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*Growing Up Rural:
How Place Shapes Life Outcomes*

VOLUME 8, ISSUE 3, MAY 2022





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Growing Up Rural: How Place Shapes Life Outcomes

ISSUE EDITORS

Shelley Clark, Sam Harper, and Bruce Weber

CONTENTS

Growing Up in Rural America **1**
Shelley Clark, Sam Harper, and Bruce Weber

Part I. Rural Families: Coping Under the Strain

Rural Food Insecurity: A Longitudinal
Analysis of Low-Income Rural Households
with Children in the South **50**
*Sarah Bowen, Sinikka Elliott, and
Annie Hardison-Moody*

When Mamaw Becomes Mom: Social Capital
and Kinship Family Formation amid the
Rural Opioid Crisis **78**
Kristina Brant

Part II. Childcare and Schools in Rural Areas: Surprising Equality and New Challenges

Access to Early Care and Education in Rural
Communities: Implications for Children's
School Readiness **100**
*Taryn W. Morrissey, Scott W. Allard, and
Elizabeth Pelletier*

The Geography of Rural Educational
Opportunity **123**
*Jessica Drescher, Anne Podolsky, Sean F.
Reardon, and Gabrielle Torrance*

"Turning Their Back on Kids": Inclusions,
Exclusions, and the Contradictions of
Schooling in Gentrifying Rural
Communities **150**
Jennifer Sherman and Kai A. Schafft

Part III. Aspiring to Leave: The Pursuit of Higher Education

Contexts of Educational Aspirations and
School Grades of Rural Students **172**
Alejandra Miranda and Michael C. Rodriguez

How Far to Go? Community Influences on
Youth Educational Aspirations in Rural,
Resource-Dependent Places **189**
*Nicole R. Bernsen, Mindy S. Crandall, Jessica E.
Leahy, and Catharine Biddle*

Moving Out to Move Up: Higher Education as
a Mobility Pathway in the Rural South **208**
Ryan Parsons

Growing Up in Rural America



SHELLEY CLARK, SAM HARPER, AND BRUCE WEBER

This article examines the context of growing up in rural America and how rural roots shape life chances. The distinctive physical, social, and cultural attributes of rural areas can exacerbate many of the challenges of childhood poverty. Yet rural children have better access to public childcare services and perform as well as urban children on standardized tests. Life trajectories diverge most sharply when rural youths decide whether to leave their home communities. Those who stay typically face limited opportunities for higher education and well-paid, stable employment, whereas those who leave fare remarkably well with respect to their educational, economic, and health outcomes. In sum, growing up in rural America offers distinctive advantages and disadvantages, yet the benefits may accrue primarily to those who leave.

Keywords: rural, life course, geographic inequalities, place-based effects

Nearly one in six Americans, some forty-six million people, lives in a rural area (Cromartie et al. 2020). Over the last three decades their lives have attracted relatively little attention, but recent years have seen a burst of media attention and academic research. Much of this newfound interest paints a bleak, even troubling, portrait of life in rural areas in the United States. Several important scholarly works have argued that rural communities feel “left behind,” engendering widespread feelings of rage, despair, mourn-

ing, and resentment (Cramer 2016; Hochschild 2016; Lichter and Schafft 2016; Wuthnow 2018).

Scholars often attribute these sentiments to widespread economic distress found in many rural communities (Monnat and Brown 2017). Some rural areas have experienced deep poverty persisting across generations (Lichter and Johnson 2007; Thiede, Kim, and Valasik 2018), whereas others have witnessed steady economic decline over the last fifty years as a consequence of economic restructuring (Lobao

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2014; Ryser and Halseth 2010) and globalization (Slack 2014; Thiede and Slack 2017). These economic hardships, in turn, have affected all aspects of rural life. Even after the recovery from the Great Recession, unemployment and underemployment (discouraged workers, involuntary part-time workers, low-income full-time workers) remain widespread in rural areas (Thiede and Slack 2017). For at least the last half century, employment hardship has consistently been greater for rural workers than for urban workers (Slack and Jensen 2020). Prime-age labor-force participation rates remain markedly lower in rural areas than in urban areas (Economic Research Service 2019b). Educational attainment is also lower in rural areas. In 2015, only 19 percent of rural residents, relative to 33 percent of urban residents, have a bachelor's degree (Marré 2017). Of particular importance for children's well-being and long-term health and educational outcomes, about 25 percent of rural children versus approximately 20 percent of urban children live in poverty (Hertz and Farrigan 2016; Pacas and Rothwell 2020; Rothwell and Thiede 2018).

Rural families have also changed (Carson and Mattingly 2014; Lichter and Graefe 2011; MacTavish and Salamon 2004). Once characterized as the traditional ideal of strong, stable "intact" nuclear families with robust extended kinship ties, rural families are now indistinguishable from urban families in terms of rates of family volatility, single motherhood, and cohabitation (Livingston 2018; O'Hare et al. 2009; Snyder and McLaughlin 2004). Similarly, in response to an aging and shrinking population, rural schools, which were historically important hubs in rural communities, are now consolidating or closing (Biddle, Mette, and Schafft 2017; Schafft and Biddle 2014; Sherman and Sage 2011). Rural health has also suffered, and mortality rates are now substantially higher in rural than in urban areas (Cosby et al. 2018; Garcia et al. 2017, 2019; Leider et al. 2020; Moy 2017). Rural areas have been severely affected by the opioid crisis and other so-called deaths of despair (Kiang et al. 2019; Monnat 2018; Peters et al. 2020; Case and Deaton 2015), a growing rural-urban gap in cardiovascular disease and injuries (Abrams, Myrskylä, and Mehta

2021; Harper, Riddell, and King 2021; Monnat 2020), and most recently elevated rates of infection and deaths associated with the COVID epidemic (Cromartie et al. 2020; Karim and Chen 2021; Karmakar, Lantz, and Tipirneni 2021; Mueller et al. 2021).

Taken together, these studies suggest that growing up in rural areas is hard. Children who happen to be born in rural areas are likely to face a series of daunting obstacles that ultimately result in cumulative disadvantage in regard to their education, incomes, and health. Yet studies examining what it is like to grow up in rural areas, and particularly its longer-term implications, are surprisingly scarce. Many of the extant studies on rural children and families focus exclusively on those living in poverty (Albrecht and Albrecht 2000; Beale 2004; Brown and Lichter 2004; Duncan 2015; Lichter and Johnson 2007; Snyder, McLaughlin, and Findeis 2006; Snyder and McLaughlin 2004; Thiede, Kim, and Valasik 2018; Weber and Miller 2017). Although such a focus is certainly justifiable from a child welfare perspective, it can create a false impression that all or at least most rural children live in poverty or in poor rural areas. As noted, about three-quarters of rural children are not living in poverty (Rothwell and Thiede 2018). Further, at the national level, although the official poverty rate is about 3.5 percentage points higher in rural than urban areas (Economic Research Service 2020b), the supplemental poverty rate, which takes into account the cost of living, is actually lower in rural areas (Nolan, Waldfogel, and Wimer 2017; Pacas and Rothwell 2020). Nationally representative studies also find few sizable differences in key indicators of children's well-being. For example, rural school children perform as well or slightly better than their urban counterparts on standardized math and reading tests, although suburban children outperform both groups (Burdick-Will and Logan 2017; Provasnik et al. 2007; Fishman 2015). Similarly, differences in the overall health of rural and urban children are minimal (National Center for Health Statistics 2019; Robinson et al. 2017; Probst et al. 2018), with the notable exception of obesity, which is higher in rural areas (Liu et al. 2012; Ogden et al. 2018; Johnson and Johnson 2015).

In addition, most studies, including those

cited, that show striking rural disadvantage with respect to health, education, and earnings are based on cross-sectional samples of adults currently living in places designated as rural or urban. Such studies provide important insights into the well-being of adults who remained in or moved to rural areas. However, they do not address one of the central questions of this issue, namely, whether individuals who grew up in rural areas fare better or worse than those from more urban areas. This is because cross-sectional studies reflect selective migration both out of and into rural areas. Adults who grew up in rural areas and left differ from those who stayed. Selective out-migration of better-educated rural youths is well documented (Carr and Kefalas 2009), but rural out-migrants may also be healthier and have higher earning potential (Weber et al. 2007). Addressing the issue of selective migration, and hence answering questions about the longer-term implications of growing up in a rural area, requires longitudinal data that traces individuals over their life course. Unfortunately, only a handful of such studies currently exist.

The goal of this double issue of *RSF: The Russell Sage Foundation Journal of the Social Sciences* is to provide a nuanced, balanced, and accurate depiction of what it is like to grow up in rural communities and its implications for both those who leave and those who stay in rural areas. This introductory article has four main objectives. First, we address a deceptively simple question: what is rural? This section briefly describes the challenges of defining rural places and rural people, the considerable changes that have occurred in rural areas over the last fifty years, and the heterogeneity across rural areas. Second, it examines what is distinctive about rural areas and challenges to measuring the effect of growing up in rural areas. Third, it draws on the existing literature and new research in this volume to provide insights into the challenges and opportunities afforded by growing up in rural areas and the longer-term implications of having grown up in rural places for adults. In the fourth section, we identify important gaps that remain in the existing literature on growing up rural.

The studies presented offer several key findings; some reinforce the well-known challenges

associated with rural life, whereas others yield surprising, and often more optimistic, insights about rural institutions and the longer-term implications of growing up in rural areas. In particular, the articles in this volume show that

consistent with prior studies, evidence indicates that rural families are under considerable strain. This strain is particularly acute in low-income families and families dealing with drug addiction. Yet strong ties among extended family members continue to play an important role in supporting and caring for children in families facing food insecurity and drug addiction.

Early public education programs and schools are surprisingly strong in rural areas relative to those in urban areas.

Publicly funded early childcare and education programs, such as Head Start, are more common in rural than in urban areas.

Rural third graders perform as well as their urban counterparts on standardized tests and socioeconomic status (SES) is less predictive of academic performance for rural than for urban students, suggesting less educational inequality.

However, the educational benefits of rural gentrification for children of longer-term residents may be limited.

Many rural youths harbor ambitious aspirations for higher education, but they lack practical knowledge about how to achieve their goals and are reluctant to leave their communities.

Young people who choose to stay in rural areas often do so to maintain family ties, even at the cost of limiting their careers and earnings. Rural youths who remain often make expedited transitions into parenthood and marriage, although these early unions are often unstable.

Relative to studies focusing on adults who currently live in rural areas, studies that take a life-course perspective paint a more complex, and somewhat rosier, picture of the consequences of growing up rural on adult health, education, income, and wealth.

Being born on an Iowa farm in the early twentieth century is associated with living a longer and healthier life. However, women who grew up and stayed in nonfarm rural areas had worse mortality outcomes.

Young adults who grew up in rural areas were less likely than their urban-raised counterparts to have negative net worth, although they also had fewer financial assets.

