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ABSTRACT

This article examines the long-overlooked governmental body, the local community college governing board, through the lens of descriptive representation, to assess what variables are associated with minority representation. Higher education governing boards have long lacked diversity, let alone any type of proportional representation, but an examination of descriptive representation of local community college governing boards, which oversee a large portion of minority undergraduates, has been missing from the literature. Using OLS regression and logit methods for analysis of original data, the results provide evidence that those boards are far from descriptively representative and that social and environmental characteristics impact board diversity. The findings indicate that board size and the percentage of Black residents can play a significant role in the selection of Blackboard members, establishing an important empirical foundation in light of descriptive representation scholars' findings that descriptive representation can lead to substantive benefits. Given the important role of community college governing bodies that serve approximately half of the nation's minority undergraduates, this research is important as a stepping stone for further study of community college governing boards, who serves on them and why that matters.

In a representative democracy, descriptive representation is an important goal, a symbol of the inclusive polity that demonstrates democratic values in a multicultural society (Fraga, 2005). Scholars have long studied the concept of descriptive representation, the theory that representatives will "stand for" a particular group with whom they share similar characteristics and backgrounds, and the extent to which federal, state and local governing bodies mirror their constituencies (Pitkin, 1967, p. 61). One local government that has not been studied in any depth is the local community college governing board, which oversees policy and budgets for two-year, postsecondary institutions in 36 states (Polonio & Miller, 2012). Using a framework of descriptive representation, the following paper examines two questions to begin to ameliorate this gap in research: (1) Do local community college governing boards reflect the racial compositions of the constituencies they serve? and (2) What political, social and environmental characteristics are associated with increased minority representation?

Community colleges educate nearly half of America's minority undergraduates and play an increasingly important role in national and local postsecondary education and economic development policy arenas (Mullin, 2012). Yet by many measures, community colleges are failing to graduate students, particularly students of color (American Association of Community Colleges, 2012). Given a dynamic workforce that increasingly needs workers with college credentials (Carnevale, Strohl, Ridley, & Gulish,

2015), policymakers are struggling to help more under-represented groups succeed and complete their college degrees. Community college governing boards have the authority to implement policies and budgets that can accomplish these goals. Whether these boards would be more successful in that endeavor if more of their members resembled the students they serve and came from similar backgrounds is a question worthy of further investigation. This study's findings provide an important contribution to establish whether local community college governing boards look like the community populations they serve and lays a foundation for future research on the substantive implications of minority representation in community colleges. From a policy perspective, it also provides insight into factors that are likely to increase board diversity.

Literature review

Descriptive representation occurs when a governing body mirrors the community it serves. Furthermore, it assumes that voters will use cues derived from physical characteristics to select candidates that look like them and whom they expect will vote like them (Griffiths & Wollheim, 1960; Hicklin & Meier, 2008; Pitkin, 1967). It is one of four well-developed theories related to representation (Pitkin, 1967). Adherents tend to emphasize three key benefits of this theory, including facilitating communication between representatives and the represented because of a shared social background; providing an efficient way for voters to use physical characteristics as short-cuts or cues about candidates' interests and behaviors; and stabilizing political systems by ensuring that minority groups have representation, which can increase the participation of under-represented citizens in the political process (Bühlmann, Widmer, & Schädel, 2010). There is strong empirical support for racial voting, in which members of a self-identified group vote for "someone like me," (Stein, Ulbig, & Post, 2005, p. 158). In a descriptively representative democracy, one would expect a similar ratio between the percentage of minority residents in the population and the percentage of minority members on governing boards.

Identity groups of many kinds exist within the body politic and individuals may claim membership in multiple groups. The idea that voters make political decisions independent of the influence of group identification is mythical. Psychologists have well documented the influence of group identity on cognitive processes (Cialdini, 2001; Eagly, 1983; Harkins & Williams, 2017; Kelman, 1958). The many ways in which people identify with others–by race, gender, ethnicity, nationality, culture, religion, sexual orientation, education level or class–complicates the study of descriptive representation. Whether visual characteristics, such as race and gender, are more influential than non-visual ones, such as education level and religion, on political attitudes and choices has not been adequately addressed in the literature. Pitkin (1967, p. 61) refers to descriptive representation as mirror or pictorial representation, emphasizing the importance of physical characteristics as a discriminating factor of in-group or out-of-group membership. Although she discounts descriptive representation as an indicator of substantive representation, research has found statistically significant differences in the agendas and styles of elected women and racial minorities compared to those of men and other racial groups, respectively (Tate, 2001; Tate & Harsh, 2005; Welch, 1985).

There is a growing vein of research in the field of education finding a significant relationship between descriptive representation and substantive policy outcomes for those populations represented (Fraga, Meier, & England, 1986; Grose, 2006; Hicklin & Meier, 2008; Meier & Stewart, 1991). For instance, Hicklin and Meier (2008) found evidence that higher levels of minority representation in state legislatures had a positive and significant impact on minority enrollment at public universities. Stewart, England, and Meier (1989) also found a strong and positive connection between Black school board representation and Black administrators and then a subsequent connection between Black administrators and Black teachers. This is important given the research finding correlations between Black teachers and positive academic outcomes for Black students (Egalite, Kisida, & Winters, 2015; England & Meier, 1985; Lindsay & Hart, 2017).

In the 1970s, a handful of scholars conducted research specific to community college trustees' demographics, aggregating results for those on local and state boards. In 1971, the *Junior College Journal* published the results of a survey that found 95% of community college trustees were White, 85% were male, 98% had never graduated from a junior college, 77% were Protestant, 70% earned more than $15,000 annually and 88% were older than age 40 (Moore, 1973).

