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Does Urban Centric Locale Impact Teacher's Perception of Diversity?

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Abstract

In this body of work, researchers determine if urban centric locale impacts a teacher's perception of diversity. Researchers quantified three questions: Does your school district have an official definition of diversity (yes, no, or unknown)? Do you feel that students benefit when there is racial, ethnic, and gender diversity among the faculty (yes or no)? Have you included diversity training in your professional development (yes, no, other)? The quantitative work determined that a significant relationship exists between urban-centric locale, however, when it comes to in-depth diversity training, its impact, and relevance for urban, rural, and suburban locales there is evidence to support the need for further teacher training programs and professional development in campuses and school districts in every locale in order to incorporate relevant diversity programming at all levels of an organization.

Introduction

Teachers' perception is everything. How teachers interact in the world usually affects how they interact with students. Their perceptions highly influence generations of students. As we become a more diverse country, our centric locale may prove to be critical as to how teachers perceive the need for diversity. Furthermore, their experiences with diverse personnel and students from their past and present will be crucial as they interact and help students understand the world they are inheriting. Ultimately, their perceptions will become the perceptions of the students they serve and gaps in perception and having a mechanism for overcoming those gaps is paramount for improving student outcomes for Black and Latino youth (Warren, 2014).

Literature Review

As the United States becomes more diverse, so does the public-school classroom (Delk, 2019). By the year 2045, demographers project that the United States will become a minority-majority nation -- a country where those currently categorized as racial minorities will comprise the majority of the populace (Frey, 2018) As a result, teachers have responsibilities that many did not face even a generation ago. According to Boser (2011), teachers enter classrooms with diverse students and cultures. Latinos comprise the nation's largest population -- 17.6 percent. And, as a percentage of school-age children -- 25 percent. That is one in four K-12 students in the United States is Latino or Latina (Gandara, 2017).

While the racial and ethnic makeup of students in public schools is undergoing change, according to Toms et al. (2019), minorities as elementary and secondary teachers has not changed. Teachers of color account for less than 20 percent of all educators during the 2015-2016 school year. Bireda and Chait (2011) indicate that the scarcity of minority teachers is not limited to any one type of school - in over 40 percent of public schools there is not a single teacher of color. According to Bireda and Chait (2011), in urban and high-poverty schools where minority teachers are disproportionately employed, teaching staff are still predominantly composed of white teachers.

Delk (2019) reports that the student population in the nation continues to expand in racial and cultural diversity, while the diversity of educators in American schools has persisted to stay comparatively similar for the past 20 years, with Caucasian teachers encompassing approximately 84 percent of educators working in elementary or secondary schools. Although there are increases in the number of Hispanic teachers, black teachers significantly lag behind. Many would conclude that this is a choice, however, the historical significance as to why African Americans don't view teaching as a viable field, may result of the thousands of African American teachers who were fired after Brown v. BOE. Walker (2019) clearly noted that the decision designed to protect the interest of black children, actually protected the interest of white children. Black educators discovered that they were the victims of an exchange model through which they traded the aspiration and advocacy that had defined black education for the slim hope of access without support or even their own involvement (Walker, 2019). Rarely does history point out that, 30,000-50,000 teachers and principals lost their jobs after Brown v. BOE (Walker, 2019).

Although the growth of teachers of color is slow while students of color in public education is projected to grow significantly over the next fifteen years, there is research that points to the fact that when teachers understand diversity and have knowledge of their students' cultures, students tend to do better. "Culturally relevant pedagogy rest on three criteria: (A) students must experience academic success. (B) students must develop and/or maintain cultural competence, and (C) students must develop a critical consciousness through which they challenge the current status quo of the social order (p. 160) - Ladson-Billings," (Lowery, 2018, pg. 3043). As a result of understanding culturally relevant pedagogy, teachers have the potential to be more responsive to students' cognitive and affective learning needs (Gentry et al., 2015). Gentry et al (2015) further discuss that teachers can be facilitators and cultural representatives of diversity.

Toms et al. (2019) states that these teachers may have limited contact with people of color and form implicit biases starting at an early age. "Identity lays the foundation for future perception and behavior yielding adverse of productive life state outcomes manifested across settings," (Swanson et al, 2003, pg. 609). This bias also contributes directly to the number of disciplinary actions taken against African American and Latinx males. Teachers often rate their African American male students play

behavior as more aggressive and threatening and Black males begin to understand teachers' negative expectations just as they have consistently understood societal biases from an early age," (Swanson, 2003). Teachers without experience in diversity (e.g. living in diverse areas, attending schools with diverse populations, listening to a Hispanic community representative) remain unchallenged, unchanged, and culturally undereducated. (Gentry et al., 2015) Seigel-Hawley and Frankenberg (2012) indicate that many schools do not have teachers and administrators with adequate training in diversity.

