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A Call for Dreamkeepers in Rural United States: Considering the Postsecondary Aspirations of Rural Ninth Graders

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Highly effective teachers not only are the percolators of student dreams but also actively convey their hopes and dreams, catalyzing student dreams of further education. Within rural education contexts, there are not enough Dreamkeepers—teachers, counselors, and other school personnel who inspire student success. This article explores the college aspiration gap among ninth graders by population density. The authors posit that the college enrollment gap between urban/suburban and town/rural students is correlated with this aspiration gap, which in turn is fueled by a lack of Dreamkeepers. They explored this using the High School Longitudinal Survey of 2009, comparing student postsecondary aspirations by locale and connecting those to student perceptions of their teachers' expectations for their success. Differences emerged between urban and rural students concerning the intensity with which ninth graders perceived teachers' expectations for their future successes. This article begins with a contextual discussion of social perceptions of urbanicity compared to rurality and then turns to a discussion of rural students' college aspirations and the role of families and schools therein. Implications for further research and practice are discussed.

***Keywords*: rural students, high school students, teacher aspirations, college/postsecondary aspirations, college choice**

Now in its second edition, the classic *The Dreamkeepers: Successful Teachers of African American Children* (2009), by Gloria Ladson-Billings, speaks to the ability of schools and districts to identify teachers highly effective with Black children as contributing to teacher effectiveness. Ladson-Billings identified teacher interests; provision of teacher education and professional development opportunities to learn about student cultures, as well as discover their own cultural biases; enhancing knowledge of self and the impact of self on students; cultivating criticality of policies and practices to enhance their ability to advocate for students; and immersion of teachers in student cultures. In speaking about nominally desegregated education in an urban environment, one of her participants, a baby boomer, remarked how "most importantly, the teachers knew our families and had a sense of their dreams and aspirations for us" (p. 7).

Highly effective teachers not only are the percolators of student dreams but also actively convey their hopes and dreams, catalyzing student dreams of further education. Within rural education contexts, there are not enough Dreamkeepers—teachers, counselors, and other school personnel who inspire student success. In this article, we explore the college aspiration gap among ninth graders by population density. We posit that the college enrollment gap between urban/suburban and town/rural students is correlated with this aspiration gap, which in turn is fueled by a lack of

Dreamkeepers. We explored this using the High School Longitudinal Survey of 2009 (HSLS:09) comparing student postsecondary aspirations by locale and connecting those to student perceptions of their teachers' expectations for their success. We found differences between urban and rural students with regard to the intensity that ninth graders perceived in their teachers' expectations for their future success. This article begins with a contextual discussion of social perceptions of urbanicity compared to rurality and then turns to a discussion of rural students' college aspirations and the role of families and schools therein. In short, it takes a village to cultivate the college aspirations of any student, but particularly rural students.

Literature Review

From 2000 to 2016, overall undergraduate college enrollment rates in colleges and universities across the United States increased by 28%, rising from 13.2 to 16.9 million students (NCES, 2018b). Despite the college enrollment increase, reports continually showed a bifurcation between the enrollments of students based on geographic locale—the most pointed difference is between students from rural areas and cities. Specifically, 29% of persons ages 18–24 enrolled in U.S. colleges and universities are from rural locales, compared to 44% of students from cities (NCES, 2015). Education scholars have argued that college education attainment for both rural and urban students is predicated on such vital precollege factors as parental education level, socioeconomic status (SES), school social capital, exposure to college readiness activities, and high school demographics (Gilfillan, 2017; Knaggs, Sondergeld, & Schardt, 2015; Schaefer & Rivera 2016). Accordingly, rural high school students are in a precarious position to either benefit from these factors or face disenfranchisement that may hinder their collegiate aspirations.

Urbanicity Versus Rurality

Urbanicity is often typecast as modern and progressive, whereas rurality is deemed as outmoded and regressive within U.S. society (Cubberley, 1914; Gibbs, Swaim, & Teixeira, 1998; Theobald & Wood, 2010). This deficit orientation plaguing rural living and education could potentially influence how parents, school personnel, policy makers, and other stakeholders perceive rural students' educational capacities (Harper, 2015; Nelson, 2016). The education trajectory in rural areas does look very different from that in urban areas, given that rural schools typically have fewer course options and extracurricular activities and lower per-pupil expenditures (Byun, Meece, & Irvin, 2012; Byun, Meece, Irvin, & Hutchins, 2012). Moreover, rural students often have lower family incomes and parents with no college education, which influences students' level of educational attainment (Petrin, Schafft, & Meece, 2014). Despite these differences, rural school systems educate their students just as urban systems do, albeit with fewer resources (Gibbs et al., 1998). Furthermore, rural students report an increased sense of connectedness with teachers and counselors and receive both formal and informal support from churches and community-based organizations that positively influence their long-term educational plans (Cholewa, Burkhardt, & Hull, 2016; Tieken, 2016). Collectively, Dreamkeepers play a vital role in creating a pro-college culture for rural students.