Children who grew up in rural areas achieved similar levels of education and earnings as urban children. More favorable economic place-based conditions facilitated greater upward educational and income mobility, although these benefits primarily accrued to those who moved to urban areas.

UNDERSTANDING RURAL AMERICA

Willa Cather's novel *My Antonia* (1918) opens with two friends on a train to New York, passing through the Iowa countryside where they had both grown up many years ago. The narrator reflects on their shared experience: "We were talking about what it is like to spend one's childhood in little towns like these, buried in wheat and corn, under stimulating extremes of climate: burning summers when the world lies green and billowy beneath a brilliant sky, when one is fairly stifled in vegetation, in the color and smell of strong weeds and heavy harvests; blustery winters with little snow, when the whole country is stripped bare and grey as sheet-iron. We agreed that no one who had not grown up in a little prairie town could know anything about it."

Some will agree with the narrator that unless you have grown up in rural America, you will never understand rural people or places. For those who study rural America, however, it is necessary to identify the boundaries and to define *rural* in a way that maintains a coherent object of study. It is challenging—even for those who grew up rural—to clearly articulate what makes a place or person rural and to mark the boundaries between rural and urban. As we discuss in the following section, it is dif-

ficult to draw these boundaries clearly for several reasons.

What Is Rural? Defining Rural Places and Rural People

At its most fundamental level, the term *rural* is about territory. Two of the most commonly used definitions of the word by the U.S. Census Bureau and the Office of Management and Budget (OMB) clearly identify the boundaries that separate rural and urban territory. Complications in characterizing rural places arise chiefly because, in either definition, rural is a residual category. Rural is defined as what is not urban. Rural is whatever territory or area is outside of the urban boundaries. Rural areas are not selected and bounded based on their own characteristics, but is what is left over after bounding *urban* territory.

Furthermore, these standard definitions of rural identify geographic places, not rural people. A person is rural only by association with rural territory, and the premise underlying the notion of rural people is that people are shaped by the places they live. People are rural to the extent that they live in or have lived in rural places. Yet because of migration, rural places and rural people may not always coincide. Further, no set duration of exposure to rural places renders an individual rural because the development of a rural identity or consciousness is subjective and idiosyncratic. Hence the study of rural people is inherently even more fuzzy and messy than the study of rural places. Defining rural is further complicated by the diversity of rural people and places and the reality that rural areas are changing and interdependent with urban places, as we discuss.

Notwithstanding the definitional issues, rural places are commonly understood to share two characteristics. They are relatively sparsely settled with small populations and relatively isolated from large cities.¹ The two standard definitions that are used to describe rural America emphasize one or the other of these characteristics in their definitions.

The Census Bureau defines rural and urban

1. Some would also add the relative dependence of rural economies on natural resources, but this is more difficult to defend as a defining characteristic given the prevalence of farming and food and wood processing in metro areas.

areas by aggregating densely settled census blocks into urban areas and defining rural as any territory that is not urban (Ratcliffe et al. 2016). Using this definition yields a rural America that consists of small towns and open country. The OMB starts with counties as the unit of measurement, and classifies them into metropolitan (metro) and nonmetropolitan (non-metro) by identifying “metropolitan statistical areas” that group counties into regional labor markets around big cities. Nonmetro counties are those that are not part of a “metropolitan statistical area.” By convention, many scholars refer to OMB metro counties as urban and non-metro counties as rural (Economic Research Service 2019d). Rural under this nonmetro definition consists of territory that is distant from the regional labor markets of cities with populations of fifty thousand or more (for more detail about these definitions, see appendix table A.1).

Both classifications provide useful perspectives on rural America. Both seek to describe sparsely populated and remote places, but they are not equivalent concepts and they capture different realities. More than half of the rural population (as defined by the Census) live in metro counties, and most of the nonmetro population (as defined by OMB) live in counties that have urban clusters, that is, cities or towns with populations of more than ten thousand. The Economic Research Service (2019d) suggests that

the choice of a rural definition should be based on the purpose of the application. For instance, tracking urbanization and its influence on farmland prices is best approached using the Census urban-rural definition because it is a land-use definition that distinguishes built-up territory from immediately surrounding, less developed land. Studies designed to track and explain economic and social changes often choose to use the metro-nonmetro classification, because it reflects a regional, labor-market concept and allows the use of widely available county-level data. The key is to use a rural-urban definition that best fits the needs of a specific activity, recognizing

that any simple dichotomy hides a complex rural-urban continuum, often with very gentle gradations from one level to the next.

In this special issue, definitions of the rural places studied are varied. The seven quantitative studies used six systems. Only two used the metro-nonmetro binary. Two articles use classifications developed by the U.S. Department of Agriculture’s Economic Research Service: one uses the Rural-Urban Continuum Codes and the other Rural-Urban Commuting Area codes. Only one used the census definitions. One article examining schooling outcomes identifies rural school districts using a National Center for Educational Statistics urbanicity code and the other devised its own criteria. All seven qualitative studies, with one exception, selected respondents from non-metro counties. The exception studied a “largely rural” region that included a few respondents from outlying areas of metro counties.²

Rural America Is Diverse, Changing, and Interdependent

Rural scholars have described rural America as “diverse, dynamic, and relational to (rather than separate from) urban places” (Slack and Jensen 2020, 775). All three characteristics complicate a common definition or understanding of rural America.

Although rural areas share the characteristics of having relatively small and sparsely settled populations and remoteness from cities, they exhibit enormous *diversity*. Each rural location offers its own combination of landscapes and features. Different rural populations have their own distinctive personalities and histories. The substantial diversity across rural areas makes generalizations about “rural life” difficult (Chan, Hart, and Goodman 2006; Cossman, James, and Wolf 2017). Some non-metro areas are truly isolated and sparsely populated and others contain medium-sized cities or are found just beyond the suburbs of large cities. Some nonmetro counties are growing, but many are declining in population.

Average poverty rates are higher in non-

2. For more detail about these studies and the ways they defined rural, see the appendix table A.2

metro than in metro counties, but this difference masks considerable economic heterogeneity. Deep pockets of persistent poverty in nonmetro America are numerous. Geographic concentrations of nonmetro poverty are found in Appalachia, in the Mississippi Delta (Thiede, Kim, and Valasik 2018), in *colonias* along the Mexican border, and on Native American reservations (Weber and Miller 2017). However, other amenity-rich rural areas and many parts of the upper Midwest are thriving and offer their residents attractive environmental features (such as lakes, mountains, rivers), better air quality, low traffic congestion, and a strong local economy (Hamilton et al. 2008).

Rural areas are also economically diverse. Many nonmetro counties depend on agricultural and extractive industries for a significant share of their jobs and earnings. Although agricultural and extractive industries such as mining account for less than 5 percent of nonmetro employment on average (Cromartie 2017), 20 percent of nonmetro counties have been classified by the Economic Research Service as dependent on farming (more than 16 percent of their jobs) and 9 percent as dependent on mining. An additional 12 percent were defined as dependent on recreation services (Economic Research Service 2019a). Those based on farming face different economic challenges than those dependent on mining or recreation jobs.

Rural America is less ethnically and racially diverse than urban America, 78 percent of the rural U.S. population is White relative to 58 percent of the urban population (Economic Research Service 2020a). Some nonmetro areas, however, have large concentrations of minorities: of African Americans in the southeastern states, of Hispanics in the southwestern states, and of Native Americans in the Southwest and northern Great Plains (Economic Research Service 2011). Furthermore, more than 90 percent of nonmetro places experienced an increase in racial-ethnic diversity between 1990 and 2010 and racial and ethnic minorities accounted for more than 80 percent of rural population growth (Johnson 2012, 2014; Lee and Sharp 2017).

In short, what it is like to grow up in rural America depends heavily on the specific rural

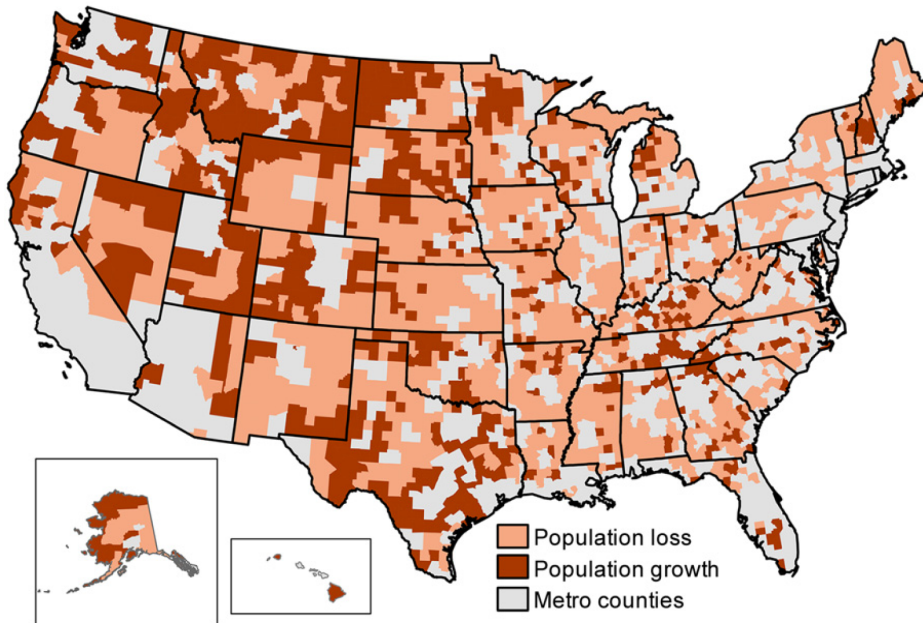
locale. This diversity presents challenges for making broad generalizations regarding the impacts of growing up rural, but also offers opportunities to explore the heterogeneity of rural environments and how their specific features may shape their residents' life chances.

The last half century witnessed considerable changes in both the composition and the general well-being of rural populations. Three important demographic trends observed in the nonmetro United States over the past several decades are: depopulation due to population aging and out-migration of youth; in-migration associated with exurban growth, retirement decisions, and amenities; and increases in ethnic and racial diversity (Brown 2014).

Although the total nonmetro population is roughly the same in 2017 as it was in 2010, more than two-thirds of the nonmetro counties lost population, as shown in figure 1. These counties that lost population are disproportionately found in the Great Plains, the Corn Belt, high poverty areas of the southern Coastal Plains and the Appalachian region from Kentucky up through New England. During the same period, however, other nonmetro areas experienced population growth. Since the Great Recession, evidence indicates that suburbanization and exurban expansion, recreation-related development and energy development in rural areas have slowed (Economic Research Service 2019c). In the wake of the COVID pandemic, some rural areas may be experiencing an influx of new residents, but the extent of this migration and whether it will endure is yet unknown.