More than four decades ago, Moore wrote (p. 173), "To tell it 'like it is,' community college boards are, for the most part, 50-year-old conservative WASP male managers earning more than $25,000 annually, who listen to 'the people' speak in his golfing foursome at the local country club and over the tinkle of martini glasses at 'sophisticated' cocktail parties."

By 1997, when Vaughan and Weisman conducted another survey of community college governing board trustees, whose institutions were members of the American Association of Community College Trustees, not much had changed. Their efforts drew a 39% response rate from 618 trustees. Among them, the authors found that 86.6% were White, 7.9% were African American and 2.3% were Hispanic. Approximately two-thirds of trustees were men. This survey is still cited in more recent works on community college trustees, including Smith (2000).

Community college governing structures vary with some community colleges governed at the state level and others by local boards, comprised of appointed or elected (or both) members of the public. To ameliorate a gap in the literature related specifically to local community college boards and their diversity, this study examines local boards with elected and appointed members.

The question of whether locally governed community colleges are descriptively representative is particularly interesting, given their proximity to the populations they serve. As Thomas Jefferson stressed frequently in his writings, the government closest to the people serves the people best (Jefferson, 1816, pp. 421–423) Community colleges were designed to provide a local postsecondary option and increase human capital within cities and towns, particularly those far from land grant universities. That local component means that local community college board members oversee institutions that their neighbors, families, and friends may attend (Cohen & Brawer, 2003; Zoglin, 1976) and according to the framework of descriptive representation, these representatives of the people should share important characteristics and backgrounds with those they serve.

But there is a healthy body of literature indicating that most governing boards of all kinds are not diverse and that minority candidates face a variety of environmental and structural barriers that hinder their ascendency to public office (Fraga et al., 1986; Grose, 2006; Hicklin & Meier, 2008; Lublin, 1999). Electoral structures have been chief among those variables found to influence minority representation. For instance, Stewart et al. (1989) showed that district elections were more powerful than at-large elections in terms of increasing the diversity of school district boards. MacManus (1978) and Latimer (1979) found that socioeconomic factors, such as a population's median education level and median family income, have been found to have strong, positive and significant correlations to the diversity of governing boards (Latimer, 1979; MacManus, 1978). Additional research has found that board size, or number of available seats, has positively impacted the descriptive representation of boards with smaller boards offering fewer opportunities for service (Bühlmann et al., 2010; Bullock & MacManus, 1990; Davidson & Korbel, 1981).

The racial and ethnic composition of the community is also an important driving factor in the literature of descriptive representation. Elazar (1994) found that states' political subcultures were derived from dominant ethnic and religious groups, suggesting that local political cultures may vary based on the diversity of constituents. There are many studies that support this positive correlation for both Black and Hispanic representatives and their respective communities (Davidson & Korbel, 1981; Grose, 2006; Hero, 1998; Stewart et al., 1989). Stewart et al. (1989) found region to be a significant factor related to the composition of policymaking bodies. The South stands out with a history of voter disenfranchising methods, such as poll taxes, literacy tests and grandfather clauses (Davidson & Korbel, 1981; Hepen, 2003; Hero, 1998; Key, 1949).

Methodologically, descriptive representation has been examined in a variety of ways in the literature. Past studies have used a representation index, consisting of the percentage of minority seats divided by

the percentage of minority population which the governing body represents. Other scholars have also used a subtraction method to calculate the differences between these percentages. The results of these different methods are easily skewed based on the size of the minority population and outcomes have varied, particularly when scholars have introduced control variables, such as electoral structures (Engstrom & McDonald, 1981; Stewart et al., 1989). For example, when studying extremely small minority populations where there is a member of the minority on the elected board, the index score method will produce an extremely large representation index score, skewing the results. Another commonly used method to study descriptive representation, the subtraction method, will produce the same score for a council with no minority representative and a population of 10% minorities as a council with 35% minority members in a municipal population that is 45% minority. Engstrom and McDonald (1981)'s regression model has been widely adopted as a method that avoids index and subtraction-related obscurities. This approach essentially predicts a value of representation for a given level of population and allows for variances among cities' populations and board memberships.

Clearly some communities that lack diversity and have few board seats cannot achieve descriptive representation and scholars have found support for threshold populations, or a number of minority constituents necessary to facilitate a descriptively representative board (Engstrom & McDonald, 1981; Hicklin & Meier, 2008; Leal, Martinez-Ebers, & Meier, 2004). There is, however, little consensus on a fixed level of minority population necessary to have a realistic chance of electing one of its own under any electoral arrangement with estimates ranging from 5% to 15% of the total population (Engstrom & McDonald, 1981). At the policy level, this situation has stirred discussion about different strategies related to representation, including the change of selection methods, to ensure systemically oppressed groups have a seat at the table (Greenblatt, 2015).

Based on the literature discussed above, the following two hypotheses were developed for testing to provide insight into the research questions articulated in the introduction.

Hypothesis 1: The local community college governing boards in the sample will reflect the racial compositions of the populations they serve.

Hypothesis 2: Political, social and environmental characteristics will impact the number of Black and Hispanic board members present.

2a: Political variables will increase the number of Black and Hispanic board members, as operationalized by the selection method of board members and the size or number of seats on the board.

2b: Social variables will increase the number of Black and Hispanic board members, as operationalized by the percentage of Black and Hispanic residents in each county and median education and income levels.

2c: Environmental variables will increase the number of Black and Hispanic board members, as operationalized by the boards' regional location.