Orfield (2009), Siegel-Hawley and Frankenberg (2012) point out that teachers can influence students' perceptions about diversity. School districts nationwide, especially at the elementary level are at the forefront of American rapid racial transformation (Mordechay et al, 2019) Twenty-first century teachers may be the ones who dismantle racism in public schools (Ruiz and Cantu 2013). Gentry et al (2015) indicate that teachers who work with diverse populations daily often respond to student needs under stress and timelines. When people undergo stress-filled situations, personal perceptions of race and diversity influence their reality and decisions. A classroom that has students from culturally diverse backgrounds holds plenty of opportunities for teachers and students to learn distinct viewpoints from one another, acquire understanding and encourage cross-cultural tolerance (Delk, 2019). Diversity experiences, within any program preparing teachers, are essential in promoting awareness and understanding. The research in this field generally points to the idea that successful teachers of students often identify the public-school system as racist and see themselves as part of a larger political struggle for racial justice, (Hyland, 2005).

Goldhaber et al (2019) further discuss that despite this rhetoric, we have made relatively little progress toward ensuring that the diversity of the teaching workforce reflects the diversity of the student body in U.S. public schools. By some measures, we seem to be moving backward. Between 2003 and 2012, for example, the percentage of the nation's teachers who were Black dropped by more than a point, while over the same time, the increase in the percentage of Latinx students far outpaced the modest increase in the percentage of Latinx teachers.

For this body of work, the researchers have chosen to interchange the following words including African-American and black; Hispanic, Latino, Latina, Latinx; Caucasian, Anglo, white. According to Merriam-Webster's Dictionary, the word diversity means the condition of having or being composed of differing elements; the inclusion of different types of people (such as people of different races or cultures) in a group or organization. For the purposes of this research, the authors have made utilize these explanations to support their body of work.

A question which has not been addressed by many researchers is, are teachers' perceptions of diversity, particularly the need for a racial, ethnic, and gender diverse teaching faculty, influenced by where they live. A review of research literature yields limited studies that sought relationships between teacher's geographic location (urban, rural, or suburban) and how they view the need for a diverse faculty. According to Howard (2007), some teachers and administrators view their schools' increasing diversity as a problem rather than an opportunity.

Purpose of the Study

This study sought to answer three questions:

1. Do urban centric locales influence whether a district or school have an official definition of diversity?

2. Do urban centric locales influence whether a teacher feels that students benefit when there is racial, ethnic, and gender diversity among faculty?
3. Do urban centric locales influence whether teachers have had diversity training in their professional development?

There were three null hypotheses in the study. The first null hypothesis was that there was no relationship between urban centric locales and whether a district or school has an official definition of diversity. The second null hypothesis was that there was no relationship between urban centric locales and whether a teacher feels that students benefit when there is racial, ethnic, and gender diversity among faculty. The third null hypothesis was that there was no relationship between urban centric locales and whether teachers have had diversity training in their professional development.

Methods

The study was conducted at a rural, four-year university. Participants were students in an online graduate multicultural issues in education and diversity course. They were asked to interview either a teacher, guidance counselor, or administrator at a public K-12 school. Participation was not mandatory for either students or the interviewee. Interviews were collected over a period of several consecutive terms, starting during the fall term of 2017. One hundred fifty-one interviews were collected (N = 151). Interviews were conducted with teachers from fifteen states: Tennessee, North Carolina, Mississippi, Georgia, Nevada, Louisiana, Connecticut, Ohio, Minnesota, Illinois, Colorado, Kentucky, Alabama, California, and Missouri. The majority of the interviews were conducted in Tennessee.

For this study, interviewees were asked to answer the following four questions:

1. What is the urban centric locale of your district/school (urban, rural, or suburban)?
2. Does your school district have an official definition of diversity (yes, no, or unknown)?
3. Do you feel that students benefit when there is racial, ethnic, and gender diversity among the faculty (yes or no)?
4. Have you included diversity training in your professional development (yes, no, other)?

Interviewee responses were coded based on urban centric locales (1 = rural, 2 = urban, and 3 = suburban), and yes, no, and unknown replies (1 = yes, 2 = no, and 3 = unknown/other). Coded responses, cities, and states were entered into an SPSS data file.

The following categorical variables were selected:

Urban-centric locale; District/School has a diversity statement; Teachers feel students benefit when there is racial, ethnic, and gender diversity among faculty; Teachers have had diversity professional development in school and/or facility.

Urban centric locale designations were determined by the authors. An Urban locale was defined as a community with a population of 30,000 or more residents. A Suburban locale was defined as a community located within 5 miles of an urban area. A Rural locale was defined as a community of 29,000 or less residents.

A Pearson chi-squared analysis was used to determine if there were any relationships between categorical variables. Chi-squared tests are popular nonparametric or distribution free tests when

researchers analyze categorical data (Sharpe, 2015). A limitation of the chi-square test is if the test indicates significant relationships that means there is some association, but no further information is given (Turner, 2014). When a significant association is detected in a large table, interpretations can be hard to determine.

