in her study of Superintendents, determined that studying "the overlapping contexts as a framework to look at similar situations through different lenses can further expand our understandings of what equity-focused leadership looks like" (p. 26).

In their study of distributed leadership, Liu et al. (2018) examined various school and principal characteristics in their data analysis. They discovered that the employment status of principals and the school's funding resources were strong predictors of stakeholder involvement in schools (Liu et al., 2018). In their qualitative study of three U.S. principals, Oldham et al. (2020) found that principals named the community context as the main guidance of their practice as social justice leaders. Though there is an acknowledgement of the relationship between leadership and context, there are few extant research studies on social justice leadership praxis and the specific context of school administrators and their schools (Albritton et al. 2017; Klar et al., 2020; Oldham et al. 2020).Additionally, there are calls for more quantitative studies of social justice leaders and contextual factors (Oldham, 2020; Zhang et al., 2018) this study seeks to contribute to this body of literature.

## Theoretical Framework

According to the International School Leadership Development Network (ISLDN) framework, to be a socially just leader, a person must be critically conscious of themselves as a product of their

context and personal experiences (Hernandez & Marshall, 2017; International School Leadership Development Network, 2013). Second, school leaders enacting social justice practices have an awareness of the effect of the complex contextual influences on their students, including sociocultural and socio-political factors (Feng & Chen, 2018; ISLDN, 2013; Zembylas & Iasonos, 2017). Third, as explained by Zemylas and Iasonos (2017), "Social justice leadership recognizes the important role leaders play in school development and transformation to benefit marginalized students" (p. 297). Furthermore, the ISLDN framework shows the leader can have a direct influence on two factors: the school community and school-specific context, which ultimately influences the greater context of the school (International School Leadership Development Network, 2013).

## Purpose of the Study

The purpose of this study is to analyze the conditional relationship between contextual factors and the perception of social justice leadership of Appalachian Kentucky educational leaders. The research questions addressed by this study are:

1. Which of the predictor variables of school context (Title I status of the school, the grade-level of school) is influential in the perception of a school administrator's social justice leadership?
2. Which of the predictor variables of personal experience (years living in Appalachia, years of experience in leadership, and position is influential in the perception of a school administrator's social justice leadership?

## Method

In order to analyze the relationship between perceived social justice tendencies of educational leaders in Appalachia Kentucky and contextual factors, a quantitative approach was utilized. The Social Justice Leadership Questionnaire (SJQ2) served as the basis of the discernment of social justice leadership tendencies. Additional questions regarding other predictor variables (Title I status of the school, the grade-level of school, years living in Appalachia, years of experience in leadership, and position) were included to better understand the context of each respondent.

### Participants

The population of focus in the study was principals and assistant principals of public schools within Appalachia Kentucky (Table 1). Kentucky is located in Central Appalachia, which is considered the most impoverished and most rural subsection of Appalachia (ARC, 2019b). The Appalachian counties in Kentucky range from rural to suburban (specifically, those counties near the Metropolitan areas of Lexington, Kentucky, and Huntington, West Virginia), which reflects two-thirds of the region considered Appalachia (Pollard & Jacobsen, 2017). The school districts in the region range in size from 311 to 11,821 students and vary from county-wide districts to Independent school districts (Kentucky Department of Education, 2019).

**Table 1**
*Research Participants*

| | | |
|---|---|---|
| **Job Title** | | |
| | Principal | 56 |
| | Assistant Principal | 42 |
| **Years of Administrative Experience** | | |
| | 0-5 years | 48 |
| | 6-10 years | 25 |
| | 11-15 years | 16 |
| | 16-20 years | 4 |
| | 21+ years | 5 |
| **Years lived in Appalachia** | | |
| | 0-10 years | 9 |
| | 11-20 years | 6 |
| | 21-30 years | 5 |
| | 31-40 years | 17 |
| | 40+ years | 61 |
| **Title 1 Eligibility** | | |
| | Title 1 and funded | 80 |
| | Title 1 and not funded | 9 |
| | Not Title 1 eligible | 8 |
| | Unknown Title 1 eligibility | 1 |
| **Grade-level of School** | | |
| | Elementary (K-5/6) | 27 |
| | Middle school (6/7-8) | 20 |
| | High School | 29 |
| | P-8th | 9 |
| | P-12 | 3 |
| | other grade combinations | 10 |
| **Total Number of Participants** | | **98** |