Rural Student College Aspirations

Historically, rural high school students have opted to enter the workforce after graduation; however, recent trends show rural students aspire to attend college despite real and perceived barriers they face (Petrin et al., 2014). Rural students in the United States most often opt to attend 2-year colleges (Baum et al., 2013; Freeman, 2016), and research pointing to why rural students elect 2-year colleges as opposed to 4-year universities is mixed. Some researchers suggest that rural students choose 2-year colleges over 4-year colleges and universities due to lower tuition costs (Carnevale & Strohl, 2013), a desire to stay closer to their families to assist with household duties, or to contribute to the family's income (Espinoza, 2010; Freeman, 2016; Friesen & Purc-Stephenson, 2016; Tieken, 2016). Other researchers argue that teachers and other school personnel do not steer rural students in the direction of 4-year postsecondary institutions (e.g., Freeman, 2016). While any postsecondary

attendance is helpful for students in earning a living wage and lifting their families from poverty (Kane & Rouse, 1995; Walpole, 2007), researchers have questioned if rural students make fully informed decisions about pursuing college. It seems that rural students enroll in colleges that are less selective than they are academically eligible to attend, a phenomenon known as academic undermatching (Freeman, 2016; Hillman, 2016). Also, rural students frequently choose college majors that reflect careers in their local communities and express a need to obtain jobs quickly due to financial constraints (Hillman, 2016; Klasik, Blagg, & Pekor, 2018).

Parents and Families as Dreamkeepers

College access requires support and guidance from knowledgeable sources, and direct access to those sources is highly correlated with parental education and SES (Carnevale & Strohl, 2013; Nelson, 2016). Specifically, parental influence is deemed the primary factor that determines college attendance for rural students (Nelson, 2016; Tieken, 2016). Rural students with parents who have completed college, who have higher SES, and who are White have more exposure to college information and preparatory programs (Carnevale & Strohl, 2013; Hillman, 2016; Klasik et al., 2018). However, Nelson's (2016) qualitative study of 30 successful rural college graduates found that, despite the inability of noncollege educated parents to help offer college knowledge directly, students reported their parents offered encouragement and material support that helped fuel their college aspirations.

The role of the family in rural student college choices is especially important, as rural culture is significantly driven by familism, a multidimensional construct that encompasses feelings of collective identity with respect for and connectedness to the family (Agger, Meece, & Byun, 2018; Freeman, 2016). It is a rural community capital asset (Yosso, 2005; Yosso & Burciaga, 2016) that can either buttress or hamper rural students' college aspirations. When it comes to immediate family needs and expectations, rural students may render their higher education aspirations subservient to the desires of their families (Agger et al., 2018; Biemiller, 2016). The interdependency of the rural community may create separation conflicts stemming from psychological constraints of adjusting to a new life outside of the community and within new cultures outside of rural settings (Friesen & Purc-Stephenson, 2016). Hence, rural students may feel a sense of identity loss, doubt their ability to succeed at universities, and feel a reduced sense of belonging in new settings (Crockett, Shanahan, & Jackson-Newsom, 2000; Dunstan & Jaeger, 2016; Friesen & Purc-Stephenson, 2016; Petrin et al., 2014). Furthermore, the thought of rural departure may paralyze the belief of progress and aptitude for success and social engagement (Friesen & Purc-Stephenson, 2016; Tieken, 2016).

Parents and families of rural high school students experience similar apprehensions due to the costs associated with the student's departure to college and the loss of human capital steaming from out-migration (Howley, 2006; Schafft & Jackson, 2010; Tieken, 2016). Through an ethnographic study, Tieken (2016) captured the experiences of rural high school guidance counselors and found that parents were apprehensive about supporting students' college aspirations, as parents' contact with school counselors was infrequent and some rural parents refused to participate in college readiness activities. As a result, counselors in the study reported providing college information directly to the students (Tieken, 2016).

Teachers as Dreamkeepers

Similar to parental and familial influence, teachers play an integral role in inspiring rural students to attend college (Cholewa et al., 2016). College readiness requires intentional academic, social, and cognitive preparation from teachers to help students succeed in collegiate-level courses (Crumb & Larkin, 2018). Rural teachers typically have increased out-of-class interactions with students, serve as role models, and often reside in or are involved in the rural communities in which they work (Tieken, 2016). For rural students who aspire to first-generation college status, teachers serve a pivotal role in exposing them to college

information (Gilfillan, 2017; Tieken, 2016; Welton & Martinez, 2014).

However, researchers have found that some rural schools provide less rigorous curricula, and teachers can have negative attitudes and low expectations of rural students, which contributes to less engagement in college readiness activities (Vega, Moore, & Miranda, 2015; Welton & Martinez, 2014). Subsequently, students disengage in the learning experience due to a perceived lack of support from their teachers, thus diminishing their aspirations of attaining a college degree (Irvin, Meece, Byun, Farmer, & Hutchins, 2011; Vega et al., 2015).