In calculating chi-squared values, the difference in observed cell counts and expected cell is calculated. These quantities are called residuals. To make residuals comparable to each other, they are standardized by dividing by the square root of the expected cell counts. This quantity represents the standardized residuals and is often referred to a Pearson residual. To obtain a more appropriate way to compare cells, Pearson residuals can be further divided by the standard deviation of the residuals. The quantity is called an adjusted standardized residual. Garcia-Perez and Nunez-Anton (2003) explain that adjusted standardized residuals are *z*-scores.

The advantage of the adjusted standardized residual is that it follows a standard normal distribution. This enables researchers to conduct post-hoc hypothesis tests on any number of standardized residuals of interest. Since the adjusted standardized residuals are normally distributed, cells with absolute values greater than the critical value of 1.96 will have raw *p*-values of less than 0.05 (for a two-sided test). Using methods outlined by Beasley and Schumacker (1995), the adjusted standardized residuals can be transformed into *p*-values which can be used to determine which specific categories are related to each other.

The researchers were interested in testing the adjusted standardized residuals of every cell to determine if relationships existed between categorical variables. In order to do this we needed to adjust the cutoffs for multiple comparison. In other words, to avoid a Type I error, a new critical value (α) must be calculated to make comparisons between categories.

Based on Chen (2017), Jafari and Ansari-Pour (2019), the researchers decided to use a Bonferroni correction, α_{Bon} / adjusted *p*-value, in which they would adjust the alpha level, *α*, by dividing the original *α*-value by the number of analyses on the dependent variable and comparing the absolute value of the adjusted standardized residual to a new critical value. A Bonferroni correction is a conservative post hoc test that protects from making Type I errors (the higher the chance for a false positive; rejecting the null hypothesis when you should not). The *p*-value is altered to a more stringent value, thus making it less likely to comment Type I errors.

Garcia-Perez and Nunez-Anton (2003) outlines a procedure that transforms adjusted standardized residuals into probability values (*p*-values) which can then be compared against a Bonferroni correction to determine relationships between cells in contingency tables. The authors of this study used that method of comparison to determine if any significant relationships exist between categories. Beasley and Schumacher (1995) outline a procedure that facilitates the transformation of adjusted standardized residuals to *p*-values using SPSS software. The authors of this study adapted their technique to analyze categorical data.

Results

An analysis of the question, “Do urban centric locales influence whether a district or school have an official definition of diversity?” revealed that of 151 teachers, 34 (22.5%) indicated that their district/school had an official diversity statement, 57 (37.7%) indicated that their district/school did not have an official diversity statement, and 60 (39.7%) indicated that they did not know if their district/school has an official diversity statement. Analysis further revealed that of teachers in rural

locales, 13.7% (13/95) indicated having diversity statements, 42.1% (40/95) indicated not having diversity statements, and 44.2% (42/95) indicated not knowing if their district/school had official diversity statements. See table 1.

In urban locales, 38.3% (18/47) indicated having diversity statements, 27.7% (13/47) indicated not having diversity statements, and 34.0% (16/47) indicated not knowing if their district/school had an official diversity statement. Teachers in suburban locales revealed 33.3% (3/9) had diversity statements at their district/school, 44.4% (4/9) did not have a diversity statement, and 22.2% (2/9) did not know if their district/school had an official diversity statement. See table 1.

Using SPSS, a Pearson chi-square analysis was used to determine if relationships exist between the categorical variables, urban-centric locales and districts/school diversity statements. The relation between these variables was significant, $\boldsymbol{X}_2$ (4, N=151) = 12.366, $p < .05$. There are significant relationships between the categorical variables.

To determine which specific relationships between categories were significant, a post hoc test was conducted. Using methods outlined by Garcia-Perez and Nunez-Anton (2003), SPSS was used to transform each categorical cell standardized residual value into an adjusted residual value. As discussed by Garcia-Perez and Nunez-Anton, adjusted residual values are equivalent to *z*-values. Following a procedure outlined by Beasely and Schumacker (1995), adjusted residual values were transformed into adjusted *p*-values (see Table 1). The transformed *p*-values were compared to a Bonferroni correction/ adjusted *p*-value. To calculate the Bonferroni correction, α_{Bon}, the following calculation was made:

$$\alpha_{Bon} = \frac{\alpha}{number\ of\ analyses} = \frac{.05}{9\ cells} = .0056 \text{ (Adjusted } p\text{-value for comparison)}$$

The adjusted *p*-value for comparison is .0056.

Using the Bonferroni correction as a post hoc test, two relationships were determined to have statistically significant relationships. There was a significant relationship in responses from teachers in rural locales who indicated that their districts do have official diversity statements (adjusted *p*-value = .00067, adjusted *p*-value < .0056). There was also a significant relationship in responses from teachers in urban locales who indicated that their districts do have official diversity statements (adjusted *p*-value = .00194, adjusted *p*-value < .0056). The results are summarized in Table 1.

Table 1.