## Instrument

Zhang et al. (2018) developed the SJQ2 from the ISLDN framework. They suggest that their instrument be implemented in a variety of school contexts to measure the perceptions of social justice leadership (Zhang et al., 2018). The Social Justice Leadership Questionnaire (SJQ2), is a series of 32 questions that were derived from a 74-question survey that Zhang et al. (2018) originally conceived but found to contain a lack of internal validity (Table 2). The subsections of the questionnaire are School Leader (SL), School Context (SC), Community Context (CC), and Policy Context (PC) (Zhang et al., 2018).

**Table 2**

*Items in the SJQ2*

| Section | Items |
|---|---|
| SL | 1. To me, social justice means taking care of the individual.<br>2. To me, social justice means providing opportunities to those who have been deprived of.<br>3. I am a person of strong persistent.<br>4. Education is to help kids find and follow their passions.<br>5. I have mentors who have influenced my growth as a principal.<br>6. I always think about how to give back to the community through education.<br>7. My family traditions shaped my attitudes toward education.<br>8. Being a principal takes a lot of my time and energy.<br>9. In my practice as principal, I must believe in kids and people.<br>10. I am passionate about my job.<br>11. The purpose of education is to build the character of my students.<br>12. I possess a high emotional intelligence.<br>13. I try to support people no matter who they are. |
| **SC** | 1. My staff and I have similar educational beliefs.*<br>2. Drug abuse is an issue among my students.<br>3. Everyone in my school recognized and believes in the mission of the school.*<br>4. My staff have good personal health and well–being.*<br>5. Alcohol abuse is an issue among my students.<br>6. I recognize the needs of my students.*<br>7. Bulling is a serious issue at my school.<br>8. Providing a lunch program is irrelevant to social justice.* |
| **CC** | 1. Household poverty is quite an issue in the community of my school.<br>2. The community served by the school is a transient one.<br>3. Criminality and/or street violence is an issue in the community.<br>4. Drug abuse, alcohol addiction, family violence, and/or mental health issues are common in the community. |
| **PC** | 1. The Department of Education, Early Learning and Culture is supportive in my operation of the school.<br>2. Large–scale assessment is helpful in evaluating educational quality of schools.<br>3. The Department of Education, Early Learning and Culture does not support me in my position as a principal.*<br>4. Most people I deal with in the Department of Education, Early Learning and Culture are not accessible.*<br>5. All the costs on large–scale assessment are not worthwhile.*<br>6. I feel that most educational policies on PEI are relevant to my school.<br>7. Large–scale assessment improved the quality of education in my school. |

*Note*. Items with * are revise-scored.

The first portion of the survey emailed to participants requested the following demographic

information: years they have lived in Appalachia, years of experience as a principal or assistant principal, and their current position. The second set of demographic questions involved information about the school they serve in: Title I status and the grade-level of the school they serve. The third portion participants completed was the Social Justice Questionnaire (SJQ2) using a six-point Likert-scale (6 - strongly agree to 1- strongly disagree).

## Data Analysis

Multiple linear regression analyses were conducted to answer the research questions of this study. Prior to conducting a multiple regression analysis, because the SJQ2 contains subsections, Cronbach's Alpha was performed to confirm internal consistency resulting in the following measurements: School Leader (SL) ($\alpha$ = .75), School Context (SC) ($\alpha$ = .47), Community Context (CC) ($\alpha$ = .57), Policy Context (PC) ($\alpha$ = .71).