Growth in the Hispanic population contributed to both the increase in ethnic diversity in rural America and to overall population growth. The rural Hispanic population grew by almost 45 percent between 2000 and 2010 (Lichter 2012; Lee and Sharp 2017). Hispanics have also become the largest minority population in nonmetro areas, 8.6 percent in 2018 (Economic Research Service 2020a). The increase also boosted the overall nonmetro population, contributing more than 60 percent of nonmetropolitan population growth from 1990 to 2017 (Lichter and Johnson 2020).

Trends across several important markers indicate deterioration in rural well-being and a widening rural-urban gap over the past thirty

Figure 1. Nonmetropolitan Population Change in the United States, 2010–2017

Source: USDA, Economic Research Service using data from the U.S. Census Bureau.

to fifty years. For example, the proportion of rural children living with married two-parent families has declined steadily such that rural children are now less likely than urban children to live in married two-parent families and more likely to live with cohabiting couples (O'Hare et al. 2009; O'Hare and Churilla 2008). Nonmetro Americans, particularly men, have also fallen further behind their metro counterparts in postsecondary education. The college completion gap between metro and nonmetro men has grown from about 5 to about 20 percent over the past fifty years (Ziliak 2018). The rural-urban gap in employment rates for men with less than a high school education has increased dramatically. In the 1960s, nearly all men without a high school degree in both metro and nonmetro areas were employed, "but by 2016 only 1 in 2 less skilled men in rural America worked, which was 15 percentage points lower than in metro areas" (Ziliak 2018, 10).

Since the early 1980s, urban and rural areas have seen diverging mortality trajectories (Cosby et al. 2018; James 2014; Singh and Siahpush 2014; Elo et al. 2019). Mortality rates have fallen in small, medium, and large metropoli-

tan areas but have increased among rural adults age twenty-five to sixty-four over the last thirty years (James 2014). The rural mortality penalty, which began to emerge in the 1990s, is now substantial (Cosby et al. 2018). Although much research highlights the poor health of rural men, recent analyses reveal a growing rural mortality penalty for White women as well (Monnat 2020). The opioid crisis and other so-called deaths of despair, such as suicides, drug overdoses, and alcohol-related deaths (Kiang et al. 2019; Monnat 2018; Peters et al. 2020; Case and Deaton 2015), only partially account for the rural-urban mortality gap, given that most of the growing difference in life expectancy is attributable to diverging mortality trajectories for cardiovascular diseases (Abrams, Myrskylä, and Mehta 2021; Harper, Riddell, and King 2021; Monnat 2020). Poorer cardiovascular health in rural areas relative to urban areas is found even among young adults (Lawrence, Hummer, and Harris 2017). Nonfatal health outcomes among adults are also worse in rural areas (National Center for Health Statistics 2019), particularly with respect to physical activity, obesity, and rates of smoking and tobacco consumption (Roth et al. 2017). Rural

areas have also not been spared from the ongoing coronavirus pandemic, which began in early 2020. Although initial caseloads were higher in dense urban places, rural counties saw rising caseloads during the summer and rural counties were observed to have some of the highest incidence and death rates (Cromartie et al. 2020; Karim and Chen 2021; Karmakar, Lantz, and Tipirneni 2021; Mueller et al. 2021). As the pandemic continues in subsequent waves, rural areas maintain their relatively higher risks of infection and death, as well as lower rates of full vaccination (Ullrich and Mueller 2021).

At least some of the measured decline in well-being in rural America is because many growing nonmetro counties have been reclassified from nonmetro to metro status since the OMB created the metropolitan classification in 1950. For many years, researchers have been aware that the conclusions drawn from comparisons of economic and social conditions in metro and nonmetro areas over long periods are influenced by the fact that each decade many counties are reclassified from nonmetro to metro or (less frequently) from metro to nonmetro (Artz and Orazem 2006; Goetz, Partridge, and Stephens 2018; Johnson and Lichter 2020).³ As a result, counties designated as nonmetro in 1974, for example, are now home to more than eighty million people, but counties classified as nonmetro in 2013 claim fewer than fifty million (Cromartie 2017). To the extent that population growth is correlated with strong local economies, better population health, and a better-educated labor force, this reclassification may contribute to a persistent rural-urban gaps in these economic, health, and education measures. For example, one recent study found

that reclassification accounted for about 25 percent of the increase in the rural-urban mortality gap since the 1970s (Brooks, Mueller, and Thiede 2020).

Two other factors that make it difficult to characterize the distinctive impact of rural places are the strength of social and economic ties across rural and urban communities and the ongoing blurring of the boundaries between rural and urban areas. Recent scholarship argues that interdependence of rural and urban places is growing and the uniqueness of rural and urban settings is diminishing as they become more similar across multiple dimensions (Lichter and Brown 2011; Lichter and Ziliak 2017; Wu, Weber, and Partridge 2017; Lichter, Brown, and Parisi 2021).

Rural and urban places are interdependent economically, environmentally, socially, and politically (Lichter, Brown, and Parisi 2021). Rural economies produce the food and energy and have the natural amenities that urban people need to thrive, and urban businesses produce goods and higher order services that rural people need but cannot generate efficiently. Rural land uses also generate environmental externalities from farming and mining that cross over into urban areas, and urban air and water pollution migrates into the rural periphery (Wu, Weber, and Partridge 2017). At the same time, the historical distinctiveness of urban and rural places is diminishing. Daniel Lichter and David Brown (2011) identify past changes in transportation technology and infrastructure that speeded the movement of goods and services and people. New advances in information technology and globalization, they argue, have facilitated the rapid movement of information and capital across rural

3. This reclassification can happen either because their largest cities cross the metro population threshold or because their commuting patterns change to cross the commuting thresholds. This was recognized as early as the 1970s when Fred Hines, David Brown, and John Zimmer developed the Beale Codes for use in an Economic Research Service publication examining changes in social and economic characteristics of metro and nonmetro populations. They recognized that using the 1970 classification for both their 1960 and 1970 data would likely depress nonmetro growth rates “by inclusion of some rapidly changing counties in the metro category that were nonmetro at the beginning of the period (1960)” (1975, 4). In the intervening years, others have noted how the failure to address the changing classification of counties affects the estimate of growth rates. Johnson (1989), for example, pointed out that the estimated nonmetro population growth rate between 1980 and 1987 was reduced by 32 percent if one used the nonmetro classification for 1987 rather than for 1980.

and urban spaces. Furthermore, the geographic expansion of boundaries at the rural-urban fringe and into exurbia can erase and blur the separation of rural and urban areas. They assert that “drawing sharp rural-urban distinctions seems increasingly obsolete” (2011, 566).

WHY GROWING UP RURAL MATTERS

A central concept of this double issue is that growing up in rural areas matters not only for children’s development and well-being, but also for their future life chances. In this section, we briefly review evidence that where one grows up has both immediate and longer-term influence on important outcomes such as health, education, and economic security. We then articulate what is distinctive about rural settings, how they differ from more urban environments, and why these place-based rural characteristics may impact the lives of those who grow up there.

Place-Based Effects: Short and Long-Term Implications

Over the past three decades since William Julius Wilson’s *The Truly Disadvantaged* (1987) stimulated research on “neighborhood effects,” a substantial literature has emerged in a wide range of disciplines demonstrating that one’s childhood place of residence matters (Duncan, Brooks-Gunn, and Aber 1997; Sampson 2008; Sampson, Morenoff, and Gannon-Rowley 2002; Diez Roux and Mair 2010; Sampson, Raudenbush, and Earls 1997; Chetty et al. 2014; Chetty and Hendren 2018a; Hayward and Gorman 2004). In their landmark publication, Jeanne Brooks-Gunn, Greg J. Duncan, and Lawrence Aber (1997) compile extensive evidence that neighborhood characteristics, particularly poverty, had a detrimental effect on children’s well-being. Importantly, several studies demonstrate that these neighborhood-level characteristics influenced child development above and beyond their individual household or family characteristics. Subsequent work showed that many neighborhood characteristics impact children by operating through key institutions such as families and schools (Leventhal and Brooks-Gunn 2000). For example, poorer neighborhoods tend to have a

higher proportion of single-parent families and lower quality, underresourced schools, which in turn are associated with poorer child development outcomes.

An important and growing literature further demonstrates that the impact of childhood residential characteristics are not limited to childhood. Recently scholars have drawn on ideas from both neighborhood or place-based effects and life-course theories to examine how community characteristics and residential environments during childhood may influence health and economic outcomes well into adulthood. Being raised in a poor or disadvantaged neighborhood is often associated with poorer health, lower educational attainment, and lower earnings in adulthood (Gould, Lavy, and Paserman 2011; Leventhal and Brooks-Gunn 2000; Wodtke, Harding, and Elwert 2011). For example, such children are more likely to be obese as adults (Alvarado 2019; Kravitz-Wirtz 2016). In his groundbreaking study, the Equality of Opportunity project, Raj Chetty and colleagues show that where children are raised is strongly related with their upward income mobility as well as educational, fertility, and marital outcomes (Chetty et al. 2014; Chetty, Hendren, and Katz 2016; Chetty et al. 2018; Chetty and Hendren 2018b, 2018a). The Equality of Opportunity project used data from deidentified geographically coded federal income tax records to identify where individuals born in the early 1980s lived when they were in their mid-teens and then linked information about their teen location and family income rank to a host of socioeconomic outcomes when the individuals were roughly age thirty. Importantly, these analyses assessed outcomes of young adults regardless of whether these individuals have remained in their home county or commuting zone or have moved. These studies provide compelling evidence that not only does where you grew up matter, but so do the place-based characteristics of your childhood residence. Specifically, they find that areas with less segregation and more income equality achieved higher rates of upward income mobility (Chetty and Hendren 2018b).

The lion’s share of the research cited, however, focuses on urban areas or nationally representative studies consisting of predominately

urban populations. Even the term *neighborhood effects* reflects an urban orientation given that *neighborhoods* more aptly characterize urban than rural communities. Hence we prefer terms like *community* or *place-based* effects. This urban bias may matter for several reasons and may not provide a full understanding of how rural places can shape the development and life chances of children. First, many of the measures used to capture urban neighborhood quality may not be applicable to rural communities. For examples, community-level indicators of food deserts typically measure the number and proximity of supermarkets but do not usually take into account whether families have access to gardens (Walker, Keane, and Burke 2010). Even studies that explicitly seek to examine neighborhood effects across the rural-urban continuum encounter urban-biased definitional problems. For example, one study defined neighborhood problems in urban, suburban, exurban, and rural areas using the presence of abandoned or vandalized buildings or buildings with bars on windows within three hundred feet of the housing unit (Cornwell and Hall 2017). Given that rural housing units are less likely to have any buildings within three hundred feet, it is not clear that these standard measures of neighborhood quality are conceptually or empirically comparable across the rural-urban continuum.