Urban Centric Locale versus District/School Has Diversity Statement

			District/School Has Diversity Statement			Total
			Yes	No	Unknown	
Urban	Rural	Count	13	40	42	95

Centric Locale		Expected Count	21.4	35.9	37.7	95.0
		% within Urban Centric Locale	13.7 %	42.1%	44.2%	100.0%
		Adjusted Residual	-3.4	1.4	1.5	
		Adjusted *p*-value	.00067	.16151	.13361	
	Urban	Count	18	13	16	47
		Expected Count	10.6	17.7	18.7	47.0
		% within Urban Centric Locale	38.3%	27.7%	34.0%	100.0%
		Adjusted Residual	3.1	-1.7	-1.0	
		Adjusted *p*-Value	.00194	.08913	.31731	
	Suburban	Count	3	4	2	9
		Expected Count	2.0	3.4	3.6	9.0
		% within Urban Centric Locale	33.3%	44.4%	22.2%	100.0%
		Adjusted Residual	.8	.4	-1.1	
		Adjusted *p*-Value	.42371	.68916	.27133	
Total		Count	34	57	60	151
		Expected Count	34.0	57.0	60.0	151.0

	% within Urban Centric Locale	22.5%	37.7%	39.7%	100.0%

Table 2.

Chi-Square Test: Urban Centric Locale versus District/School Has Diversity Statement

	Value	*df*	Asymptotic Significance (2- sided)
Pearson Chi-Square	12.366	4	.015
Likelihood Ratio	12.179	4	.016
N of Valid Cases	151		
			p = .05
Bonferroni Correction/ Adjusted p-value for comparison			0.0056

An analysis of the question, “Do you feel that students benefit when there is racial, ethnic, and gender diversity among the faculty?” revealed that of 151 teachers, 140 (92.7%) indicated that they feel that students benefit when there is racial, ethnic, and gender diversity among the faculty, and 11 (7.3%) indicated that they do not feel that students benefit when there is racial, ethnic, and gender diversity among the faculty.

Analysis further revealed that of teachers in rural locales, 90.5% (86/95) indicated they they do feel that students benefit when there is racial, ethnic, and gender diversity among faculty, 9.5% (9/95) indicated not believing that students benefit when there is racial, ethnic, and gender diversity among faculty. See Table 3 and Table 4.

In urban locales, 97.9% (46/47) of teachers indicated that they feel students benefit when there is racial, ethnic, and gender diversity among faculty, 2.1% (1/47) indicated that they do not feel that students benefit when there is racial, ethnic, and gender diversity among faculty. Teachers in suburban locales revealed 88.9% (8/9) believe that students benefit when there is racial, ethnic, and gender diversity among faculty, 11.1% (1/9) do not believe that students benefit when there is racial, ethnic, and gender diversity among faculty. See Table 3 and Table 4.

Using SPSS, a Pearson chi-square analysis was used to determine if relationships exist between the categorical variables, urban-centric locales and whether teachers feel that students benefit when there is racial, ethnic, and gender diversity among faculty. The relation between these variables was not significant, X^2 (2, N=151) = 2.720, $p > .05$. There were no significant relationships between the categorical variables.

Since the Pearson chi-square analysis did not reveal any statistically significant relationships between categorical variables for this data, no post hoc tests were conducted. Results are summarized in Table 3 and Table 4.

Table 3.

Urban Centric Locale versus Teachers Feel Students Benefit When There Is Racial, Ethnic, and Gender Diversity Among Faculty

			Teachers feel student benefit when there is racial, ethnic, and gender diversity among faculty		
			Yes	No	Total
Urban Centric Locale	Rural	Count	86	9	95
		Expected Count	88.1	6.9	95.0
		% within Urban Centric Locale	90.5%	9.5%	100.0%
		Adjusted Residual	-1.3	1.3	
	Urban	Count	46	1	47
		Expected Count	43.6	3.4	47.0
		% within Urban Centric Locale	97.9%	2.1%	100.0%
		Adjusted Residual	1.6	-1.6	
	Suburban	Count	8	1	9
		Expected Count	8.3	.7	9.0
		% within Urban Centric Locale	88.9%	11.1%	100.0%
		Adjusted Residual	-.5	.5	
Total		Count	140	11	151

	Expected Count	140.0	11.0	151.0
	% within Urban Centric Locale	92.7%	7.3%	100.0%

Table 4.

Chi-Square Test: Urban Centric Locale versus Teachers Feel Students Benefit When There Is Racial, Ethnic, and Gender Diversity Among Faculty

	Value	*df*	Asymptotic Significance (2- sided)
Pearson Chi-Square	2.720	2	.257
Likelihood Ratio	3.308	2	.191
N of Valid Cases	151		
			p = .05
Bonferroni Correction		Not applicable	

An analysis of the question, “Have you included diversity training in your professional development?” revealed that of 151 teachers, 89 (58.9%) indicated that they have had diversity training in their professional development, 71 (47.0%) indicated that they have not had any diversity training in their professional development, and 17 (11.3%) indicated that they have had some other form of diversity training (i.e. participated in a poverty situation or took a college course). Analysis further revealed that of teachers in rural locales, 58.9% (56/95) indicated having diversity training in professional development, 27.4% (26/95) indicated not having diversity training in their professional development, and 13.7% (13/95) indicated having had some often type of diversity training. See Table 5.