To further investigate the potential cause for a low Cronbach's Alpha for the subscale of School Context, a Principal Component Analysis (Jolliffe & Cadima, 2016) was conducted in Stata. The analysis revealed that three components explained most correlations between questions. Initial eigen values indicated that the three components explained 26%, 24%, and 14% of variance respectfully. The Varimax rotation revealed component 1 contained survey items SC2, SC5, SC7. Cronbach's Alpha was reevaluated on SC2, SC5, and SC7 which resulted in a Cronbach's Alpha of ($\alpha$ = .70). The Varimax rotation revealed component 2 contained survey items SC1, SC3, SC4, SC6 with a Cronbach's Alpha of ($\alpha$ = .65) so these items were discarded from the analysis to reduce the likelihood of a Type I error. Component 3, according to the varimax rotation was comprised of SC6, SC7, and SC8 and since SC6 and SC7 are cross-loaded on component 1 and 2 at > 75%, component 3 items will be removed from the data analysis.

A principal component analysis was also conducted for Community Context and revealed that all questions were correlated with one component. Component one was comprised of all 4 items of the CC subsection reported on a 6-point Likert scale that explained 43% of the variance with factor loadings from .628 to .673. Thus, data from the subsection of Community Context was removed from the data analysis because a more robust Cronbach's Alpha could not be accomplished.

### Analysis of Research Question One

The first research question to be addressed in this study concentrated on two school context predictor variables. Multiple linear regression was utilized to answer the research question and determine if the null hypothesis would be accepted or rejected (See Table 4). Before the regression analysis, an a priori power analysis was conducted in G*Power 3 (Faul et. al, 2007) to test the regression analysis with two predictor variables, the low effect size (f 2 =.15), Alpha of .05. The result showed that the total sample size of 68 participants was required to produce a power of .80. Since this sample contains 98 participants, it will provide sufficient power to lessen the chance of rejecting the H0 when H0 is false.

For research question one, the dependent variable was administrators'' mean score on the SJQ2. The independent variables were the school context items of Title I eligibility and grade-level of the school the administrator served.

The multiple regression revealed that the model produced is not statistically significant in predicting the perceptions of these participants toward social justice leadership (Table 4), F(7, 89)

= 1.05, ***p*** = .40, R2 = .076. Thus, with 95% confidence, the null hypothesis cannot be rejected for this population. No school context variables had a significant effect on the regression equation. However, stepwise regression was conducted on Elementary and Middle School administrators because they had the two lowest p-values.

**Table 4**

*Multiple linear regression of SJQ2 scores: Title 1 eligibility and grade-level of schools*

| SJQ2 score | $\beta$ | SE | t-value | p-value | [95% Confidence] | | Sig |
|---|---|---|---|---|---|---|---|
| | | | | | LL | UL | |
| Not Title 1 eligible[a] | 0.00 | | | | | | |
| Title 1 and funded | 0.003 | 0.14 | 0.02 | 0.98 | -0.28 | 0.28 | |
| Title 1 and not funded | 0.02 | 0.17 | 0.16 | 0.87 | -0.32 | 0.37 | |
| Elementary | -0.17 | 0.21 | -0.62 | 0.54 | -0.55 | 0.29 | |
| Highschool | 0.07 | 0.21 | 0.24 | 0.81 | -0.37 | 0.47 | |
| Middle School | -0.13 | 0.22 | -0.53 | 0.60 | -0.54 | 0.31 | |
| P-12[a] | 0.00 | | | | | | |
| P-8 | 0.09 | 0.23 | 0.48 | 0.63 | -0.35 | 0.57 | |
| Other | 0.06 | 0.23 | 0.29 | 0.77 | -0.39 | 0.53 | |
| Constant | 4.65 | 0.24 | 19.13 | 0.00 | 4.17 | 5.13 | *** |

*Note*. All answers were self-reported. "Other" denotes grade-level combinations that were not offered as options listed within the survey. Significant levels: *** *p<0.01,* ** *p<0.05,* * *p<0.1*

[a] The baseline subgroups in this analysis.

Stepwise regression was conducted to find a more significant model (See Table 5). The subsequent model has significance in predicting the propensity toward social justice leadership, F(2, 94) = 3.69, ***p*** = .029, R2 = .073. An accurate prediction of SJQ2 scores can be made within this sample utilizing the following equation:

Administrators SJL propensity = $4.72 - .034(X_{elementary}) + .033(X_{middleschool})$.