Methodology

The study population, sampling, data collection and analysis included in this section were designed to provide empirical research to test the hypotheses described above. The study's sample concerns local community college governing boards. The original data for this study were collected as part of a larger analysis of county governments from a stratified random sample of 400 U.S. counties out of 3,000 total. Of those, 19% had populations of 100,000 or more residents, matching the same ratio of counties with populations of 100,000 or more residents nationally, according to 2012 U.S. Census data. Over a three-month period in 2014, researchers used college websites, the Integrated Postsecondary Education

Data System (IPEDS) 2012–2013 data and interviews with college public information staff to obtain data and determine which counties among the 400 contained a single community college campus, branch or site with a local governing board. Of those 400 counties, 107 were found to contain campuses, branches or centers governed by a local community college governing board. Some of those 107 counties included campuses that were part of the same college, with the same local governing board, and duplicates were eliminated, paring down the sample to 98 colleges. Finally, seven of those 98 were eliminated because researchers were unable to confirm the race or ethnicity of board members through photos or follow-up calls, leaving a sample of 91 unique college boards with a combined total of 834 board members.

The dependent variable for both research questions reflects the number of Black or Hispanic board members found on each board in the sample. Minority board members are operationalized as board members that are Black or Hispanic and analyzed separately. This approach is supported in the literature on descriptive representation in higher education, specifically, Hicklin and Meier (2008) employ separate models for Blacks and Hispanics to capture differences between these two groups.

There are three methods available to researchers to identify race and ethnicity conducted through surveys, medical records and observation of physical characteristics. While no method of determination is perfect, the latter was selected because the others were not feasible. Contact information for board members is not public information readily available, hindering the use of surveys or interviews to allow for self-identification without support from a relevant national membership-based association. Furthermore, the race and ethnicity of trustees is also not considered public information, making this information difficult to obtain broadly through college public information offices (although these offices were consulted when researchers could not visually identify race and ethnicity with varying degrees of success). Collecting racial data using observation of physical characteristics is limited by the perceptions of the study's authors but this method has served as a viable backup approach to self-identification in other social sciences studies (Harris, 2002; Morris, 2007; Powers Dirette, 2014).[1]

The race and ethnicity of board members was collected by each of the authors using online photos. In cases where no photos were available or race was unclear, representatives of the community college or the board were consulted. In such cases, researchers would call or email board staff if available and then college public information officers or the college president's office for assistance with identification. As noted, there were seven boards in the sample for which researchers could not obtain confirmation of race or ethnicity through photos or from follow-up calls to college or board staff and these were omitted. No validity agreement process was used to cross check researchers' accuracy of racial identification because any case of uncertainty required third party consultation with the board or college.

Among the 91 local community college governing boards in the sample, about half had no Hispanic or Blackboard members. As shown in Table 1, of the 44 boards in the sample with at least one Black or Hispanic board member, 35 had at least one Black member on the board and 15 had at least one Hispanic member on the board. Out of 834 total board seats in the sample, 40 (4.8%) of those were held by Black men, 22 (2.6%) were held by Black women, 23 (2.8%) were held by Hispanic men and seven (0.8%) were held by Hispanic women. The majority, 62%, of boards had no Black board members and 84% of the boards had no Hispanic board members.

Members

The percentage of Black and Hispanic populations, the median income and the percentage of residents with an associate degree or higher for each county were identified using the 2012, 3-year estimates from the U.S. Census American Community Survey. Of note, there were no counties with a majority of Black residents and three counties with majority Hispanic populations.

Each governing board's size and selection method were determined using college websites or governing documents. Non-voting members were excluded. The IPEDS database's most recent

Table 1. Frequency of Boards in Sample with Black and Hispanic Board Members.

Variable	Description	Frequency	Percentage
Total Black Board Members	0	56	62%
	1	18	19.6%
	2	11	12%
	3	4	4.3%
	4	1	1.1%
	6	1	1.1%
	Total:	91	100%
Total Hispanic Board Members	0	76	83.7%
	1	9	9.8%
	2	1	1.1%
	3	4	4.3%
	7	1	1.1%
	Total:	91	100%

available data at the time of collection was for the year 2012–2013. Descriptive statistics for independent and dependent variables are located in the Appendix, Table A1.

This study measures descriptive representation as a relationship between the percentage of board members belonging to Black or Hispanic groups and their respective percentages in the population of the county in which the college campus, branch or site is located. The statistical method is modeled off of Engstrom and McDonald's (1981) well-established approach used in many empirical studies of descriptive representation to date (Leal et al., 2004; Meier & England, 1984; Meier, Gonzalez-Juenke, Wrinkle, & Polinard, 2005) and has been the preferred approach to studying descriptive representation on school boards (Meier & England, 1984; Meier et al., 2005; Stewart et al., 1989). This method regresses the percentage of minority members on the board on the percentage of minority residents in the population and the slope then provides an estimate of the relationship between the two, which can be interpreted as a measure of proportionality. A slope of one means that the minority population on the board is directly proportional. A slope of less than one indicates under representation and a slope greater than one means that there is over representation.[2] With this method, it is also important that intercepts not be statistically different from zero (Engstrom & McDonald, 1981; Stewart et al., 1989).

The second research question examines relevant predictors related to political, social and environmental characteristics and how they impact the presence of Black or Hispanic board members. To do this, it employs an ordered-logistic regression, using an ordinal dependent variable (0 = no Black/Hispanic board members; 1 = 1 Black/Hispanic board member; and 2 = 2 or more Black/Hispanic board members). Gologit2, a generalized ordered logit program in Stata, was used to evaluate the data for this question. A major asset of this program is that it offers a less restrictive approach compared to the traditional ordered logit. But this method is also ideal for dealing with non-linear data, which as will be discussed later is the case for certain models in this analysis. While information may be lost by grouping the data, using multiple categories to create an ordinal variable is preferable to dichotomization (Altman & Royston, 2006).[3]

Findings

Hypothesis 1: The local community college governing boards in the sample will reflect the racial compositions of the populations they serve.