A second issue is that many place-based characteristics that have been identified as important in urban settings may be less salient in rural communities, and vice versa. An obvious example is the presence of sidewalks, which may have very important implications for access to goods and services in urban areas but are less relevant in rural areas. Less obviously, levels of neighborhood socioeconomic inequality may be less germane in rural than urban areas given that urban residents are able to more easily self-segregate themselves and their children into different schools and medical care, whereas rural residents are more likely to share these services. Our lack of understanding how growing up rural may influence childhood well-being and life outcomes represents an important blind spot in both academic research and in the urban public more broadly.

What Is Distinctive About Rural Areas?

The dearth of research on the place-effects of growing up rural leaves open the question of what, if anything, is distinctive about rural places and why growing up in such places should matter. Given the rapid changes and considerable heterogeneity in rural areas just discussed, no one feature, such as poverty or agricultural production, is universally present in all rural areas. Nonetheless, we contend that two defining characteristics of rurality, smaller population size and remoteness from urban centers, fundamentally shape the characteristics of rural areas, which in turn influence the well-being and life chances of those raised in these places. Rebecca Blank (2005) identifies five attributes of communities that affect opportunity and outcomes: its natural and physical built environment, its economic structure, its public and community institutions, its social norms and cultural environment, and the demographic characteristics of its population. Places, in this view, are not just spaces where physical infrastructure and natural resources are located. Places are human creations with unique institutions, cultural and social norms, and sets of relationships within which people live and interact and change.

Despite the great diversity across rural America just described, rural areas are distinctly different from urban areas, at least on average, with respect to each of the five attributes. Perhaps the most visually striking differences between rural and urban places is in their physical environments. Put simply, rural places have a higher ratio of the natural to the built environment. Indeed, the natural environment is often central to the identity of rural areas. Densely timbered forests, vast fertile fields, coal-laden mountains, and abundant lakes and streams not only are the backbone of many rural economies, but also provide entertainment and physical exercise such as hunting and fishing, hiking, skiing, biking, and canoeing. Consequently, rural life is generally more closely tied to the natural environment. The physical built environment of rural areas is also distinctive. Rural infrastructures generally consist of longer roads and fewer sidewalks. As a result, traffic congestion may be less, but dis-

tances to services is typically greater and public forms of transportation, including bus routes and subway systems, are much more limited. Consequently, rural residents depend more on cars to perform essential daily tasks, such as getting to work or buying groceries. This reliance not only is relatively expensive, but also affords fewer opportunities for active transportation by walking or biking, thus affecting rural residence economic and physical well-being. Prior studies, for example, have labeled rural environments as “obesogenic” due to their limited access to recreational facilities, dependence on nonactive modes of transportation, and overall food environments (Boehmer et al. 2006; Wen et al. 2018).

Rural economic structures also differ strikingly from urban ones both because of their greater dependence on natural features and resources, and because smaller population sizes generate less demand and fewer economies of scale. As a result, access to economic opportunities and services is generally more limited. Job markets tend to be less diverse and many rural communities depend on only a few major industries (Cromartie 2017). Limited job opportunities correlate with higher unemployment and underemployment (Slack, Thiede, and Jensen 2020) and lower labor-force participation rates (Pender et al. 2019), which in turn affect rural families through higher levels of poverty and its impact on gender norms (as discussed). Commercial establishments including grocery stores, restaurants, and other retail businesses often are not profitable in sparsely populated areas or offer less variety where they do exist (Mushinski, Weiler, and Widner 2014). Many services and public infrastructures with high fixed costs that are provided in cities are not available in rural communities or are provided by volunteers rather than paid professionals.

Importantly, rural areas in the United States suffer from fewer health-care resources and potentially greater difficulties accessing both primary and secondary care (National Center for Health Statistics 2019). Access to physicians is generally lower in rural areas given that only about 10 percent of physicians practice there (Rosenblatt et al. 2010). The problem of rural out-migration is likely to exacerbate this issue

because growing up in a rural area is a key determinant of developing a rural medical practice (MacQueen et al. 2018).

In contrast, fewer private and public services may encourage more community institutions, including civic and faith-based organizations (Weber 2008). Schools and churches in rural areas often function as hubs of community life, engendering strong feelings of community attachment. At the same time, educational services are restricted in rural areas because fewer students lead to less diversity in choice of schools and fewer specialized subjects being taught. In sparsely populated rural communities and areas facing pronounced depopulation, some schools have been closed or consolidated. The public and community institutions that emerge (schools, churches, local governments, civic institutions, financial intermediaries) affect the quality and types of services available and thus the emotional, social, cognitive, and physical development of children and youth.

These community institutions also contribute to rural social norms and cultural values. Rural areas tend to hold more religious (Dillon and Henly 2008; Chalfant and Heller 1991) and conservative political (Gimpel et al. 2020) values. These social norms, undergirded by informal social sanctions, shape the behavior and expectations of children, youth, and adults. They are part of the “sense of place” that gives residents an identity but may also limit perceived opportunities. At the same time, the importance of local social relationships and working collectively on common issues and the limited number of neighbors makes developing these relationships easier.

The demographic characteristics of the community reflect its past history and are, in many cases, closely tied to social norms. Rural populations tend to be older, nearly 18 percent of their population age sixty-five or older relative to 14 percent of urban populations (Smith and Trevelyan 2019). In addition, despite large minority populations in geographically concentrated areas and sizable increases in ethnic minority populations, rural areas are also less ethnically and racially diverse than urban areas (Johnson 2012, 2014; Lee and Sharp 2017). These

demographic profiles shape the priorities and opportunities of youth living there. In the long run, of course, many of these attributes pertaining to the physical environment, local economy, civic institutions, cultural values, and demographics, are changeable, and many are endogenous. Social norms, for example, not only shape but also reflect the economic structure and institutions of the community that may have adapted to support these norms.

Challenges in Identifying a Rural Effect

The aim of this double issue is to better understand how growing up in a rural place influences the life outcomes of a person—what has been called the “rural effect” (Weber et al. 2005). Measuring this rural effect, however, presents several daunting methodological challenges. As discussed in detail in the appendix, *rural places* and hence *rural people* can be defined many ways. Beyond these definitional issues, scholars studying the rural effect need to address at least three other challenges: definitions change, places change, and people move. These challenges are particularly important in retrospective and longitudinal studies that follow people over their life course.

The first challenge is that the standard definitions of urban and rural—and metropolitan and nonmetropolitan—have changed over time. Since the earliest days, *rural* has always been *not urban* and *nonmetro* has always been *not metropolitan*. Some changes were made in the definitions in 1950 and 2000, however, and these changed the classification of particular places.⁴ But the basic concepts were maintained: *rural* continues to refer to small settle-

ments with open country and populations of less than 2,500; and *nonmetropolitan* continues to refer to counties distant from regional labor markets centered on cities of fifty thousand or more, and so continuity is significant across the decades in definitions that allows some consistency in the analysis of rural places.

A more serious challenge is that, even when the definitions of urban and rural stay consistent over time, places change. As noted, many nonmetropolitan counties have grown over the past half century and been reclassified as metro counties. Between 1960 and 2017, nearly 25 percent (753) of all nonmetro counties were redefined by the OMB as metro (Johnson and Lichter 2020). “All the growth since 1970 in the metropolitan share of the U.S. population came from reclassification rather than endogenous growth in existing metropolitan areas” (Johnson and Lichter 2020, 129). For the study of “rural effects,” it is important that the county of origin is correctly identified as metro or nonmetro. If one happens to have grown up in one of the 753 counties that was reclassified, using the most recent OMB classification to identify county of origin will lead to a misestimation of the rural effect. Specifically, because the formerly nonmetro counties now classified as metro generally have more positive demographic and economic characteristics, failure to properly identify nonmetro status at the time of childhood will likely bias the rural effect downward by excluding healthier, better-educated, and higher-earning adults. Both Lisa Keister, James Moody, and Tom Wolff (2022, this volume, issue 4) and Evan Roberts, Wendy Rahn, and DeAnn Lazovich (2022, this volume,

4. Before 1950, the Census Bureau considered only the populations with incorporated areas in their definition of urban. For the 1950 Census, it changed the definition to allow densely populated unincorporated areas to be identified as urban (Census Bureau 2020b). In 2000, it created two classes of urban areas, aggregating census blocks into urbanized areas of fifty thousand or more and urban clusters of between 2,500 and 49,999. In 1949, the Bureau of the Budget (the predecessor of OMB) standardized the definitions of metro areas by defining as them as single counties or groups of counties with a core city of at least fifty thousand people plus adjoining counties that were socially and economically integrated with the central county (Census Bureau 2020a). Changes of terminology were regular over the next fifty years but the standards used to identify metro areas did not change significantly (U.S. Census Bureau 1994). In 2000, however, OMB instituted a significant change in the metro classification system by adopting *core-based-statistical-areas* to define metro areas. This change retained the metro-nonmetro distinction with Census Bureau–defined urbanized areas of fifty thousand or more forming the cores of metro statistical areas. Nonmetro counties—those that were not in metro statistical areas—were classified as either micropolitan (counties or groups of counties with urban clusters of 10,000 to 49,999 as their cores) or noncore areas (those not metro or micropolitan).

issue 4) take care to link both childhood place of origin and adult place of residence to the geographic identifiers in effect at the time of childhood and adulthood.

Even if definitions can be held constant and particular places do not change categories, the characteristics of a given place may be quite different in different eras. This can change the size and character of the rural effect. This suggests that conclusions about a rural effect from the 1930s, for example, should be carefully interpreted in understanding the effect of growing up in a rural area today. Roberts, Rahn, and Lazovich (2022) provide a good example of how to address this issue in their paper on the effect of growing up in a rural area in the early years of the twentieth century on mortality rates five decades later.

The third, and possibly most intractable, challenge is that people move. This has two implications for the study of rural effects. The first is that, depending on when they move during or after childhood, people growing up in a rural area will have had varying exposure to rural life. In other words, they will have varying “doses” of the rural effect. The effects of this exposure can vary depending both on the life stage and the era in which they are experienced. Emily Parker, Laura Tach, and Cassandra Robertson (2022, this volume, issue 4) consider this in their analysis by creating variables that captured time spent in nonmetro counties, but do not report the results because they find them to be substantially the same as using the metro-nonmetro county of origin variables. They do, however, separate exposure to place-based federal funding in childhood from exposure to place-based federal funding during adulthood and found different effects on adult educational and earnings outcomes.

The second issue involved in migration is that the migration is selective. Because of more limited local institutions of higher education (colleges and universities) and less diverse and robust local labor markets, many rural youths leave their home communities to pursue their educational and occupational goals. Consequently, migration from rural areas to urban ones is known to be highly selective with respect to higher education and earning potential (Carr and Kefalas 2009; Faggian, Corcoran,

and Rowe 2017; Sherman and Sage 2011; Weber et al. 2007). Out-migration from rural areas may also be linked to better health, though this form of selective migration is less frequently studied (Jokela et al. 2009; Lee 2019). In-migration to rural areas is also selective. Between 2000 and 2010, Hispanic populations accounted for about two-thirds of rural population growth (Lichter and Johnson 2020). Other rural areas have seen an increase in migrants with high levels of education and income through a process of rural gentrification. Cross-sectional studies typically ignore these selection effects in migration; yet excluding these rural migrants can generate biased estimates of the longer-term effects of growing up in rural areas. Roberts, Rahn, and Lazovich (2022) and Parker, Tach, and Robertson (2022), for example, both find important differences in adult mortality and economic outcomes between rural stayers and movers in their studies.