**Table 5**

*Stepwise Multiple linear Regression of SJQ2 score: Elementary and Middle School administrators*

| SJQ2 score | $\beta$ | SE | t-value | p-value | 95% Confidence | | Sig |
|---|---|---|---|---|---|---|---|
| | | | | | LL | UL | |
| Elementary | -0.19 | 0.08 | -2.41 | 0.02 | -0.35 | -0.03 | ** |
| Middle School | -0.17 | 0.09 | -1.95 | 0.05 | -0.35 | 0.003 | * |
| Constant | 4.72 | 0.05 | 99.36 | 0.00 | 4.62 | 4.81 | *** |

*Note*. Significant levels: *** *p<0.01,* ** *p<0.05,* * *p<0.1;* LL – lower level; UL – upper level.

For Elementary and Middle School administrators, the null hypothesis can be rejected. With a 95% confidence, this equation can accurately predict the social justice leadership

propensity of principals and assistant principals in Appalachian, Kentucky.

Elementary is significant at the 95% confidence level, and Middle School is significant at the 90% confidence level. Those who identify as an Elementary administrator will have a .034 SD decrease in predicted SJQ2 score, with the other variables held constant. For a Middle School administrator, their SJQ2 score has .033 SD increase, when the other variables are held constant. A regression of SJQ2 scores and Elementary was conducted but was not found to be significant at the 95% confidence level, F(1, 95) = 3.47, ***p*** = .065, R2 = .04. Thus, the Middle School variable has an interaction effect on the significance of an Elementary leader's SJQ2 score.

## Analysis of Research Question Two

The second research question to be addressed in this study focused on three personal context items as independent variables: years lived in Appalachia, years of experience as an administrator, and the participants' current position. The mean scores of the SJQ2 were used as the dependent variable in this analysis. Multiple linear regression was utilized to answer the research question and determine if the null hypothesis would be accepted or rejected (See Table 6).

***Table 6***

Multiple Linear Regression of SJQ2: personal experience predictor variables

| SJQ2 | Coef. | SE | t-value | p-value | 95% Confidence | | Sig |
|---|---|---|---|---|---|---|---|
| | | | | | LL | UL | |
| position | -0.17 | 0.08 | -2.19 | 0.03 | -0.32 | -0.02 | ** |
| Experience 0-5 | 0.00 | . | . | . | . | . | |
| Experience 6-10 | -0.05 | 0.11 | -0.49 | 0.63 | -0.26 | 0.16 | |
| Experience 11-15 | -0.01 | 0.19 | -0.07 | 0.95 | -0.39 | 0.36 | |
| Experience 16-20 | 0.15 | 0.17 | 0.88 | 0.38 | -0.19 | 0.49 | |
| Experience 21+ | 0.08 | 0.10 | 0.81 | 0.42 | -0.11 | 0.27 | |
| Appalachia 0-10 | 0.00 | . | . | . | . | . | |
| Appalachia 11-20 | -0.17 | 0.19 | -0.91 | 0.36 | -0.55 | 0.20 | |
| Appalachia 21-30 | 0.01 | 0.20 | 0.06 | 0.96 | -0.39 | 0.41 | |
| Appalachia 31-40 | -0.09 | 0.15 | -0.56 | 0.58 | -0.39 | 0.22 | |
| Appalachia 41+ | -0.05 | 0.13 | -0.38 | 0.71 | -0.30 | 0.20 | |
| Constant | 4.76 | 0.13 | 35.51 | 0.00 | 4.49 | 5.03 | ** |

*Note*. Significant levels: *** *p<0.01,* ** *p<0.05,* * *p<0.1;* LL – lower level; UL – upper level.