In urban locales, 57.4% (27/47) indicated having had diversity training in professional development, 36.2% (17/47) indicated not having diversity training in their professional development, and 6.4% (3/47) indicated they had some other form of diversity training, for example, participating in a poverty simulation, or having taken a course in college. Teachers in suburban locales revealed 66.7% (6/9) had diversity training in their professional development, 22.2% (2/9) did not have any diversity training in their professional development, and 11.1% (1/9) have some other form of diversity training in their professional development. See Table 5.

A Pearson chi-square analysis was used to determine if relationships exist between the categorical variables, urban-centric locales and teacher’s indication of whether they had had diversity training in their professional development. The relation between these variables was not significant, X^2 (4, N=151) = 2,600, $p > .05$. There were no significant relationships between the categorical variables.

Since the Pearson chi-square analysis did not reveal any statistically significant relationships between categorical variables for this data, no post hoc tests were conducted. Results are summarized in Table 5.

Table 5.

Urban Centric Locale versus Teacher Has Had Diversity Professional Development

			Teacher Has Had Diversity Professional Development			Total
			Yes	No	Other (i.e. Poverty Simulation, college course)	
Urban Centric Locale	Rural	Count	56	26	13	95
		Expected Count	56,0	28,3	10.7	95,0
		% within Urban Centric Locale	58.9%	27.4%	13.7%	100.0%
		Adjusted Residual	.0	-.9	1.2	
	Urban	Count	27	17	3	47
		Expected Count	27.7	14.0	5.3	47.0
		% within Urban Centric Locale	57.4%	36.2%	6.4%	100.0%
		Adjusted Residual	-.3	1.2	-1.3	
	Suburban	Count	6	2	1	9
		Expected Count	5.3	2.7	1.0	9.0
		% within Urban Centric Locale	66.7%	22.2%	11.1%	100.0%

	Adjusted Residual	.5	-.5	.0	
Total	Count	89	45	17	151
	Expected Count	89.0	45.0	17.0	151.0
	% within Urban Centric Locale	58.9%	29.8%	11.3%	100.0%

Table 6.

Chi-Square Test: Teacher Has Had Diversity Professional Development

	Value	*df*	Asymptotic Significance (2- sided)
Pearson Chi-Square	2.600	4	.627
Likelihood Ratio	2.731	4	.604
N of Valid Cases	151		
			p = .05
Bonferroni Correction		Not applicable	

Discussion

The authors of this study sought to answer three questions: 1) do urban centric locales influence whether a district or school have an official definition of diversity? 2) do urban centric locales influence whether a teacher feels that students benefit when there is racial, ethnic, and gender diversity among faculty?, and 3) do urban centric locales influence whether teachers have had diversity training in their professional development? Graduate students in an online multicultural issues in education and diversity course involuntarily interviewed 151 teachers. Interviewed teachers were from 15 states: Tennessee, North Carolina, Mississippi, Georgia, Nevada, Louisiana, Connecticut, Ohio, Minnesota, Illinois, Colorado, Kentucky, Alabama, California, and Missouri, with the majority being from Tennessee.

Teachers' answers were coded based on simple "yes", "no", "unknown", and "other" replies. Teacher responses were grouped into three urban-centric locales: urban, rural, and suburban. SPSS statistical software was used to conduct Pearson chi-square analysis to determine if significant relationships exist between urban centric locales and teacher responses.

Analysis revealed that a significant relationship exists between urban-centric locale and teacher responses to the question, "Do urban centric locales influence whether a district has an official definition of diversity?". Pearson chi-square results were, X^2 (4, N=151) = 12.366, $p < .05$. The Bonferroni correction post hoc test indicated that specific relationships occurred in the categorical variables "Rural Centric locale and teachers who indicated that their district/school does have an official definition of diversity," *Adjusted p-value* = .0067, and "Urban Centric locale and teachers who indicated that their district/school does have an official definition of diversity", *Adjusted p-value* = .00194.

The authors posit that rural school district faculty and administrators tend to be predominantly white, middle-class, monolingual-English speakers. According to Geiger (2018), non-white teachers not only are sharply outnumbered by white teachers, but they also tend to work in different school environments. She further indicated that 31% of teachers in city [urban] schools were nonwhite versus 11% of teachers in rural schools. Greater numbers of non-white teachers are at nonwhite schools with more nonwhite students, while the reverse was true for schools with more white students. Lastly, she mentions that across schools where at least 90% of students were white, nearly all teachers (98%) also were white. The authors posit, could it be possible that educators who work at predominantly majority white schools tend to not feel a need for a diversity statement?