Furthermore, researchers have found that teachers, counselors, and administrators in rural schools often encourage higher education only for the academically strongest students (Carr & Kefalas, 2009; Sherman & Sage, 2011; Tieken, 2016). These rural school personnel invest in the college search and admissions process primarily of high-achieving rural students, preparing this subgroup of students for higher education attainment (Carr & Kefalas, 2009; Sherman & Sage, 2011; Tieken, 2016). As a result, rural students who have lower academic performance may have fewer Dreamkeepers to aid in the college search and application process (Nelson, 2016). Teachers have a prime platform to intervene and inspire college aspirations for all rural students, but it seems that many abdicate this role. Teachers who engage all students in college readiness activities and who embrace the cultural capital present in rural communities (e.g., the sense of community, high parental expectations, and established school-family-community partnerships) bolster college aspirations for their entire student body (Crumb & Larkin, 2018; Welton & Martinez, 2014).

Theoretical Framework

For rural students, interpersonal connections and social networks are an especially important piece of the college aspiration process (Freeman, 2005; Hossler & Gallagher, 1987; Toutkoushian & Paulsen, 2016), especially in forming college dreams (McGrath, Swisher, Elder, & Conger, 2001). Social networks, otherwise known as social capital (Coleman, 1988; Schuller, Baron, & Field, 2000), involve "the contacts, ties and connections, the group attachments which relate one agent to another and so cannot be reduced the properties of the individual agents themselves" (Knoke & Kuklinski, 1991, p. 3). These networks are capital because they can be leveraged to help people, in this case rural students, to attain other assets. Higher education is one such asset, part of a person's human capital stock, an investment in future financial capital (Coleman, 1988) for students and their families (Walpole, 2007).

For rural students, social networks, while dense within families and communities (Aggeret al., 2018), are tempered externally by limited population density, the sheer number of people within a community that are able to interact, and lower baccalaureate attainments within rural communities (Tizon, 2016), which is 19.5%, as opposed to 29% in the United States as a whole (U.S. Bureau of the Census, 2016). McGrath et al. (2001) found that rural students from farming families were considerably more likely to pursue a college education if their family social network included individuals with professions that required a college degree. Thus, within local social networks, college dreams can be inspired through organic social interaction. However, for rural students whose family social networks are not so advantaged, school actors such as teachers and counselors are vital in rousing college dreams (Agger et al., 2018; Crockett et al., 2000; Friesen & Purc-Stephenson, 2016; McDonough, Gildersleeve, & Jarsky, 2010).

Method

To explore urban-rural differences in student postsecondary aspirations more generally, and college aspirations specifically, we used the 2009 NCES High School Longitudinal Survey (HSLS:09), a nationally representative and longitudinal survey of over 23,000 students across 944 schools. Survey participants included students, parents, math and science teachers, school administrators, and counselors. The base pool of ninth graders in 2009 was first followed up in 2012, when most participants were in their senior year of high school. A second follow-up was

conducted in 2016 to measure the participants' postsecondary choices.

The present study uses data from the base-year sample. Our research questions were as follows:

1. What are the college (i.e., postsecondary) aspirations of urban/suburban and town/rural students? Is there a difference by urbanicity/rurality?
2. Do students perceive that teachers have high expectations for all students? Is there a difference by urbanicity/rurality?

The first question targets the general aspirations of students by locale. The second regards a component of their social network within schools: math and science teachers, selected because they were the only teachers directly surveyed in HSLS:09. In addition, math teachers, and perhaps science teachers as well, can be particularly influential in fostering college dreams, as both the quantity and quality of math courses strongly influence college enrollment (Adelman, 2006; Battey, 2013; Kim, Kim, DesJardins, & McCall, 2015). These teachers often serve as gatekeepers to more rigorous coursework and as such can further or dampen college dreams (Campbell, 2012; Martinez & Guzman, 2013).

To analyze these questions, we examined descriptive statistics to determine overall college (i.e., postsecondary) aspirations of students by urbanicity/rurality and the nature of student relationships with teachers and school counselors.

For this study, our understanding of rurality is based on the NCES locale framework (NCES, 2015), which relies on standard rural definitions developed by the Census Bureau:

- Rural–Fringe: Census-defined rural territory that is less than or equal to 5 miles from an Urbanized Area, as well as rural territory that is less than or equal to 2.5 miles from an Urban Cluster.
- Rural–Distant: Census-defined rural territory that is more than 5 miles but less than or equal to 25 miles from an Urbanized Area, as well as rural territory that is more than 2.5 miles but less than or equal to 10 miles from an Urban Cluster.
- Rural–Remote: Census-defined rural territory that is more than 25 miles from an Urbanized Area and also more than 10 miles from an Urban Cluster. (pp. 2–3)

In operationalizing rurality within the HSLS:09, the rural construct is combined into one factor and compared against other factors within the X1LOCALE variable: City, Suburban, and Town.