The multiple regression revealed that the model produced is not statistically significant in predicting these participants' inclinations toward social justice leadership (Table 4), F(9, 87) = .74, ***p*** = .67 R2 = .070. Thus, the null hypothesis cannot be rejected. However, the model does reveal a significant effect of position on SJQ2 scores with a difference in principals' score (.17 standard deviation decrease) compared to assistant principals within the model. An analysis of where these differences exist within the SJQ2 subscales, a visual comparison of means revealed that the largest difference in scores was in the School Context section with assistants average ($\bar{X}$ = 3.75) and principals ($\bar{X}$ = 3.36), a t-test revealed that the difference was significant t(95) = 1.84,

p = .03. Assistant principals were more likely to report that drug abuse was an issue among students ($\bar{X}$ = 4.00) than principals ($\bar{X}$ = 3.73). Assistant administrators also related that alcohol abuse was an issue among students ($\bar{X}$ = 3.71) compared to principals ($\bar{X}$ = 3.29). Additionally, assistants noted bullying as a problem among their students ($\bar{X}$ = 3.63) at a higher rate than principals ($\bar{X}$ = 3.07).

Given the position of a participant is significant (***p*** = .03), a stepwise regression was conducted to see if, as a single predictor variable, it would show significance in predicting SJQ2 scores. The new regression divulged that position was not significant F(1, 95), ***p*** = .0593, R2 = .037 in predicting SJQ2 scores; thus, experience and years living in Appalachia do have some mediating effect (Mertler & Reinhart, 2017).

**Supplementary Findings**

The SJQ2, as designed by Zhang et al. (2018), was meant to contain a more expanded School Context section and four Community Context questions removed from this study due to internal inconsistency among this sample. To see if the inclusion of these deleted points of data would reveal any differences in the findings involving the research questions. First, as with RQ1, the overall model of SJQ2, Title 1 eligibility, and grade-level, including these extra points of data, did not improve its significance. Second, Elementary and Middle school administrators still had the lowest p-values and thus were included in a stepwise multiple regression (Table 7).

**Table 7**

*Multiple Linear Regression of full SJQ2: Elementary and Middle School*

| SJQ2 full | ß | SE | t-value | p-value | 95% Confidence | | Sig |
|---|---|---|---|---|---|---|---|
| | | | | | LL | UL | |
| Elementary | -0.20 | 0.06 | -1.93 | 0.06 | -0.23 | 0.003 | * |
| Middle School | -0.21 | 0.07 | -2.01 | 0.05 | -0.26 | -0.002 | ** |
| Constant | 4.32 | 0.04 | 122.72 | 0.00 | 4.25 | 4.39 | *** |

*Note*. Significance levels: *** *p<0.01,* ** *p<0.05,* * *p<0.1*; LL – lower level UL – upper level

The model is not significant, and the regression equation cannot accurately predict the propensity of social justice leadership, F(7, 89) = 1.04, ***p*** = .41, R2 = .075, unlike in the section on RQ1. However, an interesting point of difference between the two equations in which grade-level has a significant effect. In the hypothesis testing for RQ1 (See Table 2), Elementary had a significant effect on SJQ2 (***p*** = .02), while Middle school did not have a significant effect (***p*** = .05). In the regression model produced by the full data of SJQ2, Middle School is the factor with a significant effect (***p*** = .047) while Elementary does not (***p*** = .06).

An analysis of the second research question resulted in a non-significant model. The main difference in including the data from the previously omitted School Context and Community Context questions was that position no longer had a significant effect on SJQ2 scores as it did in the hypothesis testing (***p*** = .08).

The analysis of data collected from the sample of Kentucky Appalachian administrators resulted in an inability to reject the null hypothesis of research questions one and two. Though the equations formed through the inclusion of all the school context variables did not result in a significant predictive model, the model created from the stepwise regression involving elementary

and middle school administrators did result in an adequate equation. Thus, for research question one, the factors of being an elementary or middle school administrator in Appalachia did create a lower projected score than their counterparts of other grade-levels. The equation for research question two was also not significant in predicting scores, though the model did reveal that the position of the participant did influence SJQ2 scores, though only when in calculated with the other two personal experience variables.