This is plausible, however, the fact that the overwhelmingly response in rural locales indicated a not knowing or did not have a diversity statement speaks to a lack of understanding diversity and inclusion in rural areas. The authors posit that this gap could have implications not easily seen even amongst the most homogeneity of groups. The word itself, "diversity" holds huge and a variety of possible implications that any district and/or campus may want to research.

Analysis did not reveal any significant relationship between urban-centric locale and teacher responses to the question, "Do urban centric locales influence whether a teacher feels that students benefit when there is racial, ethnic, and gender diversity among faculty?". An analysis of teacher survey data reveals that a majority of teachers indicate that they feel that students do benefit from having a diverse faculty. Of 151 teachers, 140 (92.7%) indicated that they feel that students benefit when there is racial, ethnic, and gender diversity among the faculty, and 11 (7.3%) indicated that they do not. Although analysis does not indicate any significant relationships between teachers urban-centric locales, the authors did note that teacher affirmative responses to the prompt were not the same percentage. Rural affirmative responses were 90.5%, urban affirmative responses were 97.95, and suburban affirmative responses were 88.9%. Geiger's (2018) discussion of teacher demographics may possibly explain the differences in teachers' affirmative responses.

Howard (2007) states that some teachers and administrators view their schools increasing diversity among students as a problem rather than an opportunity. He mentioned that in a school district on the west coast where the number of Latino students has quadrupled in the past 10 years, a teacher stated, "Why are they sending these kids to our school?," (pg. 16). He also discussed in another school district outside New York City where the student population was once predominantly rich, white, and Jewish, but is now 90% low-income students of color, mostly from the Caribbean and Latin

America, a principal remarked in a workshop, “These kids don’t value education, and their parents aren’t helping either. They don’t seem to care about their children’s future,” (pg. 16).

The authors posit that a majority of respondents may have answered in the affirmative because they were being interviewed by someone rather than completing an anonymous questionnaire? Respondents who know that their identity is unknown tend to be more revealing when answering sensitive questions (Ong and Weiss, 2000; Randal and Fernandez, 1991). Although not statistically significant, it is worth noting that there were differences in percentages between the affirmative responses of urban, rural, and suburban teachers. Although not explored in this study, the researchers posit whether the race and gender of the interviewer influenced the interviewee’s responses to questions being asked.

The researchers also noted the possible reasons for there being no relationship between location and teacher responses to this question. Answers are strictly relational, meaning in essence that based on the interviewee’s experience, can determine how he/she would answer the question. If the interviewee lived in a diverse community and neighborhood despite it being rural, urban, or suburban would significantly shape his/her answer.

Analysis did not reveal any significant relationship between urban-centric locale and teacher response to the question, “Do urban centric locales influence whether teachers have had diversity training in their professional development?” Of the 151 respondents, 89 (58.9%) indicated that they have had diversity training in their professional development, 71 (47.0%) indicated that they have not had any diversity training in their professional development, and 17 (11.3%) indicated that they have had some other form of diversity training (i.e. participated in a poverty situation or took a college course).

Given that school districts in urban areas tend to hire more diverse faculty than school districts in rural areas, the authors found it noteworthy that the percentages of teachers in rural areas who have had some form of diversity training in professional development (58.9%) was not much different from that of teachers in urban areas who indicated having had some form of diversity training (57.4%). Due to the small population of suburban teachers (N = 9, six percent of total population), the authors chose not to place too much emphasis on the percentage of suburban teachers who indicated having had some form of diversity training in their professional development (66.7%).

There were several limitations to this study. Interviewed teachers were not asked to identify their race, age, or years in their profession. Teachers were not asked to identify whether their school consisted of predominantly Caucasian students or students of color. Another limitation of this study was that it did not address LGBTQIA+ students in its discussion of diversity. Schulman (2013) defines LGBTQIA+ as lesbian, gay, bisexual, transgender, queer or questioning, intersex, ally of asexual. According to Toms et al. (2019), Current practices in teacher training programs is insufficient for addressing issues of educational inequities in regard to gender and sexuality. Unfortunately, creating professional development opportunities for teachers to learn how to be inclusive of LGBTQIA+ students has had negative associations rather than being a matter of equity. A teacher preparation program that does not require multicultural courses, which often includes LGBTQIA+ issues, is being neglectful to teachers and the diverse students they will educate (King and Butler, 2015).

Another limitation of the study was the omission of students with physical and mental disabilities. Toms et al. (2019) discuss that it is vital that teachers have the knowledge to teach students with physical and mental disabilities especially considering the national trend to move toward inclusion. They further mention that studies have shown that teacher preparation has insufficiently prepared teachers for students with mental and physical disabilities.