The simple bivariate relationship between populations and the respective dependent variables was examined first. There were statistically significant, strong and positive correlations between the percentage of Blackboard members and the percentage of Black residents, $r(89) = .67$, $p < .001$ as well as between the percentage of Hispanic board members and the percentage of Hispanic residents, $r(89) = .611$, $p < .001$. The correlations, however, are somewhat misleading whereas a curvilinear
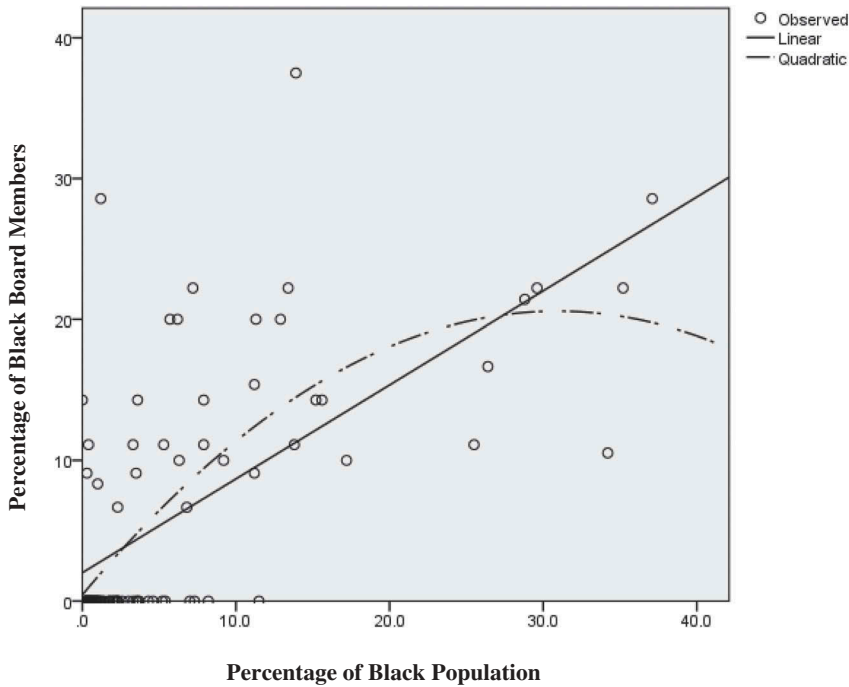
Figure 1. Scatterplot of percentage of Blackboard members and percentage of Black population.

relationship was detected for the relationship between the percentage of Blackboard members and Black residents as shown in Figure 1.

As Table 2 depicts, the linear regression model was statistically significant, $F(1, 89) = 63.96$, $p < .001$ and the slope was .67, indicating college boards in the sample were under representative of the Black populations they served. For each additional 1% increase in Black population, the percentage of Blackboard members increased by .67%. Put another way, the capacity for demographic growth of this population to positively influence representation is only 67% effective. The percentage of Black residents in the county accounted for 42% of the explained variance in the percentage of Blackboard members. But as mentioned above, the relationship between Black population and board membership is not linear and therefore these figures should not be interpreted by themselves as precise estimates of representation. To evaluate whether an over-inflation of zeros accounts for this relationship, whereas there are counties with small boards and small and static minority populations that cannot obtain descriptive representation, we examined two models: (1) a sample of counties with Black populations of 1% or greater and (2) a sample of counties with Black populations of fewer than 1% as indicated in

Table 2. Regression Results for Black Board Membership on Local Community College Governing Boards.

Dependent Variable = Percent of Black Board Members				
Variable	Model 1 Black – All Boards	Model 2 Black ≥ 1%	Model 3 Black < 1%	Model 4 Non-linear
Intercept	1.97* (0.87)	2.72* (1.29)	3.75* (1.42)	0.40 (1.02)
Population	0.67*** (0.08)	0.63*** (0.12)	−5.10 (2.60)	1.30*** (0.25)
Population-squared				−0.21** (0.01)
Tolerance				0.11
R-squared	0.42	0.37	0.13	0.46
F	63.96***	36.22***	3.84	37.93***
N of Cases	91	64	27	91

Note: * = $p < .05$; ** $p < .01$; *** $p < .001$; Parentheses indicate standard errors; Coefficients are unstandardized.

Table 2's models 2 and 3, respectively. Model 2 contributes knowledge to this research question by its equivalence to the first model, indicating that even though the relationship is nonlinear, the results are similar when counties with fewer than 1% Black population are excluded. Although the intercept has increased by slightly less than one unit, the slope is nearly equivalent and the level of explained variation has diminished only slightly. Model 3's coefficient lacks significance and little can be gleaned from this equation.

The last model shows the results of a non-linear equation linking population to representation. The population-squared term is significant but negative, indicative of the quadratic curve down but less helpful as a value of representation in Engstrom and McDonald's approach, which relies on linear regression models. It is noteworthy that the level of explained variation is similar to, though slightly higher than the first model.

Taken together these findings suggest Blacks are underrepresented on local community college boards and that the relationship is nonlinear, with communities with larger Black populations significantly more represented than those with smaller populations. It also suggests that there is a ceiling at which point, growth in Black population may actually lead to a decrease in representation.