We use chi-square analyses to determine whether the differences by urbanicity and rurality are statistically significant, using Fisher's Z_r to calculate practical significance. Next, we used regression analysis to determine the mediating effect of urbanicity/rurality on the association between student college (i.e., postsecondary) aspirations by their perceptions of math and science teachers' expectations for their success. Additional control variables include student achievement (math theta scores) and SES. We selected these additional factors given their strength in predicting college enrollment (Adelman, 2006; Chambers, Walpole, & Outlaw, 2016).) as design features of the HSLS, PSU and STRATUM were included in the data analyses.

Results

Of the 23,503 students in the HSLS:09 base year sample, 6,689 were from urban areas, 8,467 from suburban locales, 2,788 from towns, and 5,559 from rural communities. When controlling for students entering the sample in the base year only, the total number of students is 20,898: 5,905 of whom are from urban areas, 7,461 from suburban areas, 2,526 from towns, and 5006 from rural areas (see Table 1). Overall, only 0.4% of sampled ninth graders signaled that they did not think they would complete their high school degree, with students from rural areas and towns 0.1% more likely than their urban and suburban counterparts to aspire to less than a high school degree. This difference is negligibly small, especially considering that rural high school students are more likely to complete high school (McDonough, Gildersleeve, & Jarsky, 2010). When considering a high school diploma or GED as the highest postsecondary aspiration, ninth graders from rural

Table 1
Ninth Graders' Highest Educational Expectation, by School Locale

Response	City *n* (%)	Suburb *n* (%)	Town *n* (%)	Rural *n* (%)	Total *n* (%)
Less than high school	24 (0.4)	27 (0.4)	12 (0.5)	24 (0.5)	87 (0.4)
High school diploma or GED	634 (10.7)	838 (11.2)	342 (13.5)	714 (14.3)	2528 (11.1)
Start an associate's degree	22 (0.4)	50 (0.7)	21 (0.8)	41 (0.8)	134 (0.6)
Complete an associate's degree	270 (4.6)	398 (5.3)	165 (6.5)	330 (6.6)	1163 (5.6)
Start a bachelor's degree	42 (0.7)	37 (0.5)	10 (0.4)	22 (0.4)	111 (0.5)
Complete a bachelor's degree	955 (16.2)	1246 (16.7)	396 (15.7)	836 (16.7)	3433 (16.4)
Start a master's degree	57 (1.0)	88 (1.2)	31 (1.2)	46 (0.9)	222 (1.1)
Complete a master's degree	1239 (21.0)	1580 (21.2)	471 (18.6)	905 (18.1)	4195 (20.1)
Start PhD/MD/Law/other prof degree	48 (0.8)	74 (1.0)	16 (0.6)	34 (0.7)	172 (0.8)
Completed PhD/MD/law/ other prof degree	1372 (23.2)	1576 (21.1)	458 (18.1)	952 (19.0)	4358 (20.9)
Don't know	1242 (21.0)	1547 (20.7)	604 (23.9)	1102 (22.0)	4495 (21.5)
Total	5905	7461	2526	5006	20898

areas and towns were higher, respectively at 14.3% and 13.5%.

At the postsecondary level, there is a 0.5% difference between urban and town/rural students in top aspiration to start an associate's degree and a 0.1% difference in aspiration to start a bachelor's degree. (Concerns with these questions, especially for ninth graders who are just starting high school, are discussed later.) However, town and rural students were much more likely than urban and suburban students to aspire to completing a 2-year degree.

Differences in aspirations to complete a bachelor's degree are small. Overall, 16.4% of students had a top aspiration of completing a bachelor's degree. This varies from 16.7% of rural and suburban students to 15.7% of town students. At the graduate level, there were similar questions regarding the start of master's level and terminal degree programs (PhD, MD, JD, or other professional degrees). Approximately 1.1% of students reported a top aspiration of starting a master's program and 0.8% reported wanting to start a PhD, MD, law or other professional degree. Variations by urbanicity/rurality were small, at 0.4% or less. Differences in master's and terminal degree completion were significant, however. Whereas about 21% urban/suburban students aspired to complete a master's degree, compared to only approximately 18% of town/rural students did so. At the terminal degree level, town and rural students had higher aspirations than their urban/suburban counterparts. Town students reported terminal degree aspirations at a rate of 23.9%, followed by rural students at 22%, urban students at 21%, and then suburban students at 20.7%. Overall, 21.5% of students were undecided, with greater indecision among town/rural students at 23.9% and 22%, respectively, than urban (21%) and suburban (20.7%) students.

Synthesizing for interpretative simplicity, regardless of locale, 21.5% of students were undecided, which for a ninth grader is a very appropriate place to be. Differences arose, however at the high school level, with 10.7% of urban and 11.2% of suburban students aspiring to a high school diploma as their highest degree as compared to 13.5% of town and 14.3% of rural students. In addition, town and rural students were slightly more likely to have the highest aspiration of an associate's degree, 7.4% (rural) and 7.3% (town)

as compared to 5% of urban and 6% of suburban students. While students similarly aspired to bachelor's degrees, urban and rural students were more likely to aspire to graduate degrees, 32%, as compared to town and rural students, 29% (see Figure 1). These differences are statistically significant (χ^2 [30, n = 20,898] = 159.76, p < .001) but not practically significant (Fisher's Z_r = 0.09, 95% CI [0.073, 0.0999]), accounting for approximately 10% of the difference in rural/urban student aspirations. Thus, while patterns are more the same than different across localities, there are key areas of difference—high school completion and graduate education—and these factors may be fueled by other considerations such as socioeconomic status and student ability.