Conclusions and suggestions for further study

The authors recommend that future researchers explore whether the race, gender, socio-economic status, or sexual identity of the interviewer influences the interviewee's responses to diversity questions. A possible extension of this study could explore whether a respondent's political affiliation influences their views on diversity. Another extension that could be a determinant factor would be the interviewee's current work setting. Whether or not he/she is currently working at a high needs campus (more than 40% economically disadvantaged), the racial make-up of the school that the interviewee is working; whether or not the school has high retention or turn-over; whether or not the school has low discipline or a school-to-prison pipeline; whether or not the school currently ensuring that students are receiving the services that he/she needs academically, behaviorally, emotionally, psychologically; whether or not the school is diverse with current faculty and staff, and that it is reflective of the student population it serves. Perhaps creating and performing equity audits for campuses first and then populating questions of inquiry could hugely benefit the outcomes of the researchers proposed questions.

References

Beasley, T. M., & Schumacker, R. E. (1995). *Multiple Regression Approach to Analyzing Contingency Tables: Post Hoc and Planned Comparison Procedures*. *Journal of Experimental Education* (Vol. 64, pp. 79–93). https://doi.org/10.1080/00220973.1995.9943797

Bireda, S., and Chait, R. (2011). *Increasing teacher diversity: Strategies to improve the teacher workforce.* Center for American Progress. Retrieved from: https://www.americanprogress.org/issues/education-k-12/reports/2011/11/09/10636/increasing-teacher-diversity/

Boser, U. (2011). *Teacher Diversity Matters: A State-by-State Analysis of Teachers of Color.* Washington, D.C.: Center for American Progress. Retrieved from: https://www.americanprogress.org/issues/education-k-12/reports/2011/11/09/10657/teacher-diversity-matters/

Delk, T. D. (2019). Are teacher-credentialing programs providing enough training in multiculturalism for pre-service teachers? (2019). Journal for Multicultural Education, (3), 258. https://doi-org.wgu.idm.oclc.org/10.1108/JME-01-2019-0003

Digest of Educational Statistics (2013). Number and percentage distribution of teachers in public and private elementary and secondary schools, by selected teacher characteristics: Selected years, 1987-88 through 2011-12, U.S. Department of Education, National Center for Education Statistics, available at https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2015011

Gandara, P. (2017). The potential and promise of Latino students. (Essay). *American Educator*, *41*(1), 4–11. Retrieved from: https://eric.ed.gov/?id=EJ1137807.

García-Pérez, M. A., Núñez-Antón, V. (2003). Cellwise analysis in two-way contingency tables. *Educational and Psychological Measurement, 63*(5), 825-839. https://doi.org/10.1177%2F0013164403251280

García-Pérez, M. A., Núñez-Antón, V., & Alcalá-Quintana, R. (2015). Analysis of residuals in contingency tables: another nail in the coffin of conditional approaches to significance testing. Behavior Research Methods, *47*(1), 147–161. DOI: 10.3758/s13428-014-0472-0.

Geiger, A. W. (2018). America's public school teachers are far less racially and ethnically diverse than their students. Pew Research Center. Retrieved from: https://www.pewresearch.org/fact-tank/2018/08/27/americas-public-school-teachers-are-far-less-racially-and-ethnically-diverse-than-their-students/

Gentry, J., Lamb, H., & Hall, R. (2015). The difference in pre-service teachers' diversity beliefs: Interventions to influence personal and professional perspectives. *The International Journal of Diversity in Education 14*(3-4), 1-11. DOI: https://doi.org/10.18848/2327-0020/CGP/v14i3-4/40122

Goldhaber, D., Theobald, R., & Tien, C. (2019). Why we need a diverse teacher workforce. *Phi Delta Kappan, 100*(5), 25 - 30. Retrieved from: https://www.kappanonline.org/why-we-need-diverse-teacher-workforce-segregation-goldhaber-theobald-tien/

Howard, G. R. (2007). As diversity grows, so must we. *Educational Leadership, 64*(6), 16-22. Retrieved from: https://eric.ed.gov/?id=EJ766357

Indiana University-Purdue University Indianapolis, I. M. & P. E. A. C. (MAP E., MAEC, I. C. for E. E. (CEE), & Intercultural Development Research Association. (2018). *Equity-Based Framework for Achieving Integrated Schooling: A Framework for School Districts and Communities in Designing Racially and Economically Integrated Schools*. *Equity Assistance Center Region II, Intercultural Development Research Association*. Equity Assistance Center Region II, Intercultural Development Research Association. Retrieved from: https://www.idraeacsouth.org/equity-based-framework-achieving-integrated-schooling/

Jafari, M., & Ansari-Pour, N. (2019). Why, When and How to Adjust Your P Values? DOI: 10.22074/cellj.2019.5992.