The relationship between Hispanic population and board membership was linear and the results from the regression, as shown in Table 3's first model, indicate they are under-represented. But the slope in this model, which indicates Hispanics are represented at about half – 54% – of their population, is not itself a precise estimate of representation. The intercept is negative with a low level of significance ($p \leq .1$), indicating a threshold effect. This means that increases in Hispanic population have no effect on expected representation levels until the group population reaches a specific benchmark. Therefore, a threshold was estimated using a regression equation to predict the population level at which the estimated representation will be at least 0 (Leal et al., 2004). This provided a threshold level of 4.4%, the minimum Hispanic population required before Hispanic population can influence board representation. Model 2 in Table 3 depicts the regression equation for counties with Hispanic populations of 4.4% or greater. The coefficient increases in strength to .62 while the explained variation decreases by only 1% point to 36%. The change in intercepts, increasing in its distance from 0 and still negative, suggests caution in interpreting these values as precise indicators of representation.

The first hypothesis that local community college governing boards are representative of the populations they serve is not supported by the findings. This is confirmed in the models examining representation of Blackboard members and inconclusive for Hispanic populations. However, both models, shown in Tables 2 and 3, provide further insight into the data provided in Table 1, the frequency, or lack thereof, of Black and Hispanic board members in the sample. This is a helpful first step before examining the second hypothesis to understand how different political, social and environmental characteristics impact board diversity.

Hypothesis 2: Political, social and environmental characteristics will impact the number of Black and Hispanic board members present.

2a: Political variables will increase the number of Black/Hispanic board members, as operationalized by the selection method of board members and the size or number of seats on the board.

Table 3. Regression Results for Hispanic Board Membership on Local Community College Governing Boards.

Dependent Variable = Percent of Hispanic Members		
Variable	Model 1 Hispanic – All Boards	Model 2 Hispanic ≥ 4.4 Percent
Intercept	−2.40* (1.41)	−5.29* (2.99)
Population	0.54** (0.08)	0.63** (0.12)
R-squared	0.37	0.36
F	53.09**	27.83**
N of Cases	91	51

Note: * = $p < .10$; ** $p < .001$; Parentheses indicate standard errors; Coefficients are unstandardized.

Table 4. Logit Analysis of Board Composition for Black Board Members.

	Variables	Odds Ratio	Coefficients	P Values
0 Black Board Member vs. 1 or More Black Board Members	At Large	0.18	−1.74	− − − − −
	Median Education	1.05	0.05	− − − − −
	Median Income	0.99	−8.11	− − − − −
	Board Size	1.25	0.22	0.04
	% Black Population	1.3	0.27	0.00
	Region	2.17	0.78	− − − − −
	_Cons	0.01	−5.13	0.00
0 or 1 Black Board Member vs. 2 or more Black Board Members	At Large	0.18	−1.74	− − − − −
	Median Education	1.05	0.05	− − − − −
	Median Income	0.99	−8.11	− − − − −
	Board Size	1.25	0.22	0.04
	% Black Population	1.3	0.27	0.00
	Region	2.17	0.78	− − − − −
	_Cons	0.00	−7.37	0.00

Note: LR chi2(6) = 69.9; Prob > chi2 = 0.00; Pseudo R^2 = 0.41

Table 5. Logit Analysis of Board Composition for Hispanic Board Members.

	Variables	Odds Ratio	Coefficients	P Values
0 Hispanic Board Member vs. 1 or More Hispanic Board Members	At Large	0.74	−0.31	− − − − −
	Median Education	1.03	0.03	− − − − −
	Median Income	1.00	0.00	− − − − −
	Board Size	1.11	0.11	− − − − −
	% Hispanic	1.09	0.09	0.04
	Population	0.98	−0.02	− − − − −
	Region	0.00	−5.78	0.00
	_Cons			
0 or 1 Hispanic Board Member vs. 2 or more Hispanic Board Members	At Large	0.74	−0.31	− − − − −
	Median Education	1.03	0.03	− − − − −
	Median Income	1.00	0.00	− − − − −
	Board Size	1.11	0.11	− − − − −
	% Hispanic	1.09	0.09	0.04
	Population	0.98	−0.02	− − − − −
	Region	0.00	−7.18	0.00
	_Cons			

Note: LR chi2(6) = 20.89; Prob > chi2 = 0.00; Pseudo R2 = 0.21

2b: Social variables will increase the number of Black/Hispanic board members, as operationalized by the percentage of Black and Hispanic residents in each county and median education and income levels.

2c: Environmental variables will increase the number of Black/Hispanic board members, as operationalized by boards' regional location.

Results, as shown in Tables 4 and 5, indicate log odds or odds ratio for the independent variables in two phases. The first has a dependent variable of 1 = at least one Black or Hispanic board member and 0 = no Black or Hispanic board member. The second phase examines these relationships and their impact on there being 1 = one or more Black or Hispanic board members and 0 = 1 or no Black or Hispanic board members. If the log odds and odds ratios are the same in both phases, as it is in our results, there is no violation of the parallel lines assumption. This allows us to draw conclusions about the impact of independent variables across both analyses.

Analysis of the relationship between the number of Black board members on local community college governing boards and the explanatory variables shows that the model was significant, as compared to a null model with no predictors, with the likelihood ratio chi-square of 69.9 (p = .00)

and a pseudo R^2 of .41. The size of the local community college board and the percentage of Black population were significant explanatory variables. So for each one-unit increase in the size of the board and the percentage of Black residents, one can expect a .22 and .27 increase, respectively, in the log odds of having more Black board members. Because log odds are not intuitive to interpret, the odds ratios terms are provided. For every seat added to a board, it is 1.25 times more likely to have one or more Blackboard members, and for each percentage increase in the Black population, a board is 1.3 times more likely to have one or more Blackboard members. The model for the Hispanic variables was also significant with the likelihood ratio chi-square of 20.89 (p = .00) and a pseudo R^2 of 0.21. The percentage of Hispanic population was the only significant variable and had a modest impact on the percentage of Hispanic board members. For every percentage increase in the Hispanic population, we expect a .09 increase, respectively, in the log odds of having one or more Hispanic board members or for every percentage increase in the Hispanic population, a board is 1.09 times more likely to have one or more Hispanic board members.