Student Perceptions of Teacher Expectations for Students

In the absence of specific questions correlating the aspirations of students to the aspirations teachers had for students, we used the proxy "Teacher thinks all students can be successful." This was measured for math and science teachers only in the HSLS:09. Missing data for each question was less than 10%. There were also legitimate "skips," such as when students were not enrolled in a fall 2009 math or science class due to

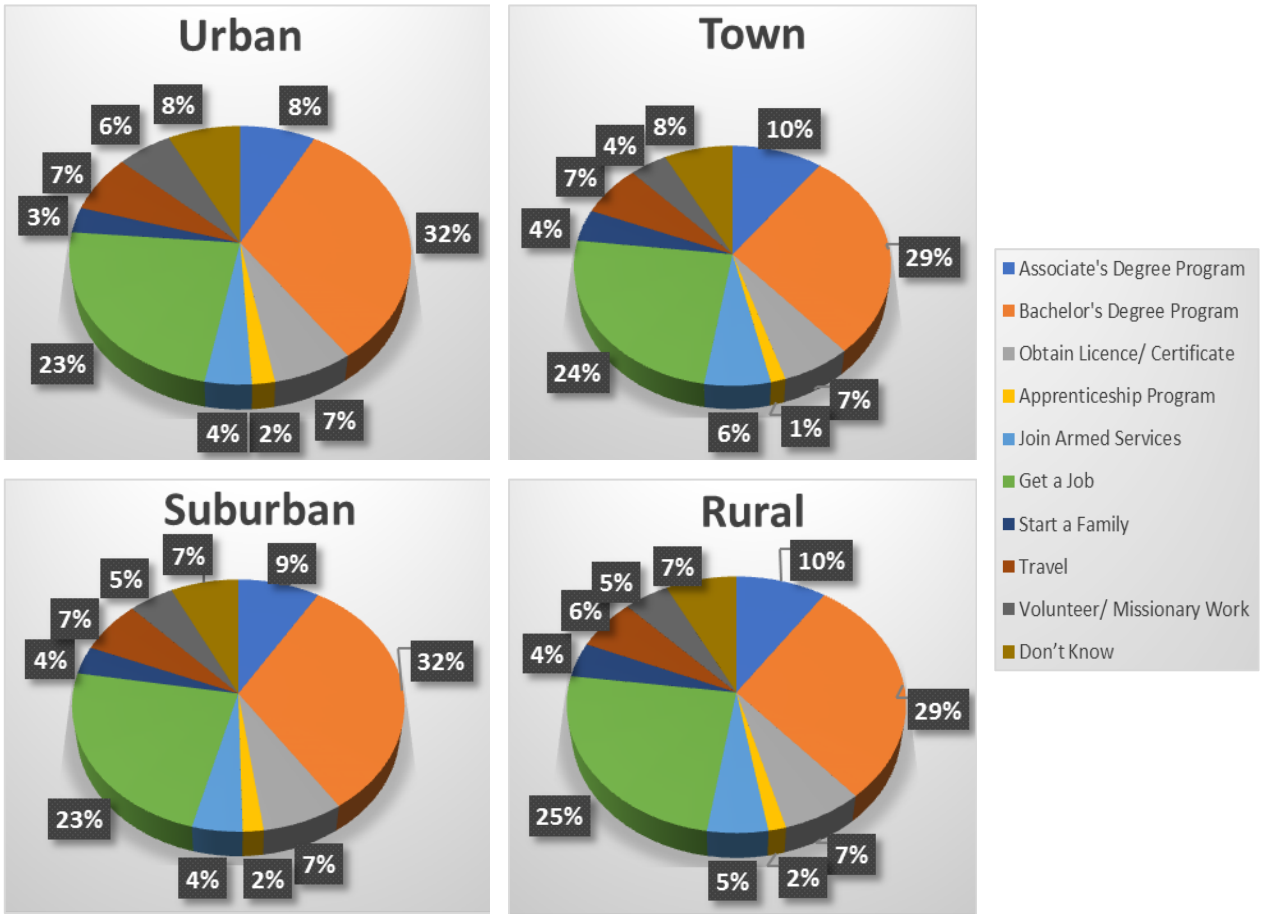

Figure 1. Ninth grader educational aspirations by locale.