King, E. & Butler, B.R. (2015). Who cares about diversity? A preliminary investigation of diversity exposure in teacher preparation programs. *Multicultural Perspectives 17*(1), 46-52. Retrieved from: https://eric.ed.gov/?id=EJ1053471

Lowery, C. (2018). An Autoethnography of Culturally Relevant Leadership as Moral Practice: Lived Experiences through a Scholar-Practitioner Lens. (Report). *The Qualitative Report*, *23*(12), 3036–3053.National Center for Education Statistics (2009). *Characteristics of public, private, and bureau of Indian education elementary and secondary school teachers in the United States: Results from the 2007-08 schools and staffing survey (NCES 2009-324).* Retrieved from: https://nsuworks.nova.edu/tqr/vol23/iss12/12/

Morchecha, K., Gandara, P. & Orfield, G. (2019). *Embracing the Effects of Demographic Change: How Can Education Leaders Respond to Population Shifts and Parent Housing Preferences to Keep the Promise of Brown Alive.* Educational Leadership. ASCD, April, pgs 34-40. Retrieved from: http://www.ascd.org/publications/educational-leadership/apr19/vol76/num07/Embracing-the-Effects-of-Demographic-Change.aspx

Passion driven statistics (n.d.). Retrieved from: https://alanarnholt.github.io/PDS-BookDown/BookDownTry/book/overview.html

Ong, A. D., and Weiss, D. J. (2000). The impact of anonymity on responses to sensitive questions. *Journal of Applied School Psychology,* 2000, *30*(8), 1691 -1708. Retrieved from: https://doi.org/10.1111/j.1559-1816.2000.tb02462.x

Orfield, G. (2009). Reviving the goal of an integrated society: A 21st century challenge. Los Angeles, CA: *The Civil Rights Project/Proyecto Derechos Civiles at UCLA.* Retrieved from: https://www.civilrightsproject.ucla.edu/research/k-12-education/integration-and-diversity/reviving-the-goal-of-an-integrated-society-a-21st-century-challenge

Randall, D. M. and Fernandez, M. F. (1991). The social desirability response bias in ethics research. *Journal of Business Ethics, 10*(11), 805 - 817. Retrieved from: https://link.springer.com/article/10.1007/BF00383696

Regional Educational Laboratory Mid-Atlantic (ED), & ICF International. (2015). *Culturally Responsive Education: Diversity in Our Classrooms. Frequently Asked Questions for Saundra Tomlinson-Clarke, Ph.D., and Penelope Lattimer, Ph.D. REL Mid-Atlantic Webinar*. *Regional Educational Laboratory Mid-Atlantic*. Regional Educational Laboratory Mid-Atlantic. Retrieved from: https://eric.ed.gov/?id=ED559061

Ruiz, E.C., and Cantu, N.E. (2103). Teaching the teachers: Dismantling racism and teaching for social change. *Urban Review 45*(1), 74-88. Retrieved from: https://eric.ed.gov/?id=EJ996182

Santamaria, L. (2009). Culturally Responsive Differentiated Instruction: Narrowing Gaps between Best Pedagogical Practices Benefiting All Learners. *Teachers College Record*, *111*(1), 214–247. Retrieved from: https://eric.ed.gov/?id=EJ826003

Schulman, M. (2013). Generation LGBTQIA, *The New York Times, 9.* Retrieved from: https://www.nytimes.com/2013/01/10/fashion/generation-lgbtqia.html

Sharpe, D. (2015). Your Chi-Square Test Is Statistically Significant: Now What? Retrieved from: https://www.researchgate.net/publication/281962515_Your_chi-square_test_is_statistically_significant_Now_What

Siegel-Hawley, G., and Frankenberg, E. (2012). *Spaces for inclusion? Teachers' perspectives of school communities with differing student racial and socioeconomic contexts.* Los Angeles, CA: The Civil Rights Project/Proyecto Derechos Civiles at UCLA. Retrieved from: https://www.civilrightsproject.ucla.edu/research/k-12-education/integration-and-diversity/spaces-of-inclusion-school-communities

The Impact of Teacher Diversity. (2019). *Educational Leadership*, *76*(7), 8. Retrieved from: http://www.ascd.org/publications/educational-leadership/apr19/vol76/num07/The-Impact-of-Teacher-Diversity.aspx

Toms, O., Reddig, K. and Jones-Fosu, S. (2019), "Assessing the diversity-related professional development needs of pre-service teachers", *Journal for Multicultural Education*, Vol. 13 No. 3, pp. 236-248. https://doi-org.wgu.idm.oclc.org/10.1108/JME-03-2019-0029

Turner, G. (2014). Is it statistically significant? The chi-square test. Student data management and analysis, 1-14. *UAS Conference Series* 2013/14. University of Oxford. Retrieved from: https://docplayer.net/18169574-Is-it-statistically-significant-the-chi-square-test.html

Using chi-square statistics in research. (n.d.). Retrieved from www.statisticssolutions.com

Walker, V. (2019). What Black Educators Built. *Educational Leadership*, *76*(7). Retrieved from: http://www.ascd.org/publications/educational-leadership/apr19/vol76/num07/What-Black-Educators-Built.aspx

Warren, C. (2015). Conflicts and Contradictions: Conceptions of Empathy and the Work of Good-Intentioned Early Career White Female Teachers. *Urban Education*, *50*(5), 572–600. https://doi.org/10.1177/0042085914525790