These results indicate partial support for the second hypothesis examining the impact of political, social and environmental characteristics. Region and the selection method of board members, indicating whether they were elected at large or through other methods, were not significant. However, the percentage of Black and Hispanic populations were significant in both models. Finally, the number of seats on each board was significant in the model representing Black membership.

Conclusion

This research explores a forgotten local governing body in the descriptive representation literature, local community college governing boards. These governmental bodies are important to national policy goals to increase college attainment and workforce development, particularly for under-represented communities. The findings from this data establish a foundation for future research by providing empirical evidence that these boards are not descriptively representative and refute assumptions that because community college governing boards at the local level are close to the people they serve that they would be *of the people* as well. In fact, the non-linear relationship between Black population and board membership indicates that there may be a plateau for board membership whereby as the Black population continues to grow, Blackboard membership may even decline. In addition, the lack of Hispanic population and boards with Hispanic members confounds efforts to determine their representativeness. This is an important finding for future descriptive representation research on governing bodies with few minorities. Additional questions for scholars in this field to explore include examining non-linear relationships and representative measurements.

The study also provides evidence that political and social variables play a role in determining the board's diversity. The significance of board size on Black membership shows the impact that environmental characteristics affecting structure can play in board diversification. The progressive movement that swept that nation in the early 20th century, leading to smaller governing bodies as a counter to corruption, also had the effect of limiting minority access to positions of power (Mitchell, 1997). This finding should serve as a caution to policymakers considering decreasing the size of their higher education boards, as is taking place in the state of Nevada, as a way to reform higher education governance (Rindels, 2018). Decreasing the number of members may have the unintended consequence of reducing the diversity of the board. This result may also incite board members to think twice about the size of the board the next time they update their bylaws. In addition, the community, and the number of Blacks and Hispanics within it, prove to be an important social characteristic impacting board diversity. While this type of diversification by demographics should lead to increased descriptive representation as America's population continues to diversify (Kotkin, 2010), the strong impact of Black and Hispanic population growth on board diversity may have implications for the way community college service areas or board member districts are drawn.

A final issue that should take center stage on an agenda of future research examining the relationships between descriptive and substantive representation is the effect of board diversity on diversity

planning, which has become an integral component of community college effectiveness in response to the changing demographics of the students they serve. As open-door institutions, community colleges have been dubbed, "the people's college," (Vaughan, 1982, p. 3), and access, equity and inclusion are values associated with many community colleges' missions. As the United States becomes more diverse, community colleges must develop appropriate organizational responses through well-developed diversity plans (Burke, 2013). The diversity of the board may make significant and powerful contributions to community colleges' effectiveness at welcoming students of color and helping them succeed.

Notes

1. Asking respondents to identify their race or ethnicity through surveys and in-depth interviews is the most prevalent way to identify race in social sciences (Morris, 2007). Self-identification is endorsed by the federal statistical system as the preferred method of racial classification. However, when this approach is not feasible, observer identification is used (Harris, 2002). Efforts to confirm race or ethnicity with PIOs proved challenging when necessary when photos were unavailable or when researchers were unable to classify race based on visual identifiers and resulted in seven boards being excluded from the sample as discussed above. Therefore, research-described appearance, based on the perspectives of all of the authors, who come from different racial, ethnic and gender backgrounds, was determined to be the best approach. The method of researcher-described appearance for data collection of race is utilized in practice (e.g., death certificates) and research (ethnographies and field research needing to avoid obtrusive interactions) and while observed race may vary across observers, research-described appearance is substantially more likely to confirm with self-reported race when individuals identify with only one race (Harris, 2002).
2. Under the regression approach, proportionality is a best fit relationship across a set of data points, each of which reflects the specific Black/Hispanic proportions of the population and the board for the college. But unlike other methods, it is sensitive to the variance among cities' variables. Unlike a ratio method, it accounts for the fact that all counties with no Black/Hispanic board member have varying percentages of Black/Hispanic populations and unlike the deficit method, it accounts for the fact that all cities that have the same difference in proportional representation are not equal (Engstrom & McDonald, 1981).
3. The more stringent restrictions for ologit include the proportional odds or parallel lines assumption, dictating that the effects of the explanatory variable be mirrored in their application to each category of the dependent variable (Williams, 2005a). In other words, using a traditional ordered logit program, one should see the same coefficients, with the exception of sampling variability, when one compares the relationships of the independent variables to the category of 0 to 1 Blackboard members as they would for the relationship of the independent variables to the dependent category of one to two or more Blackboard members. Gologit2 provides the capability to relax the parallel lines constraint for those variables that violate that assumption by constraining their effects to meet the parallel lines assumption (Williams, 2005b). All explanatory variables were constrained to meet the proportional odds assumption for both Black and Hispanic populations.

References

Altman, D. G., & Royston, P. (2006). The cost of dichotomizing continuous variables. *BMJ* (clinical Research Ed.), *332* (7549), 1080. doi:10.1136/bmj.332.7549.1080

American Association of Community Colleges. (2012). *Reclaiming the American dream: A Report from the 21st-Century Commission on the Future of Community Colleges*. Washington, DC. http://www.aacc.nche.edu/21stCenturyReport.