## Results

The data revealed that the school's Title 1 eligibility did not have a robust predicting force within Appalachia for the SJQ2 score. One possible explanation, as discussed in the literature review, is poverty's pervasiveness within the Central Appalachian region where these administrators work (Appalachian Regional Commission, 2019b; Wright, et al., 2016). Even though their school might not be in an area of high-concentrated poverty, administrators still recognized that poverty was an issue within their community and, thus, for their students. The awareness of community poverty was further confirmed by the removed data from Community Context question 1 (CC), which addresses poverty as an issue within the community. The principals from Title 1 eligible and funded schools reported the highest average ($\bar{X}$ = 5.49), while the Title 1 eligible but not funded leaders averaged ($\bar{X}$ = 5.33), and Not Title 1 eligible administrators' average was ($\bar{X}$ = 5.00). The lack of substantial difference and high averages demonstrates that these principals and assistant principals are very aware of the poverty that pervades Central Appalachia. The evidence of this awareness means that administrators in Appalachia could be more prepared to move toward a critical consciousness of the lived experience of poverty of their students and enact changes that could address the obstacles that poverty can create for students (Brown & Evans, 2017; Dodd, 2017; Mattheis, 2017).

The stepwise regression conducted for research question one did reveal that being an Elementary or Middle School administrator did create a predictable model. The data also disclosed that this difference was primarily located in the School Context section of the SJQ2 scores. The school context questions involved in the hypothesis testing were SC2, SC5, and SC7. SC2 and SC5 deal with drug and alcohol abuse being an issue "among my students." Participants' interpretation of these questions as a student having a personal addiction problem is likely to be the reason for the low scores. The American Addiction Centers' (AAC) website (2020) reports statistics on adolescents from 12-17, (but not prior) and presents low rates of drug (3%) and alcohol abuse (1.8%). Substance abuse is a rare occurrence for younger students, which is reflected in the lower scores among administrators of these grade-levels.

Elementary and Middle School administrators' main difference in the school context section is how they rated bullying in their schools (SC7). Elementary principals average score for SC7 ($\bar{X}$ = 2.85) while middle school leaders' average was ($\bar{X}$ = 3.75). According to Kevorkian et al. (2016), one reason for this discrepancy between scores is a lack of awareness of bullying within elementary schools. The issue is two-fold. First, there is a lack of research involving bullying at the elementary level (Kevorkian, et al., 2016), which leads to a lack of information and resources on the reality of the problem of bullying among younger students. Second, a study by "Olweus (1993) [revealed], students feel most vulnerable to bullying in locations where there is the least amount of supervision" (as cited in Kevorkian et al., 2016, p. 267). Kevorkian et al. (2016) study of third through fifth graders in the state of Massachusetts revealed that 40% of students reported being bullied at school and more frequently experienced it on playgrounds. Another reason for the

difference in scores involving bullying could be due to successful anti-bullying programs within schools (Kevorkian et al., 2016). The exact reason for these differences needs to be explored further with additional studies of schools or interviews with administrators.

Since the significant differences between Elementary and Middle School principals and all other grade-level administrators are explained through the difference in these SC factors, overall, the grade-level of the school has little impact on the propensity of social justice leadership of these Appalachian participants. The data reveals that the students' age and grades do not influence whether the administrators' SJQ2 scores. It is promising that the students' age does not show a significant impact on administrators' tendency toward social justice leadership. One age group of students is not more likely to experience social justice leadership than another group. All administrators, no matter what grade-level they serve, show potential for social justice leadership. One notable revelation is how substance abuse and bullying become more overt and easily recognized among older students and acknowledged as an issue among administrators. The difference signals administrators and researchers' need to look more in-depth at these school context issues within Elementary and Middle schools.

The second research question pursued an analysis of personal experience predictor variables such as position, experience in administration, and years the participant lived in Appalachia. The analysis did not create a predictive model; however, the predictor variable of position was significant ($p = .03$) within that model. The data analysis revealed a significant difference between the scores of assistant administrators and principals on the School Context subscale.

There are a couple of explanations for this phenomenon. First, as seen in the assessment of RQ1, Elementary and Middle School administrators also have lower scores in the SC subsection. Most assistant principals (n = 28) report working in schools other than elementary or middle schools, while most principals in this study report that they work in either an elementary or middle school (n = 33). Additionally, the difference in scores could be the reduced rate of describing drug and alcohol abuse and bullying as issues among younger students. Second, it could be because of the nature of many assistant principals' role as primarily "responding to student misbehavior and supervising of student activities" (Houchens et al., 2018, p.40). In other words, assistant principals tend to have more interactions with students and, thus, may be more critically conscious of the issues reported in the SC section due to this proximity students. The data analysis of RQ2 revealed that position was not significant on its own in predicting SJQ2 scores. Thus, experience and years living in Appalachia have some effect on the significance of the difference between principals and assistant principals.