Table 2
Ninth Graders' Perceptions of Fall 2009 Teacher Expectations by School Locale (Urbanicity/ Rurality)

Response	Math teacher thinks all students can be successful				Science teacher thinks all students can be successful			
	City *n* (%)	Suburb *n* (%)	Town *n* (%)	Rural *n* (%)	City *n* (%)	Suburb *n* (%)	Town *n* (%)	Rural *n* (%)
Missing	133 (2.2)	147 (1.9)	47 (1.8)	99 (1.9)	135 (2.2)	158 (2.1)	36 (1.4)	108 (2.1)
Skip	464 (7.6)	657 (8.6)	313 (12.1)	679 (13.2)	930 (15.3)	1025 (13.4)	520 (20.2)	1135 (22.0)
Strongly agree	2309 (38.1)	2890 (37.8)	915 (35.5)	1847 (35.8)	2022 (33.3)	2499 (32.7)	774 (30.0)	1538 (29.8)
Agree	2725 (44.9)	3415 (44.7)	1130 (43.8)	2211 (42.8)	2569 (42.3)	3393 (44.4)	1057 (41.0)	2019 (39.1)
Disagree	362 (6.0)	428 (5.6)	139 (5.4)	258 (5.0)	352 (5.8)	449 (5.9)	156 (6.0)	291 (5.6)
Strongly disagree	74 (1.2)	99 (1.3)	36 (1.4)	67 (1.3)	59 (1.0)	112 (1.5)	37 (1.4)	70 (1.4)
Total	6067 (28.3)	7636 (35.6)	2580 (12.0)	5161 (24.1)	6067 (28.3)	7636 (35.6)	2580 (12.0)	5161 (24.1)

scheduling, accelerated curriculum programming, and the like. It is interesting that there are approximately twice as many skips for student perceptions of science teachers compared to math teachers (see Table 2).

Overall students tended to rate their math and science teachers highly on the measure of "Teacher thinks all students can be successful." However, when compared with the question of whether "Teacher treats some kids better than others," results (not reported) were the inverted mirror of the results in Table 2. This enhances the credibility of findings and diminishes (while not eliminating) concern regarding social desirability in student responses. In other words, whereas social desirability would dictate an articulation that teachers think similarly and hold high expectations for all students, the comparison to responses to the second statement, that some students are treated better than others, reduces social desirability concerns. Using a paired-samples *t* test we found that, overall, students perceptions of their math teacher aspirations were higher than their perceptions of science teachers. This difference was statistically significant ($t_{(21,433)} = 22.99$, $p < .001$).

Looking at locale, we found statistically significant differences in student perceptions of teacher expectations ($\chi^2_{MathTeach}$ [15, n = 18,905] = 130.36, $p < .001$; $\chi^2_{SciTeach}$ [15, n = 18.905] = 210.66, $p < .001$). Town and rural students were less likely than their urban and suburban counterparts to believe that their math teachers thought all students could be successful. Approximately 36% of town and rural students strongly agreed with that statement, compared to about 38% of urban and suburban students, with another 43% of town/rural students and 45% of urban/suburban students agreeing. Similarly, town and rural students were less likely than their urban and suburban counterparts to believe that their science teachers thought all students could be successful. Approximately 30% of town and rural students strongly agreed with that statement, compared to about 33% of urban and suburban students. Rural students were less likely to agree: 39% compared to 41% of town, 42% of urban, and 44% of suburban students. Across the board, disagreements and strong disagreements were low, in fact lower than the percentage of missing and skips, which renders the interpretation of these data points questionable.

To see how each of these factors would run together as part of the postsecondary aspirations equation for rural college students, we ran three simplistic linear regression models. The first regression looks solely at the relationship between student aspirations and the perceptions of their math and science teachers. The second includes the socioeconomic status and mathematics theta scores, an indicator of mathematics ability based on the number of correct items and relative achievement of peers. The third model includes locale, scaled by population density from greatest to least, measuring urban at 1 and rural at 4. Results are presented in Table 3.

Moving from Model 1 to Model 2, the R^2 adjusts from 0.3% to 0.5%, a point that does not

Table 3
Student Aspirations by Perceptions of Teacher Expectations, Mathematical Ability, Socioeconomic Status, and Locale

	Model 1 (R^2 = .003)				Model 2 (R^2 = .005)				Model 3 (R^2 = .005)			
	B	*SE*	*t*	*p*	*B*	*SE*	*t*	*p*	*B*	*SE*	*t*	*p*
(Constant)	7.514	0.022	346.224	.000	7.597	0.021	356.196	.000	7.714	0.047	165.849	.000
Math teacher thinks all students can be successful	0.020	0.008	2.700	.007	-0.003	0.007	-0.404	.687	-0.003	0.007	-0.414	.679
Science teacher thinks all students can be successful	0.039	0.006	6.141	.000	0.010	0.006	1.626	.104	0.010	0.006	1.536	.125
Socioeconomic status composite					0.604	0.031	19.723	.000	0.607	0.031	19.801	.000
Mathematics theta score					0.384	0.024	15.933	.000	0.383	0.024	15.877	.000
School locale (urbanicity)									-0.052	0.018	-2.834	.005

Note.
[a]Dependent variable: X1, How far in school ninth grader thinks he/she will get.
[b]Weighted least squares regression: weighted by W1 base year student analytic weight. Equations include Primary Sampling Unit PSU and STRATUM (using key school characteristics) design features.

change when adding in locale in Model 3. Thus, overall, these models explain very little about college aspirations; however, there is something to be learned in the change from model to model.