Studying the longer-term effects of having rural roots typically requires longitudinal data at the individual level that spans a substantial portion of the life course and follows individuals who move. Studies of the rural effect over the life course also need to use the most appropriate definition of rural status and measure it at the time the individual was a child. Ideally, such studies would capture not only whether an individual grew up in a rural area, but also how specific attributes of these rural communities (its physical environment, economic structure, community institutions, social norms, and demographic characteristics) shape individuals’ life chances. These rural attributes would also need to be measured during childhood as they too change over time. Studies that meet all of these data and analytic challenges are rare, but also essential to provide a deeper understanding of both the advantages and disadvantages of being raised in rural America.

AN OVERVIEW OF GROWING UP IN RURAL AMERICA

In this section we provide an overview of the literature pertaining to growing up in rural America and highlight the contributions of articles in this volume to this literature. We begin with a discussion of two key institutions that are shaped by rural place attributes and play a

pivotal role in fostering children's development: rural families and rural schools. We then turn to one of the most distinctive and difficult aspects of growing up in a rural area: having to decide whether to leave or stay in one's home community. In particular, we examine the conflict and uncertainty rural youths experience as higher educational aspirations typically require them to leave. We then explore why many rural youth prefer to stay in rural areas and the implications of this choice for building families and securing work. Last, we draw on a limited number of studies, including three new studies in this volume, that take a life-course perspective to examine the implications of growing up in rural areas on adult education, income, wealth, and health for both those who leave and those who stay in rural areas.

Rural Families: Coping Under Strain

Like their urban counterparts, rural families play a central role in protecting and promoting rural children's well-being. The strength, stability, and dynamics of family forms and functions critically influence children's emotional well-being and physical health (Amato 2005, 2010; Brown 2004; Panico et al. 2019; Thomson and McLanahan 2012; Bzostek and Berger 2017). Historically, rural children were more likely than urban children to be raised in traditional family structures consisting of heterosexual married couples and their children (Albrecht and Albrecht 2000). These nuclear family units were typically integrated into extended kin networks, including grandparents, aunts, uncles, cousins, nieces, and nephews, who lived nearby. In traditional rural communities, these large and tightly knit kinship networks were actively engaged in the lives of rural children offering both supplemental support and full-time care in times of economic or personal crisis (Beggs, Haines, and Hurlbert 1996).

Today, rural and urban families more closely resemble one another (Carson and Mattingly 2014). By 2018, slightly fewer rural (60 percent) than urban (63 percent) children lived in two-parent married households. Instead, rural children are more likely to live with cohabiting parents (O'Hare et al. 2009) and to be born to unmarried mothers (Livingston 2018). Data on children's residence with same-sex couples are

limited, but American Community Survey (ACS) data from 2018 show that a similar proportion of rural and urban children (about 0.5 percent) live in same-sex married or cohabiting couples. Rural children are as likely as urban children to live in multigenerational households, and grandmothers often play an active role in helping raise their grandchildren (Barnett 2008; Brown and Lichter 2004; Burton et al. 2013; Lichter and Graefe 2011). These multigenerational households are especially common among African Americans and Native Americans living in rural areas (Snyder, McLaughlin, and Findeis 2006). Yet the assumption that rural kin are more available to assist with childcare is increasingly questionable, given that high out-migration means fewer family members around to care for the young or the old (Choi et al. 2020).

Furthermore, despite substantial changes in the structures of rural families, social norms, being often rooted in Christian religious ideals, continue to valorize "traditional families" in many rural communities (Miller and Edin 2022, this volume, issue 4). These traditional social norms may help explain why some family structures may be particularly disadvantageous for children living in rural areas (Burton et al. 2013). Relative to urban single mothers, rural single mothers may face greater social stigma as well as greater barriers in accessing welfare benefits and, if employed, are more likely to be working part time (Brown and Lichter 2004). This may help explain the higher poverty levels among single mothers in rural areas than urban areas (Brown and Lichter 2004; Snyder and McLaughlin 2004). In addition, although research shows little if any differential impact of parental gender composition on children's well-being (Reczek et al. 2016; Cheng and Powell 2015; Schumm 2016; Cenegy, Denney, and Kimbro 2018), the scarce literature on lesbian, gay, bisexual, transgender, and queer-questioning (LGBTQ) rural families raises concerns that children with LGBTQ parents may face a higher risk of bullying and social isolation (Bell 2000; Poston and Chang 2016; Preston and D'Augelli 2014).

Some scholars have argued that it is not family structure per se, but instead family instability, including divorce, remarriage, or

household moves, that disrupt children's home lives and have a negative impact on their well-being (for an overview, see Cavanagh and Fomby 2019). Numerous factors have been found to be associated with family instability in rural areas. Studies on the impact of economic restructuring suggest that changing gender roles in rural areas increased family tensions, potentially resulting in greater family instability (Sherman 2009a). Yet other work shows that rural families accustomed to economic hardships, specifically those dependent on coal extraction, exhibited greater resilience (less disruption) than metro areas before and after the recession (Betz and Snyder 2017). Cohabiting unions, which are more common in rural areas, are less stable than marriages, and rural cohabiting unions are less enduring than urban cohabiting partnerships (Brown and Snyder 2006). Similarly, remarriage is more common in rural areas, suggesting higher levels of blended families and a greater number of family transitions. High levels of family instability also fosters greater multipartner fertility, which leads to complex family structures and complicated intergenerational family ties (Burton et al. 2013).

Family instability is also higher among families facing deep poverty and drug addiction. The official poverty rate is higher for rural than for urban children, and poverty increased during the early 2000s reaching a high of 27 percent in 2012 (Hertz and Farrigan 2016). Many low-income rural families, like their urban counterparts, struggle to care for young children through a combination of low-paying jobs, government programs (such as the Supplemental Nutrition Assistance Program [SNAP] and Women, Infants and Children [WIC]), and help from other family members, often grandmothers. Yet in some ways living in a rural area poses additional challenges. Notably, employment opportunities are more scarce and stigma around receiving support from government programs reduces families' use of such programs, even when they are eligible (Brown and Lichter 2004). Moreover, work locations, hospitals, gas stations, and grocery stores are farther away, requiring rural families to incur the costs of car ownership or greater dependence on family and friends to perform

essential tasks. Recently, studies have also noted limited access to healthy food in rural areas. In fact, despite being the primary producers of food in America, rural families are more likely to experience food insecurity than urban households, particularly after adjusting for region (Gundersen et al. 2017; Rabbitt, Coleman-Jensen, and Gregory 2017). Furthermore, although food insecurity has generally declined in urban areas after the recovery from the Great Recession, it has continued to rise in rural areas (Coleman-Jensen, Steffen, and Whitley 2017).

Rural families struggle to mitigate the impact of poverty and family instability for children (Sano, Manoogian, and Ontai 2012). Two articles in this volume demonstrate how low-income rural families adapt when coping with food insecurity and drug addiction, respectively. Sarah Bowen, Sinikka Elliott, and Annie Hardison-Moody (2022, issue 3) take a close look at the lived experiences of three unmarried low-income female caregivers of young children in two rural counties in North Carolina. They follow these families for five years. At the beginning of their study, these children reside in a variety of nontraditional living arrangements, including a multigenerational family consisting of a single mother and grandmother, a blended family with cohabiting migrant parents, and a single grandmother caring for three grandchildren. Despite these different initial living arrangements, these families had common experiences. First, all three noted the importance of being able to rely on other family members and, to a lesser extent, neighbors and friends to cope with food insecurity. Second, their reliance on public safety net programs, such as SNAP and WIC, and charitable food pantries was both essential to "getting by" and engendered significant levels of anxiety, frustration, and embarrassment. Third, by the end of the five years of the study, all families experienced significant instability. When an older adolescent grandchild in the multigenerational family became pregnant and had a child, the grandmother (now great-grandmother) left the household as the boyfriend of the adolescent mother moved in. Over this same period, a car accident compelled the migrant family to move to an urban center to

be closer to hospital care. Mounting bills and dilapidated housing forced the grandmother to move several times and ultimately to lose custody of her grandchildren. Her struggles illustrate the close interconnection between food and housing insecurity in rural areas (Coleman-Jensen, Steffen, and Whitley 2017).

In addition to chronic poverty, rising rates of drug addiction have wreaked havoc on rural families, frequently separating children from their parents' care, and fueling family instability. The rapidly spreading opioid and methamphetamine epidemics have rendered fewer adults, including parents, capable of providing childcare. In her analysis of children's living arrangements in rural Appalachia, Kristina Brant (2022, this volume, issue 3) shows how parental opioid and other drug abuse and its ties to the criminal justice systems and child welfare programs generates family instability as children bounce among care by parents, grandparents, and other relatives. Brant's study highlights how in rural communities personal connections (both positive and negative) to local legal systems plays a critical role in determining whether rural families are successful in navigating kinship family formations. Rural family members with negative experiences and connections are less likely to seek legally recognized custody of children, thereby limiting their access to federal and state subsidies for childcare. In contrast, rural families with positive connections are able to effectively intervene, buffering both children and their parents from the negative effects of drug addiction. The articles in this volume by both Bowen, Elliott, and Hardison-Moody and by Brant focus on rural families facing considerable economic and personal strain, but also demonstrate how in the midst of these crises, rural families often work together to prioritize children's well-being.

Childcare and Schools in Rural Areas: Surprising Equality and New Challenges

In addition to families, educational institutions, including early childcare and education programs and schools, play a key role in fostering children's well-being. These institutions are primarily responsible for promoting children's cognitive development and preparing children

with the necessary knowledge and skills for subsequent academic success.

The Changing Context of Childcare

Historically, most rural children under the age of five were cared for by family members. Lower female employment rates combined with greater distances to center-based childcare and closer proximity to kin resulted in limited demand for center-based childcare, either private or public (Atkinson 1994). Rapid economic and social change over the last thirty years, however, have transformed rural families, undermined traditional gender roles, and altered childcare arrangements (Betz and Snyder 2017; Lichter and Graefe 2011). Specifically, economic restructuring caused by a shift from largely agricultural and extractive industries to service positions has resulted in lower paid jobs with fewer benefits (Autor 2019; Slack 2014; Thiede and Slack 2017). It has also led to a decline in employment, much more pronounced among rural men than rural women. In fact, many rural women entered the formal labor market in response to their male partners' job loss (Mattingly and Smith 2010). These trends were compounded during the 2008 recession: not only did rural female employment outpace male employment, but rural fathers also modestly increased their time spent on childcare if the child's mother was employed (Smith and Pruitt 2017), transforming traditional gender roles of the male breadwinner and female caregiver (Mattingly and Smith 2010; Smith and Pruitt 2017; Tickamyer and Henderson 2004).