The highest over-all average for SJQ2 was a principal with 0-5 years of experience who has only lived in Appalachia 0-10 years. Since there is only one participant within this range, their score might not be a good predictor of the population. The second-highest average SJQ2 score was a principal with 6-10 years of experience who has lived in Appalachia 31-40 years. However, there is only one participant in this grouping; thus, they might not represent the entire population. The third highest score was five assistant principals with 6-10 years of experience and who have lived in Appalachia 41+ years.

Since there are multiple participants in this group, the researcher believes some inferences can be made. First, assistant principals with 6-10 years of experience and who have lived 41+ years in Appalachia have higher than average SJQ2 scores than the collective subgroups of other assistant principals with the same experience and years living in Appalachia. These same participants also have a much larger average score than the eleven principals (n = 11) with the

same years of experience and years living in Appalachia. The combination of their experience within their position and their experience living a large proportion of their life in Appalachia appears to make this group more prone to social justice leadership.

A potential explanation for this combination is the redesign of principal preparation programs in the state of Kentucky in 2011. Those who have completed their training since the redesign are more likely to have participated in programs that "Expose[d] candidates to diverse student populations and school environments" (Education Commission, p.6). Educational leaders within the 6-10-year experience range are likely to have received this exposure and training. Also, it seems that living in Appalachia most of their lives (41+ years) paired with principal preparation programs that include diversity training has allowed them to be aware of the issues pervading the schools in the region. Since the participants are at least 41, and if they began teaching at 22, they began their assistant principalship approximately 9 – 13 years into their teaching career. Thus, they spent more time in the classroom. Some researchers argue that leaders who spent more time in classrooms have a greater inclination toward social justice education because of a potential increase in promoting instructional practices and addressing classroom needs (Shaked et al., 2017). The researcher recommends that further research into this phenomenon may help in determining more reliable conclusions.

The results of RQ2 analysis divulges that a person's experience level does not have a strong influence on their propensity toward social justice leadership. A new principal is just as likely as a veteran administrator to have a tendency toward social justice leadership. The data also exposed that living in an area for an allotted amount of time does not significantly affect the tendency toward social justice leadership. A person new to a school community has an equal amount of likelihood to enact social justice leadership as someone who has lived in the community. The duration of living in a particular context does not necessarily make a person more aware of the injustices within their community than someone with an outsider perspective. Schools recruiting administrators to be change agents can feel confident about hiring people from outside their community, knowing that they can still have the same propensity for social justice leadership as someone from within their community.

## Discussion and Limitations

First, the Community Context (CC) section with only four questions did not accurately provide a snapshot into the community of the schools of Appalachia. It lacked the internal consistency to be included in the study. The lowest average for this section was CC3 "Criminality and/or street violence is an issue in the community" (Zang et al., 2018, p. 74) ($\bar{X}$ = 3.14), and it had the most substantial standard deviation (1.97). The statistics of this question reflect the varying degree of criminality throughout Appalachian Kentucky communities. According to the Kentucky State Police 2018 Crime report (2019), the proportion of crimes varies significantly throughout the Appalachian region, depending on the type of crime committed. Those counties in Appalachia with higher populations, such as Boyd, Clark, Laurel, Madison, and Pulaski, tend to have a higher proportion of violent crimes compared to other Appalachian counties in Kentucky (Kentucky State Police, 2019). It is also possible that the term "street violence" was a determining factor in the response of participants since the term can be interpreted as being contextual to urban communities.