As we found earlier, there is a weak but positive and statistically significant relationship between student aspirations and their perceptions of their teachers' expectations for student success. This relationship is borne out in Model 1 ($\beta_{MathTeach}$ = 0.02, *SE* = 0.008, *p* = .007; $\beta_{SciTeach}$ = 0.04, *SE* =0.006, *p* < .0001); however, in Model 2, which includes SES and mathematical ability, these factors shift from statistical significance, with the sign on perceptions of math teachers' expectations changing to negative, and a larger share of the equation is explained by SES and mathematical ability ($\beta_{MathTeach}$ = –0.003, *SE* = 0.007, *p* > .05; $\beta_{SciTeach}$ = 0.01, *SE* = 0.006, *p* > .05; β_{SES} = 0.604, *SE* = 0.031, *p* < .001; β_{Math} = 0.384, *SE* = 0.024, *p* < .001). Finally, in Model 3, adding the factor of locale, measured with urban the lowest number and rural the highest, the sign is negative, suggesting an inverse relationship between postsecondary aspirations and rural locale when controlling for student perceptions of teachers' expectations, mathematics ability, and SES.

Discussion

Overall, there is a difference in the way rural students perceive their teachers' expectations for their success. Ninth-grade teachers' expectations while the student is still in ninth grade does not directly influence student aspirations but is mediated by student SES and prior achievement, as well as the sum total of the perceived expectations of all teachers heretofore. In this manner, perhaps the model is misspecified, as the influence of two teachers currently teaching a student's courses with may be minimal. In addition, the changes from Model 1 to Model 2 seem to suggest that how students perceive teachers' expectations varies by student socioeconomic status and math scores. Moving to Model 3, this relationship is more negative for rural students, perhaps reflecting that cultural perceptions of rurality tend to be negative. This includes the characterization of rural people as simple-minded and regressive (Cubberley, 1914; Gibbs et al., 1998; Theobald & Wood, 2010) to the exclusion of cultural strengths of relational knowledge and familism (Agger et al., 2018; Freeman, 2016; Tieken, 2016; Yosso, 2005; Yosso & Burciaga, 2016). These perceptions can be internalized,

even among rural school personnel, resulting in schools picking winners and losers in the college attendance game (Nelson, 2016).

However, this need not be the case, as evinced by Ladson-Billings (2009). The teachers of African American students in urban areas face what seem like insurmountable odds, yet within her sample of the classic and new millennium Dreamkeepers Ladson-Billings found teachers who have had a transformative experience through civil rights work, Peace Corps, or more contemporarily life experiences that allowed them to connect with economically poor, inner-city Black students as human, worthy, dignified, and of value. The same is needed for rural students: Dreamkeepers who can transcend social contexts and find the positive values within each student and inspire dreaming for college and beyond. These Dreamkeepers are especially important in rural America because of the informational disadvantage due to the dearth of professionals within any given rural community. While most communities have teachers and preachers, and perhaps a primary care physician and town lawyer for real estate, wills, and other common legal matters, the number of professionals interspersed throughout rural communities is small.

Having social networks that include professionals with baccalaureate degrees is more likely to inspire students to pursue not only college at the associate and baccalaureate levels but also graduate-level degrees (McGrath et al., 2001). Teachers are individuals with baccalaureate and graduate degrees with whom students everywhere interact. As such, having teachers actively prod students to consider college would be a systemic way of encouraging higher rates of college enrollment generally, and specifically within rural areas.

In addition to the difference by locale in students' graduate degree aspirations, the other large difference is in high school diploma aspirations. While perhaps not every student needs a postsecondary education, the difference between urban and rural students in their college enrollment and baccalaureate attainment rates are clear (NCES, 2015). Associate degree attainment is beneficial for students and their families (Kane & Rouse, 1995); however, it is not until baccalaureate attainment that families are lifted out of poverty (Walpole, 2007). In this vein, while encouraging associate degree attainment, perhaps the most readily available postsecondary degree within a region, is helpful, students need to be made aware of the wide range of options open to them. This requires assistance in the cultivation of students' dreams.

Implications

Nationwide more than 60% of all adults ages 18 to 24 enroll in some form of postsecondary education (NCES, 2018), yet this rate should be reflected not only in suburban and urban areas but also in rural areas and towns. Toward this end, we encourage school personnel not to focus just on high-performing students or achievers but on all students who show a modicum of college interest. With 60% of all young adults attending some form of postsecondary education, that means that not only A and B students but also C and D student and, dare we say, those with Fs are attending as well. In this vein, college choice information should not be reserved for the select few but shared with the many. It is essential that all teachers in rural schools, especially those in the areas of math and science, help students build their academic self-efficacy, which fosters students' identity capital, confidence, and college aspirations. Not only is this an effective strategy to increase the number of rural students going to college (Carr & Kefalas, 2009; Sherman & Sage, 2011; Tieken, 2016), but sharing of college information could perhaps be more seamless than in urban and suburban environments, as rural schools often partner with families and communities (Nelson, 2016; Tieken, 2016; Yosso, 2005; Yosso & Burciaga, 2016).