Even after the recession, many of the new jobs available for both men and women in rural areas had rigid hours or irregular shift work, neither of which is compatible with childcare (Thiede and Slack 2017). Rural jobs have been described as being less family friendly because they offer fewer paid sick days, paid vacation days, parental leave, or flextime than urban jobs (Glauber and Young 2015). Historically, many rural families may have depended on kin for assistance with childcare (Atkinson 1994), but this appears to be waning as more rural families look for affordable center-based childcare. Contrary to some expectations, Taryn Morrissey, Scott Allard, and Elizabeth Pelletier (2022, this volume, issue 3) find that publicly

funded early childhood care and education programs, primarily Head Start, are more available and more likely to be used in rural than in urban areas, highlighting the heavy dependence on such public funds in rural communities. In contrast, urban children were more likely than rural children to attend private nonprofit preschools. In addition, on entry into kindergarten, rural children's reading and math scores were slightly lower than their more urban counterparts'. Adjusting for county-level center-based childcare capacity and socioeconomic characteristics, however, largely explained rural-urban differences in young children's readiness to enter kindergarten.

Rural Schools: Challenges and Advantages

School quality, resources, and investments largely drive students' educational outcomes in both rural and urban areas; yet on several key dimensions, differences between rural and urban school environments are distinct. Because of their lower population density, rural schools face numerous challenges. Smaller student bodies support fewer specialized classes (Bouck 2004). Of particular concern in rural areas are the limited number of college preparatory classes as well as of classes suited to the needs of students with learning disabilities. Funding allocation regulations, particularly with respect to federal funding for low-income students, further limits services for disadvantaged rural students (Biddle, Mette, and Schafft 2017). For example, Title 1 of the Elementary and Secondary Education uses an allocation formula based on the percentage of students living in poverty or the total numbers of students living in poverty. As a result, smaller rural schools receive fewer resources per child living in poverty than large urban schools do (Schafft and Biddle 2014; Biddle, Mette, and Schafft 2017; Strange 2011). Less funding also limits teacher salaries, which in turn, undermines the recruitment and retention of rural school teachers (Fishman 2015;

Monk 2007; Lamkin 2018). These financial challenges are compounded by stringent certification requirements, which restrict the pool of potential teachers and the number of subjects teachers are eligible to cover. Because rural teachers are more likely to double-up on subjects taught, the burden of these restrictions is heightened in rural school systems.

Given that rural schools receive less per-student funding and offer a less diverse curriculum, one may expect that rural children would exhibit lower academic performance. Yet, rural and urban students often perform similarly on standardized tests such as the National Assessment of Educational Progress (NAEP). From 2000 to 2010, rural students performed slightly better than urban students on the reading and math NAEP, but worse than suburban students (Burdick-Will and Logan 2017; Provasnik et al. 2007). Within rural areas, students in fringe rural areas typically outperform the national average, whereas those in remote rural areas score lower on the NAEP (Fishman 2015).⁵ National averages also mask potentially important regional variation. In the Deep South, which includes rural areas with high levels of persistent poverty and lower levels of school funding, rural children's performance on standardized tests falls gradually behind those of urban students as they progress from kindergarten to grade twelve (Lindahl 2011). By using an innovative new common scale of state achievement tests on 430 million standardized test scores, Jessica Drescher, Anne Podolsky, Sean F. Reardon, and Gabrielle Torrance (2022, this volume, issue 3) provide a nationwide comparison of rural and urban third grade achievement and learning rates between the third and eighth grade. Overall, they find only modest differences between rural and urban students' academic performance, although some differences within race-ethnicity groups were larger.

To help explain the similar levels of aca-

5. "NAEP reports results for four mutually exclusive categories of school location: city, suburb, town, and rural. Each of these categories has three subcategories. Rural areas are further distinguished by their distance from an urbanized area: Fringe rural is 5 miles or less from an urbanized area or 2.5 miles or less from an urban cluster; distant rural is more than 5 miles up to 25 miles from an urbanized area or more than 2.5 miles up to 10 miles from an urban cluster; remote rural is more than 25 miles from an urbanized area or more than 10 miles from an urban cluster" (Fishman 2015).

demic performance in rural and urban areas, some studies highlight specific advantageous characteristics of rural schools that may enhance students' learning and performance. For instance, rural schools tend to be closely integrated into their communities, often serving as hubs of local activity and engagement (Elder and Conger 2014; Schafft and Jackson 2010; Schafft and Biddle 2014; Schafft 2016; Bauch 2001). Glen Elder and Rand Conger (2014) provide extensive evidence on how farm children's ties to the land, their families, and their communities enhance both their academic success and social competence. Other studies show that rural schools promote social capital by facilitating children's and adolescents' civic engagement. Rural youth are highly engaged in both community and school civic activities such as student council, Future Farmers of America, and 4-H (Ludden 2011). These close community ties offer important advantages because teachers are more likely to know their students' parents and parents are more engaged in school activities (Schafft and Biddle 2014; Semke and Sheridan 2012). Rural classrooms are also, on average, smaller than urban ones and lower student-to-teacher ratios tend to correspond with greater per-student attention (Schafft and Biddle 2014).

Last, rural schools tend to be less socioeconomically segregated than urban schools. Largely because of limited school choice in rural areas, rural students across the socioeconomic spectrum are more likely to attend the same classes, participate on the same sports teams, and engage in the same extracurricular activities. Emerging research suggests that this greater integration may offer important opportunities for academic achievement and help facilitate social mobility (Chetty and Hendren 2018b; Chetty et al. 2014). These findings are consistent with those of Drescher and her colleagues (2022), which show that socioeconomic status is less predictive of academic achievement in rural areas than in urban areas. Another study also found that racial-ethnic gaps, specifically White-Black and White-Hispanic differences, in test scores were lower in rural than in urban settings (Gagnon and Mattingly 2018). These findings suggest that rural schools offer more equitable oppor-

tunities for upward mobility via education than urban schools.

However, new work by Jennifer Sherman and Kai Schafft (2022, this volume, issue 3) raises concerns that this greater rural educational equality may be threatened in rapidly gentrifying, high-amenity rural areas. Although rural gentrification is sometimes viewed as a critical development strategy to reverse economic decline, this provocative study highlights some potentially harmful consequences to the influx of wealthy migrants to a former logging community in the Pacific Northwest. These newcomers have, on average, improved schools resources and performance, but they have also exacerbated inequalities. The most socioeconomically disadvantaged children benefited little from these changes because they lack the resources to pay for any of the schools' new sports and extracurricular activities and are poorly prepared to take advantage of curricular changes. Hence the process of rural gentrification may undermine an important advantage of rural schools, namely, promoting more equitable upward mobility through education.

Aspiring to Leave: The Pursuit of Higher Education

Arguably, the pursuit of postsecondary education marks when the life trajectories of rural and urban Americans most sharply diverge. Because of the limited range of postsecondary institutions in rural areas, rural youth, unlike their urban counterparts, typically face a difficult, and sometimes painful, decision of whether to remain in their home communities or leave to achieve their educational goals. Choosing to leave entails not only separation from their family, friends, and community, but also adjusting to a new, often unfamiliar, urban culture and environment. In addition, because rural areas have fewer local colleges and universities and fewer adults who have college degrees, many rural youths make this potentially life-altering decision with little understanding of how postsecondary institutions work or the role of postsecondary education in defining their subsequent career options.

The rural-urban divergence begins with differential aspirations to attend college. In their study of students in Minnesota, Alejandra Mi-

randa and Michael Rodriguez (2022, this volume, issue 3) find that only 61 percent of rural students, versus 74 percent of urban students, aspired to attend a four-year college. Rural girls had greater odds of college aspiration than rural boys did, and American Indian and Latinx students had lower educational aspirations than non-Latinx White students, but these ethnic differences were smaller among rural than urban students. Other studies, however, have found that among African American men, rural men were slightly less likely than urban men and significantly less likely than suburban men to aspire to attend college even after controlling for SES and student grades (Strayhorn 2009). Nationally, rural and urban adolescents express the greatest divergence in their educational aspirations beyond college, rural children being significantly less likely than urban to aspire to pursue postgraduate training (Howley 2006).

Previous studies highlight three factors that may curtail the educational aspirations and attainment of rural youth: family SES, particularly parental education; greater attachment to their families, communities, and land; and fewer and lower-ranked local universities and colleges nearby (Turley 2009). Perhaps the strongest barrier to pursuing postsecondary education for rural students is limited family resources (Irvin et al. 2012; Koricich, Chen, and Hughes 2017). One study contends that parents' low SES is the primary deterrent for rural youths to seek additional education (Byun, Meece, and Irvin 2012). Matthew Irvin and his colleagues (2012) also find that rural children whose parents have postsecondary education are more likely to attend college. Ethnographic research shows how members of the broader community, including teachers, perceive and sometimes reinforce the link between family SES and youths' educational prospects. In rural Kentucky, children of community leaders, who generally have higher SES, were encouraged to leave their community to attend college, whereas children in poor and working-class families were expected to remain (Miller and Edin 2022, this volume, issue 4). Although a handful of individuals from low-income families do leave and earn college degrees, these children were the excep-

tion and referred to as "beating long odds." Jennifer Sherman and Kai Schafft (2022, this volume, issue 3) similarly show notable differences in educational aspirations by length of residency, which is closely correlated with SES. Both old-timers, most of whom lived in the community more than twenty years, and newcomers in rural gentrifying areas strongly encouraged their children to attend college, but old-timers were more likely to view college as essential to securing well-paid and reliable employment, whereas newcomers tended to value education as an important life goal in and of itself.

The strong attachment of rural youths to their families and communities may be a double-edged sword, simultaneously encouraging and discouraging educational ambitions (Byun, Meece, and Agger 2017; Byun, Meece, and Irvin 2012; Howley 2006; Johnson, Elder, and Stern 2005). On the one hand, these ties are an important form of social capital and benefit rural adolescents in their college application process (Nelson 2016). These social resources may be especially important for rural children of lower SES to achieve their educational goals (McGrath et al. 2001). On the other hand, strong local attachments may conflict with educational aspirations (Petrin, Schafft, and Meece 2014; Theodori and Theodori 2015). Unlike urban youths, rural youths with strong parental bonds are less likely to enroll in postsecondary education, suggesting that close family ties, which typically promote higher education, may conflict with educational aspirations in rural contexts (Demi, Coleman-Jensen, and Snyder 2010). One study finds that rural youth with strong academic records tend to apply to lower-ranked community colleges rather than to more distant high-ranking universities (Robbins 2012). Similarly, youths who are more satisfied with their communities are more likely to stay (Mellander, Florida, and Stolarick 2011). These findings are consistent with the study by Nicole Bernsen and her colleagues (2022, this volume, issue 3) that youths in rural Oregon and Maine that have a more favorable perception of their communities were less likely to want to go to college. Interestingly, the perceptions of the high school students about the future local economic trajectory of the commu-

nity did not have any relationship with their educational aspirations.