Bühlmann, M., Widmer, A. F., & Schädel, L. (2010). Substantive and descriptive representation in Swiss cantons. *Swiss Political Science Review*, *16*(3), 565–595. doi:10.1002/spsr.2010.16.issue-3

Bullock, C. S., & MacManus, S. A. (1990). Structural features of municipalities and the incidence of Hispanic council members. *Social Science Quarterly*, *71*(4), 665–681.

Burke, L. H., Jr. (2013). Why we can't wait: Diversity planning in community colleges. *Community College Journal of Research and Practice*, *37*(11), 839–843.

Carnevale, A. P., Strohl, J., Ridley, N., & Gulish, A. (2015). *Three educational pathways to good jobs*. Washington, DC: Georgetown University Center on Education and the Workforce.

Cialdini, R. B. (2001). *Influence: Science and practice*, (4th ed). Boston, MA: Allyn and Bacon.

Cohen, A. M., & Brawer, F. B. (2003). *The American Community College*. San Francisco, CA: John Wiley & Sons.

Davidson, C., & Korbel, G. (1981). At-Large elections and minority-group representation: A re-examination of historical and contemporary evidence. *The Journal of Politics*, *43*(4), 982–1005. doi:10.2307/2130184

Eagly, A. H. (1983). Gender and social influence: A social psychological analysis. *American Psychologist*, *38*(9), 971–981. doi:10.1037/0003-066X.38.9.971

Egalite, A. J., Kisida, B., & Winters, M. A. (2015). Representation in the classroom: The effect of own-race teachers on student achievement. *Economics of Education Review*, *45*, 44–52. doi:10.1016/j.econedurev.2015.01.007

Elazar, D. J. (1994). *The American Mosaic: The impact of space, time and culture on American politics*. Boulder, CO: Westview Press.

England, R. E., & Meier, K. J. (1985). From desegregation to integration: Second generation discrimination as an institutional impediment. *American Politics Quarterly*, *13*(April), 227–247. doi:10.1177/1532673X8501300206

Engstrom, R. L., & McDonald, M. D. (1981). The election of blacks to city councils: Clarifying the impact of electoral arrangements on the seats/population relationship. *The American Political Science Review*, *75*(2), 344–354. doi:10.2307/1961369

Fraga, L. R. (2005). Racial and ethnic politics in a new century. In G. M. Segura & S. Bowler (Eds.), *Diversity in democracy, minority representation in the United States* (pp. 278–302). Charlottesville, NC: University of Virginia Press.

Fraga, L. R., Meier, K. J., & England, R. (1986). Hispanic Americans and educational policy: Limits to equal access. *The Journal of Politics*, *48*(4), 850–876. doi:10.2307/2131003

Greenblatt, A. (2015). How seattle is increasing diversity in politics. *Governing*. Retrieved from http://www.governing.com/topics/politics/gov-seattle-city-council-elections.html

Griffiths, A. P., & Wollheim, R. (1960). How can one person represent another? *Aristotelian Society*, *34*, 187–224. doi:10.1093/aristoteliansupp/34.1.187

Grose, C. R. (2006). Disentangling constituency and legislator effects in legislative representation: Black legislators or black districts? *Social Science Quarterly*, *86*, 427–443. doi:10.1111/j.0038-4941.2005.00311.x

Harkins, S. G., & Williams, K. D. (2017). Introduction and overview. In S. G. Harkins, K. D. Williams, & J. Burger (Eds.), *The oxford handbook of social influence* (pp. 3–10). Oxford, UK: Oxford University Press.

Harris, D. R. (2002). *In the eye of the beholder: Observed race and observer characteristics*. PSC Research Report No. 02-522. Population Studies Center at the Institute for Social Research, University of Michigan. Ann Arbor.

Hepen, J. (2003). Racial and social diversity and U.S. presidential election regions. *The Professional Geographer*, *55*(2), 191–205.

Hero, R. E. (1998). *Faces of inequality: Social diversity in American politics*. New York, NY: Oxford University Press.

Hicklin, A., & Meier, K. J. (2008). Race, structure, and state governments: The politics of higher education diversity. *The Journal of Politics*, *70*(3), 851–860. doi:10.1017/S0022381608080808

Jefferson, T. 1816, February 2. Thomas Jefferson to Joseph C. Cabell. In P. B. Kurland & R. Learner Eds., *The Founders' Constitution* (pp. 421–423). Chicago, Illinois: University of Chicago Press. Retrieved from http://press-pubs.uchicago.edu/founders/documents/v1ch4s34.html.

Kelman, H. C. (1958). Compliance, identification, and internalization: Three processes of attitude change. *Journal of Conflict Resolution.*, *2*(1), 51–60. doi:10.1177/002200275800200106

Key, V. O. (1949). *Southern politics in state and nation* Alfred A. Knopf. New York, NY: Vintage Books.

Kotkin, J. (2010). The changing demographics of America. Retrieved from https://www.smithsonianmag.com/travel/the-changing-demographics-of-america-538284/

Latimer, M. K. (1979). Black political representation in southern cities: Election systems and other causal variables. *Urban Affairs Quarterly*, *15*, 65–86. doi:10.1177/107808747901500104

Leal, D. L., Martinez-Ebers, V., & Meier, K. J. (2004). The politics of Latino education: The biases of at-large elections. *Journal of Politics*, *66*(4), 1224–1244. doi:10.1111/j.0022-3816.2004.00297

Lindsay, C. A., & Hart, C. M. D. (2017). Exposure to same-race teachers in student disciplinary outcomes for Black students in North Carolina. *Educational Evaluation and Policy Analysis.*, *39*(3), 485–510. doi:10.3102/0162373717693109

Lublin, D. (1999). *The paradox of representation*. Princeton, NJ: Princeton University Press.