Factors beyond proximity and costs affect students' selection of 2-year versus 4-year postsecondary options (Hillman, 2016). In particular, schools should be aware of "momentum to degree" and that in a community college environment students can become "adultified" (i.e., take on adult responsibilities quicker, such as full-time jobs), thereby limiting transfer and further education options (Goldrick-Rab, 2010). Moreover,

while there are economic returns to each additional unit of education (Kane & Rouse, 1995), students are better poised to lift their families out of poverty with the attainment of a baccalaureate degree (Walpole, 2007). As such, it is vital that schools, perhaps in concert with regional colleges and universities, invest more in assisting students to find ways to finance 4-year degrees. Schools can be more intentional about reaching out to more universities and more selective colleges for college fairs, especially with a more expansive sense of the region. In particular, what we advocate for is a broader inclusion of rural high schools in college and university recruitment.

At the district level, rural high school teachers and counselors can collaborate with other school personnel and community stakeholders to share information about college and outreach programs to assist rural students in the pipeline to college. To ensure rural student college acceptance and retention, high school teachers should start to integrate college-level rigor into all courses, not only those classified as advanced placement or college preparatory courses (Crumb & Larkin, 2018; Millitello, Schweid, & Carey, 2011; Welton & Martinez, 2014). Given the findings of this study, it is especially important that rural math and science teachers demonstrate interest and investment in all their students' college aspirations.

Furthermore, professional guidelines and standards support early college readiness interventions starting at the elementary level (Pulliam, 2018). Thus, all rural school personnel can encourage college aspirations for students as early as the elementary level, to create a pro-college culture for rural students and establish the necessary supports to access higher education.

Limitations and Directions for Future Research

A key limitation of this study is its delimitation: our sampling selection of ninth-grade students, most of whom have not been exposed to school-based college preparatory activities (Plank & Jordan, 2001). As found by Hossler and Stage (1992), high school teachers and counselors have little impact on ninth graders' college choice processes, which seems to be a function of underinvolvement at this stage. Moreover, when ninth graders are so engaged, college aspirations are positively impacted (Edmunds et al., 2012; Gándara, 2002).

Nevertheless, rural ninth graders tend not to be urged to consider college choices, so we selected a time that for many students is early or considering higher education; yes, it may also be late to promote a pro-college culture in rural education systems. While students can adjust their schedules in the ninth grade year to an extent, given the availability of coursework, facilities, teaching loads, and the like, it may be difficult to change a student's course trajectory from a regular to honors or another advanced track in ninth grade. It becomes even more challenging to change trajectories the longer a student is in a high school program of study. Toward that end, we emphasize that college readiness activities should begin earlier than high school for rural students.

In addition, there are some limitations within the data set. Certainly, cluster sampling designs are more economical than simple random studies, and while design features included in the modeling account for the influence of the clusters, perhaps newer data collection methods in the future will enhance purer, less complex designs. Moreover, student questions about their future aspirations did not neatly map to the proxy for teacher expectations: whether "teacher thinks all students can be successful." It would be better in future iterations to ask students whether, more personally, their teachers think they can be successful or how far in school their teachers think they will go. In this way, a more accurate appraisal of student perceptions of teachers' expectations can be garnered.

Finally, the model as specified, for reasons of parsimony and simplicity, explains a small fraction of the variance in student postsecondary aspirations. Beyond a factor analysis, which would better parse connections within this variable, a more complex, inclusive model could better explain variations in student aspirations.

Future work can explore the level of parental involvement in school and at home, as well as parents' and students' academic socialization, or messages received about school to address the

college aspirations of both rural and urban students. Also, there is much space within this line of work for researchers to explore other variables or identities that may influence college aspirations such as race/ethnicity, SES, first-generation status, and cultural capital. Moreover, studies are needed to explore rural student aspirations and experiences in terminal degree and professional programs. Finally, instead of just looking at differences, future work could look at similarities between rural and urban environments. For example, poverty and attending low-performing schools affect college attendance in both rural and urban locales (Knaggs et al., 2015; Petrin et al., 2014).

Conclusion

More Dreamkeepers, teachers who effectively pass on their deepest desires, catalyzing student dreams for postsecondary education, are needed in rural settings. In this study, we investigated the postsecondary aspirations among ninth graders by locale. We found that a postsecondary aspirations gap between urban/suburban and town/rural students occurs at the top level of college aspirations, graduate school, and with a highest desire to complete a high school diploma. There are differences among urban and rural students regarding the intensity with which ninth graders see teacher expectations for their future success. As we stated in the introduction, it takes a village to develop the college aspirations of any student, and especially rural students. For this, more Dreamkeepers are needed.

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