These aspirational rural-urban gaps are reflected in both college and postgraduate enrollment and completion rates. Data from the National Educational Longitudinal Study show that urban youths are more likely than those from rural areas to earn a bachelor's degree (Byun, Meece, and Irvin 2012). The gap in college completion rates may partially reflect higher college drop-out rates for rural youths, who may not feel that they “fit” in university environments, which tend to be more culturally urban and politically liberal. Challenges of acceptance on university campuses may not be limited to rural Whites. One interesting study found that in-state rural African Americans were often being perceived as “more White” and provincial, whereas urban African Americans represented “authentic Blackness” and sophistication (Woldoff, Wiggins, and Washington 2011). Ryan Parsons (2022, this volume, issue 3) provides one of the first in-depth looks at the multiple barriers to college completion facing rural African Americans in the South. He argues that although college is perceived as crucial to upward social mobility, social and cultural capital are mismatched, expectations of cultural and emotional labor are high, and feelings of marginalization are pronounced. In particular, his work highlights how enrolling in college and pursuing careers that require college degrees entails a permanent transition from one opportunity structure to another one, that is unfamiliar to them, their families, and their communities. Thus for rural students of color this transition is especially difficult because it usually entails the substantial emotional and social costs of leaving family behind and facing uncertain futures largely on their own.

Choosing to Stay: Building Families and Finding Work

Out-migration of rural youth is a well-established pattern (Carr and Kefalas 2009; Faggian, Corcoran, and Rowe 2017; Sherman and Sage 2011). Rural youth are typically drawn to urban areas in search of further education, better pay or diversity in employment, and more cosmopolitan lifestyles (Artz 2003; Gibson and McKenzie 2012). Rural out-migration can be

substantial. Between 1990 and 2005, the rural Midwest experienced a 50 percent decline in its population aged twenty-five to thirty-four (Hamilton et al. 2008).

Yet many rural youth choose to remain, noting close ties to their families and communities and a dislike for the congestion and anomie of urban life, and many out-migrants later return to rural areas (von Reichert, Cromartie, and Arthun 2011). These youth make a conscious decision to remain in or return to their home communities, despite limited employment opportunities and almost certain economic hardships. Older studies find that rural youth experience markedly different transitions to adulthood, including completing one's education, finding work, leaving home, getting married, and having children (Heaton, Lichter, and Amoateng 1989). Emily E. N. Miller and Kathryn Edin (2022, this volume, issue 4) refer to these transitions as the “big five” and provide an in-depth analysis of the challenges of obtaining these key markers of adulthood in an area of rural Kentucky that has become an icon of rural White poverty. Two of the most notable differences in these transitions to adulthood pertain to building families and securing work.

Early Family Formation

Although rural and urban family structures increasingly resemble one another, differences in the timing of family formation continue to be notable. On average, women in rural counties give birth three years earlier than women in large metro counties in 2017 (Ely and Hamilton 2018). Teen childbirth is strikingly higher in rural than in urban areas, partly a result of more limited access to contraception and abortion services (Hamilton, Rossen, and Branum 2016; Ng and Kaye 2015). Consequently, a higher percentage of rural than urban teen births are unintended (Sutton, Lichter, and Sassler 2019). This early entry into parenthood generally occurs outside marriage, placing many adolescent and young parents at odds with local religious norms and teachings and undermining their access to critical community support and practical assistance. Miller and Edin (2022, this volume, issue 4) provide astute insights into how young unmarried parents navigate their complex and sometimes conflictual relation-

ships with religion and religious institutions in rural Kentucky.

Rural men and women also marry at younger ages (Snyder, Brown, and Condo 2004). Rural marriages that are formed early are often of lower quality with high levels of intimate partner violence and divorce (Miller and Edin 2022, this volume, issue 4). Hence, despite personal aspirations and community expectations of raising children within nuclear families, many young adults in rural areas find themselves struggling to support their children on their own.

Finding Well-Paid, Stable Employment

Job opportunities for those who stay or return to rural areas are limited. In the wake of decades of restructuring, recessions, and globalization, well-paid, stable employment with predictable hours and benefits is difficult to find in many rural communities. The few “good jobs” available, often in the education or health-care sectors, are highly competitive and usually require advanced degrees, and the “bad jobs” offer inadequate wages leading to a higher proportion of the working poor in rural than in urban areas (Thiede, Lichter, and Slack 2018). Even these bad jobs required owning or having regular access to a car, which was beyond the economic reach of many rural workers. Yet having a job, even a poorly paid one with irregular hours, was important to both men and women and carried not only practical, but also important moral, implications (Miller and Edin 2022, this volume, issue 4; Sherman 2009b). Lack of economic opportunities in rural areas is one of the primary drivers of outmigration (McLaughlin, Shoff, and Demi 2014; Petrin, Schafft, and Meece 2014). Depopulation, in turn, exacerbates income inequality (Butler et al. 2020).

For young men and women who have grown up and stayed in rural areas with declining economic bases, available employment is strongly shaped by gender and class. Although better-educated women often dominate in the education and health sector, poorer and less well-educated women can typically only find work at low-paying jobs with limited benefits at fast food restaurants or big box stores (Miller and Edin 2022, this volume, issue 4). In contrast,

men with limited education can secure better-paying jobs as construction workers, electricians, and plumbers.

These disparities with respect to the expected returns to education for rural men and women may help explain some of the findings in the study by Ashley Niccolai, Sarah Damaske, and Jason Park (2022, this volume, issue 4) of unemployed men and women age fifty to seventy who grew up in and still lived in rural Pennsylvania. They find working-class girls there were given more encouragement to seek higher education than working-class boys were, and that rural middle-class parents encouraged both boys and girls to pursue a college education. These early aspirations changed in the transition to adulthood by processes they term upshifting, downshifting, and nonshifting. About half of the respondents reported no change in aspirations during this period. Upshifting (raising aspirations) was observed largely among middle-class men. Downshifting was observed largely among working-class men and women, men emphasizing financial constraints as a reason and women emphasizing family ties. When faced with unemployment in midlife, the processes were also classed and gendered and influenced by the desire to remain in the community. In response to unemployment, middle-class men upshifted and anticipated having to leave the rural community. Middle-class women and both working-class men and women, on the other hand, were likely to downshift and remain in place despite recognizing poor local job prospects.

Robert Francis (2022, this volume, issue 4) explores how being rooted in rural places shapes the labor-market trajectories of working-class men in rural Pennsylvania and particularly rural men’s decisions about whether to upskill, move, or change jobs to improve their economic prospects. He finds more geographic mobility for work than generally reported, particularly when one considers geographic mobility required for military service. Furthermore, many rural men have left their home communities in search of better-paid jobs but returned when they failed to find them. He also finds that most of these men have pursued some postsecondary education or training, but that rather than seeking further

education to escape rural areas or the working class, they use it “to strengthen—not escape from—their identities as rural, working-class men.”

Rural Roots: The Consequences of Growing Up Rural for Adults

As discussed, a sizable literature demonstrates that adults currently living in rural areas have poorer health and higher mortality, have lower educational attainment, and are more likely to be underemployed or unemployed than urban residents. These studies, however, do not necessarily mean that individuals raised in rural areas are similarly disadvantaged in terms of health, education, or economic outcomes because they do not take into account selective migration. We now review the admittedly few studies that have examined rural-urban differences from a life-course perspective and, hence, yield insights into the longer-term implications of having rural roots.

Consequences on Health

The handful of longitudinal health studies that have been published suggest that the effects of growing up rural may be more beneficial than is typically found in cross-sectional comparisons. Samuel Preston, Mark Hill, and Greg Drevenstedt (1998), using data from the 1900 and 1910 Censuses, find that childhood exposure to rural environments among turn-of-the-century cohorts was associated with greater likelihood of living to age eighty-five. In particular, they find that childhood residence on farms, in rural places, and in less dense counties was associated with greater survival chances and speculated that at least some of this pattern may have resulted from the intergenerational transmission of farming as an occupation, which is less likely to be relevant today, when fewer than 5 percent of Americans work on farms. Nonetheless, a similar analysis of the more recent National Longitudinal Survey of Older Men (Hayward and Gorman 2004) also finds that rural farm residence in childhood was associated with reduced mortality in adulthood. Although these studies take into account childhood residence, they do not assess whether the individual moved to a more urban setting.

Evan Roberts, Wendy Rahn, and DeAnn Lazovich (2022, this volume, issue 4) link a recent health survey of older women (aged fifty-five and older) in Iowa to early-life census records, and demonstrate the value of such linkage studies for addressing some of the core questions around the impact of “growing up rural.” They find that women who grew up on farms or in nonfarm rural areas and migrated to urban areas had an increased probability of attending college relative to those who stayed, but also relative to women who moved to other rural areas. However, these rural-to-urban migrants were also much more likely to be smokers in adulthood, reflecting that out-migration does not necessarily always lead to better health, depending on the social and cultural context of the destination. They also present intriguing results for mortality. Among women originating in rural areas, those who stayed on farms had the highest survival rates and that those who moved to towns, cities, or even rural nonfarm areas had lower survival rates. Interestingly, women who grew up in urban areas but moved to farms also had better survival rates than those who grew up urban but stayed or moved to towns.

The rural effect on health is likely to operate through different pathways for different health outcomes, some salutary and some detrimental. Studies cite evidence that urban adult migrants to rural areas were more likely to become obese in later life, consistent with theories that rural physical environments are obesogenic (Jokela et al. 2009; Lee 2019). A few studies have directly investigated differential exposure to rural environments across the life course, that is, whether rural residence at a particular stage of the life course affects health later in life. Kira Patterson and her colleagues (2017) compare life-course models for assessing the contribution of different place trajectories (stable rural, rural-to-urban, urban-to-rural, stable urban) to rates of obesity in Australia. They find evidence for an impact on obesity in middle-age of both cumulative exposure to rurality, as well as exposure to rural areas during the “sensitive period” of young adulthood. In contrast, a recent study by Shelley Clark (2021) uses longitudinal data from the United States and finds that living in a rural area during the critical period of birth

to age two was associated with higher body mass index (BMI) during young adulthood, but that neither cumulative exposure nor exposure during adolescence to rural environments led to elevated BMI later in life.