MacManus, S. A. (1978). City council election procedures and minority representation: Are they related? *Social Science Quarterly*, *59*(1), 153–161.

Meier, K. J., & England, R. E. (1984). Black representation and educational policy: Are they related? *American Political Science Review*, *78*(2), 391–403. doi:10.2307/1963371

Meier, K. J., Gonzalez-Juenke, E., Wrinkle, R. D., & Polinard, J. L. (2005). Structural choices and representational biases: The post-election color of representation. *American Journal of Political Science*, *49*(4), 758–768. doi:10.1111/ajps.2005.49.issue-4

Meier, K. J., & Stewart, J. (1991). *The politics of Hispanic education: Un paso pa'lante y dos pa'tras*. Albany: State University of New York Press.

Mitchell, J. (1997). Representation in government boards and commissions. *Public Administration Review*, *57*(2), 160–167. doi:10.2307/977064

Moore, W. (1973). The community college board of trustees: A question of competency. *The Journal of Education*, *44*(3), 171–190.

Morris, E. W. (2007). Researching Race: Social construction through qualitative methods and an interactionist perspective. *Symbolic Interaction*, *30*(3), 409–425. doi:10.1525/si.2007.30.3.409

Mullin, C. M. (2012). *Why access matters: The community college student body. (AACC Policy Brief 2012-01PBL).* American Association of Community Colleges. Retrieved from https://eric.ed.gov/?id=ED532204

Pitkin, H. F. (1967). *The concept of representation.* Berkley: University of California Press.

Polonio, N. A., & Miller, E. R. (2012). *Public community college governing boards: Structure and composition.* Washington, DC: Association of Community College Trustees.

Powers Dirette, D. (2014). Questions about race as a research variable. *The Open Journal of Occupational Health Therapy, 2*(3), Article 1.

Rindels, M. (2018). Strife between donors, regents over UNLV president comes amid broader effort to restructure higher ed system. *Nevada Independent.* Retrieved from https://thenevadaindependent.com/article/strife-between-donors-regents-over-unlv-president-comes-amid-broader-effort-to-restructure-nshe

Smith, C. J. (2000). *Trusteeship in community colleges: A guide for effective governance.* Washington, DC: The Association of Community Colleges Trustees.

Stein, R. M., Ulbig, S. G., & Post, S. S. (2005). Voting for minority candidates in multiracial/multiethnic communities. *Urban Affairs Review, 41*(2), 157–181. doi:10.1177/1078087405280311

Stewart, J., Jr., England, R. E., & Meier, K. J. (1989). Black representation in urban school districts from school board to office classroom. *The Western Political Science Quarterly, 42*(2), 287–305. doi:10.2307/448356

Tate, K. (2001). The political representation of blacks in congress: Does race matter? *Legislative Studies Quarterly, 26*(4), 623–638. doi:10.2307/440272

Tate, K., & Harsh, S. (2005). "A portrait of the people" descriptive representation and its impact on u.s. house members' ratings. In G. M. Segura & S. Bowler (Eds.), *Diversity in democracy: Minority representation in the United States.* Charlottesville, NC: University of Virginia Press.

Vaughan, G. B. (1982). *The community college in America: A short history.* Washington, D.C.: American Association of Community and Junior Colleges.

Vaughan, G. B., & Weisman, I. M. (1997). Selected characteristics of community college trustees and presidents. *New Directions for Community Colleges, 98*, 5–12. doi:10.1002/cc.9801

Welch, S. (1985). Are women more liberal than men in the United States Congress? *Legislative Studies Quarterly, 10* (1), 125–134. doi:10.2307/440119

Williams, R. (2005a). Gologit2: A program for generalized logistic regression/partial proportional odds models for ordinal dependent variables. Retrieved from http://www.stata.com/meeting/4nasug/gologit2.pdf

Williams, R. (2005b). *Gologit2: Generalized logistic regression/partial proportional oddsmodels for ordinal dependent variables.* Department of Sociology, University of Notre Dame. Retrieved from http://www3.nd.edu/~rwilliam/gologit2/

Zoglin, M. L. (1976). *Power and politics in the community college.* Palm Springs, CA: ETC Publications.

Appendix A

Table A1. Descriptive Statistics for Independent Variables.

Variable	Obs.	Mean	Std. Dev.	Min.	Max
BLPOP (% of Black Population)	91	6%	8.5	0	37.1%
HISPOP (% of Hispanic Population)	91	11.8%	14.9	0.4%	76%
Board Total (% of Board Seats)	91	9.2	4.2	5	30
MEDIAN INCOME (of county)	91	$47,651.08	$10,040.36	$27,242	$88,687
ASSOC ED (% with an Associate Degree in County)	91	30.6%	8.3	11.8%	51.2%

Variable	Freq.		Percent
Region (1 = South; 0 = Non-South)	South = 31		34.1%
	Other = 60		65.9%
At Large (1 = Elected at Large; 0 = Other)	Elected at Large = 18		80.2%
	Other = 73		19.8%
Ordinal Black Representatives	0 Black Board Members = 56		61.5%
	1 Black Board Member = 18		19.8%
	2 or More Black Board Members = 17		18.7%
Ordinal Hispanic Representatives	0 Hispanic Board Members = 76		83.5%
	1 Hispanic Board Member = 9		9.9%
	2 or More Hispanic Board Members = 6		6.6%