The SJQ2 also lacked questions in the CC subsection about unemployment or underemployment and lack of higher education of parents, which are issues in Appalachian Kentucky and many areas throughout the United States with higher levels of poverty (Wright et

al., 2016). The section involved zero questions on socio-cultural identities, such as religion, ethnicity, English as a Second language, and abilities, and Lesbian Gay Bisexual Transgender and Questioning (Özdemir, 2017). Another issue was the absence of questions about community involvement in the school, which the literature revealed as a critical element in the enactment of social justice leadership (Bertrand & Rodella, 2018)

The second issue was in the lack of socio-cultural questions in the School Context section of the SJQ2. Though the issues of poverty, substance abuse, and bullying are universal in schools, students and staff are not homogeneous when it comes to their faith, ethnicity, LGBTQ identities, English-speaking proficiency, or their abilities. A more socio-culturally-inclusive survey could reveal more about the real propensity of a sample or population toward social justice leadership.

The final issue with the survey instrument is its deficiency in queries of actions taken by the participant. The survey deals mostly with the awareness of issues but not the actions required to deal with injustices. Being aware that injustices exist does not necessarily translate to a person taking actions toward dismantling systems of oppression. According to Brown and Shaked (2018), successful leaders "make the shift from personal awareness to social action (Freire, 1973), realizing that respect for diversity entails advocacy, solidarity, an awareness of societal structures of oppression, and critical social consciousness" (p.15). According to the extant literature reviewed for this study, questions involving the shared leadership between administrators, teachers, parents, and the community would signal social justice leadership. Questions involving the active inclusion of differently-abled students in mainline classrooms, ensuring the safety of LGBTQ students, providing services to ESL students, or restorative justice practices are just a few examples of what could be included to measure social justice leadership of administrators better.

## Implication for Further Study

The current study reveals the need for further study into a variety of aspects of the social justice leadership of Appalachian administrators. There is very little extant literature exploring issues specific to schools within the Appalachian region. Since the Appalachian region is comprised of both urban and rural communities, with a varied dispersion of minority students, and the highest poverty rate of any region in the United States (Appalachian Regional Commission, 2019c; Wright et al., 2016) studies focused on the region may provide a better snapshot into the broader population of schools, administrators, and students throughout the United States. For this reason, Appalachian schools should be of equal focus to research into social justice leadership and pedagogical practices as their urban counterparts.

This study also revealed a possible need for a new quantitative instrument that measures the awareness of social justice issues, as the SJQ2 does, but that focuses on social justice actions. As previously stated, there is a difference between awareness of social injustices and systems that disadvantage students in schools and the praxis of social justice leadership (Brown & Shaked, 2018). That is, there may be a need to understand what actions denote a more accurate gauge of social justice leadership. The potential new instrument may also need to be more inclusive of socio-cultural identities among students to measure the social justice issues pervasive in society and schools. Finally, possible new studies may need to be conducted to create a quantitative instrument that would provide a consistent and reliable measurement of educational leaders' social justice tendencies.

## Conclusion

The findings of this study may expand upon previous scholars' work by examining social justice leadership among administrators in rural Appalachia. This investigation revealed that when all school context variables (Title 1 eligibility and grade-level) were compared, no factors were statistically significant, and a significant predictor equation was not created. However, an analysis of only Elementary and Middle School administrators resulted in a statistically significant model. That is, the researcher found that Elementary and Middle School administrators had scores that were predictably lower than principals of other grade-level schools because they were less likely to report that bullying and substance abuse was an issue among their students.

This study also revealed that the predictor variables of personal experience (position, years of experience, and years living in Appalachia) were not significant in predicting the social justice propensity of Appalachian administrators. Conversely, the participants' position had a significant effect within the model in predicting SJQ2 scores, with assistant principals having a higher average than principals. As a possible explanation, the researcher felt their proximity to students through their role with discipline and as supervision of student activities was a possible factor. However, further examination may reveal the reasons for the differences between principals and assistant principals.

Finally, the study ultimately shed much needed light on the need for further research to develop a quantitative survey instrument to measure administrators' social justice leadership in a broader context. The SJQ2's creation was focused on a specific context and proved insufficient in measuring the Community Context and some aspects of School Context accurately in rural Appalachia. The development of a social justice leadership instrument may require more inclusive and expanded questions as well as the possible need to test in a variety of contexts to garner a more consistent and validated instrument.

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