Consequences on Economic Outcomes

Although findings from the Equality of Opportunity project brought considerable attention to the importance of childhood residence for a variety of measures of adult economic attainment, the study was primarily interested comparisons across urban cities or regions. The initial reports pay scant attention to differences in economic mobility across the rural-urban continuum, though they note that low-income children growing up in rural commuting zones are, on average, more likely to be upwardly mobile than their urban counterparts (Chetty et al. 2014). This finding surprised and puzzled many rural scholars who thought that the rural economic disadvantages found in many cross-sectional studies would be evident in longitudinal studies as well. Indeed, this finding has yet to be fully explained, though several hypotheses have been put forward. First, much of this average effect is driven by the exceptional upward mobility of youth raised in the upper and lower Midwest. In fact, subsequent analyses show a strong negative correlation between population density and upward mobility of White children (suggesting greater upward mobility of rural children) in the Midwest, and a positive correlation in the Southeast suggesting greater upward mobility for White urban children (Chetty et al. 2018). Similar academic and social advantages have also been noted among rural adolescents in Iowa (Elder and Conger 2014). Second, some of this upward mobility may reflect the high levels of geographic mobility from rural to urban areas, and the corresponding higher urban incomes. Again, out-migration is especially high in the Midwest. Finally, rural community characteristics, including the percentage of single mothers, the racial and ethnic composition, social capital, school quality, and income equality may also facilitate greater upward mobility (Chetty et al. 2014). In the most in-depth analysis of this question to date, Bruce Weber and his colleagues (2017, 2018) find that the most remote

rural areas, those farthest from large metro centers, experienced the greatest upward mobility of low-income youth. They also show that many characteristics of rural areas, including higher levels of social capital, less economic inequality, and less single motherhood, help explain the greater upward mobility found in rural areas. Importantly, however, they find that some of these characteristics have a larger effect on upward mobility in rural than in urban areas. These findings demonstrate not only the importance of place-based characteristics, but also that which characteristics matter most may differ in rural and urban areas.

Parker, Tach, and Robertson (2022) further extend our understanding of how access to place-based resources during childhood affect young adults' educational attainment and earnings. Using longitudinal data from the National Longitudinal Study of Youth, they show that, as expected, young adults currently living in metro counties have both higher educational attainment and higher earnings. Yet, importantly, no differences in the educational or earnings outcomes of young adults based on whether they lived in a metro or nonmetro county during childhood are economically meaningful. They also provide an in-depth assessment of trends in federal place-based investments in metro and nonmetro counties, showing a substantial rise in federal funding since 1990. They then show a strong positive association between living in counties with more place-based funding during childhood and higher educational attainment in both metro and nonmetro counties. However, they find that children who grew up in rural counties with more federal place-based funding experienced upward educational and income mobility, only if they subsequently moved out of their home county. Federal place-based funding had no effect on the upward mobility of rural children who remained in their home county. These quantitative findings reinforce qualitative studies suggesting that place-based initiatives may facilitate upward educational and economic mobility, but mainly by helping rural residents leave.

Although most longitudinal studies focus on income, less is known about rural-urban differences in wealth accumulation. Cross-

sectional comparisons across the rural-urban continuum show that rural families are more likely to own the house they live in but have fewer liquid assets than urban families (Fisher and Weber 2004). Lisa Keister, James Moody, and Tom Wolff (2022, this volume, issue 4) use longitudinal data from the National Longitudinal Survey of Adolescent Health to examine whether this pattern holds from a life-course perspective or mainly reflects selective migration or current local economic structures. Their analyses find that young adults who were raised in rural areas were more likely to own a home and had lower mortgage debt than adults who were raised in the urban core, consequently they were less likely to have negative net worth. However, those raised in rural areas also had fewer financial assets. They suggest, therefore, that these types of wealth across the rural-urban continuum reflect both differences in local economies (costs of housing) as well as opportunities for acquiring debt (higher education) that can have a lasting impact on individuals' lifetime economic security.

SUMMARY AND FUTURE RESEARCH

The primary objective of this double issue is to provide a more complete and accurate picture of what it is like to grow up in rural areas and how doing so influences one's life chances. Taken together, these studies generate three main messages that offer a somewhat different perspective on growing up rural than previous studies do.

First, that growing up in poor rural areas is hard and presents a distinctive set of challenges is not in question. Rural children (25 percent) are more likely than urban children (20 percent) to live in poverty in 2016 (Rothwell and Thiede 2018). Furthermore, rural areas, such as the Mississippi Delta and Appalachia, are some of the highest concentrations of persistent poverty in the United States. Growing up in these places has detrimental consequences for children's health and development. Although poor rural children face many of the disadvantages that poor urban children do, some of the harmful effects of poverty may be unique to or exacerbated by living in a rural setting. For example, both rural and urban poverty are associated with greater family vol-

atility, housing instability, food insecurity, job loss, and often drug addiction. In rural areas, however, the natural and built environment typically requires access to an automobile in order to work. Several respondents reported that the lack of a car or mechanical breakdowns were responsible for them losing their jobs (Miller and Edin 2022, this volume, issue 4; Bowen, Elliott, and Hardison-Moody 2022, this volume, issue 3). Greater distances to public services also triggered housing instability, such as that of the family forced to move to an urban area to access necessary medical care (Bowen, Elliott, and Hardison-Moody 2022). Rural social norms and civic and religious institutions can also amplify some of the harmful effects associated with family instability. For example, strong religious beliefs valorizing nuclear families can induce feelings of shame among unmarried parents and greater stigmatization of their children (Miller and Edin 2022). Social connections may also matter more in rural areas creating sizable inequalities in how drug charges are handled in the legal system and poor children are perceived in their schools (Brant 2022; Miller and Edin 2022; Sherman and Schafft 2022). Lastly, rural norms valorizing work and independence may make poor rural families, including those experiencing food insecurity, less likely to access government or private assistance (Bowen, Elliott, and Hardison-Moody 2022). These differences compel scholars of child poverty to think about whether policies and programs designed primarily to meet the needs of urban children living in poverty are applicable in rural areas or whether new policies are required.

Second, because of their more acute vulnerability, the lion's share of research has focused on rural children living in poverty. Although such a focus is justifiable, it does not generate a full picture of what it is like to grow up in rural areas. Specifically, it can distort public images of the lives of rural children by failing to take into account the lives of the three in four rural children who are not living in poverty and the considerable geographic, economic, and social heterogeneity within rural areas. Nationally representative studies tend to show few if any significant differences in rural and urban children's health or academic performance

(Probst et al. 2018). With the notable exception of obesity levels (Liu et al. 2012; Ogden et al. 2018; Johnson and Johnson 2015) and perhaps mental and behavioral disorders, rural children on average are as healthy as urban children (National Center for Health Statistics 2019; Robinson et al. 2017; Probst et al. 2018). Educational programs are also not particularly lacking in rural areas. For example, publicly funded early childcare and education programs, such as Head Start, are more common in rural than in urban areas (Morrissey, Allard, and Pelletier 2022). In addition, using a large national survey, Drescher, Podolsky, Reardon, and Torrance (2022) find that rural third graders perform as well as their urban counterparts on standardized tests, and community SES is less predictive of academic performance for rural than for urban students, suggesting less educational inequality. Ironically, because rural areas typically offer fewer choices in schools and health-care services, socioeconomic inequalities between rural families may matter less because both the rich and the poor use public services, one of the distinctive advantages of growing up rural. Hence, despite substantial heterogeneity in children's well-being, especially by region, at a national level, rural children do not appear to be disadvantaged relative to their urban counterparts.

Third, studies that focus on adults who currently live in rural areas consistently reveal substantial adversity, particularly in regard to health, family formation, job security, education, and earnings (see Miller and Edin 2022; Francis 2022; Niccolai, Damaske, and Park 2022). In contrast, articles that focus on adults who were raised in rural areas but do not necessarily currently live there (that is, not reflecting selective migration bias), show less rural disadvantage and, in some instances, an overall long-term advantage of growing up in a rural area. For example, being born on a farm in the early twentieth century is associated with living a longer and healthier life. However, women who grew up and stayed in a nonfarm rural area had the worst mortality outcomes (Roberts, Rahn, and Lazovich 2022). In addition, young adults who grew up in rural areas are not “less wealthy,” although they have different types of wealth (Keister, Moody, and Wolff 2022). Last,

despite large metro-nonmetro differences in education and earnings based on where respondents currently live as young adults, Parker, Tach, and Robertson (2022) find no significant differences in either education or earnings between respondents who grew up in metro versus nonmetro places. However, they also find that although place-based federal funding enhances both the educational attainment and earnings of rural (and urban) children, the benefits of these federal funds primarily accrue to children who grew up in a rural area and subsequently left.

This last caveat is critical. If these place-based effects are causal, for rural children to realize the same life opportunities as urban children, a sizable fraction must move. This highlights one of the most distinctive and arguably disadvantageous aspects of growing up in a rural area. Rural children face a much sharper trade-off between maintaining close ties to their families and communities and their educational and occupational aspirations than urban children do. Some may dismiss this stipulation as trivial, noting that many urban children also decide to leave their home communities in pursuit of higher education, work, or simply new experiences. Yet this choice is much less constricted for urban than rural children. Many urban children may leave to attend a particular university or take a specific job, but they could find similar or comparable ones nearby. Further, as Parsons highlights (2022), when rural children move to urban areas they often feel marginalized, lack social and cultural urban capital, and must expend considerable emotional labor adjusting to their new environments while maintaining meaningful connections to their old ones. On a practical level, travel times for these rural migrants may take longer than for urban migrants. For example, flying from New York City to Chicago takes less time than driving from New York City to many rural parts of upstate New York. Greater distances also limit the instrumental support family members can provide to one another. For example, grandparents who live farther away are less available to assist with childcare, and adult children are less able to offer practical assistance to their aging parents (Clark, Lawrence, and Monnat forthcoming). At the same

time, costs to rural places that are “left behind” are considerable because high selective out-migration often deprives these communities of the energy and skills that maintain vibrant social lives and dynamic economies (Wuthnow 2018).

Gaps in Current Knowledge

The comparative dearth in rural studies likely reflects the research challenges discussed and the lack of sufficient data on rural populations, particularly in nationally representative, longitudinal data, available to meet these challenges. Even in large national studies, rural residents make up a minority of the population, which, unless oversampled, makes studying heterogeneity across types of rural areas difficult. Second, longitudinal studies often face attrition and attrition rates may be especially high among respondents who move. Third, as discussed, measuring exposure to rural places is daunting. Even detailed measures that treat rurality as a continuum rather than a dichotomous indicator face the problem that places themselves may transition from more rural to less rural (or vice versa) and that government classification systems change over time. These issues pose particular difficulty for life-course researchers who need to take these shifting definitions into account. Life-course researchers who wish to access contextual factors within rural areas also require historical data on county or census tract characteristics. In sum, as Jamie Pearce (2018) argues, serious challenges are involved in developing a practical research program on life-course effects of geographic areas, requiring the linking of longitudinal data on people and places over a substantial period of observation, as well as information on geographic mobility over the life course. Notably, the lack of longitudinal data with information on both rural childhood exposure and adult health outcomes has prevented the generation of evidence on whether rural environments in early life may have similar or different effects on later life outcomes (Burton et al. 2013).

Although the new evidence in this issue adds to our understanding of growing up in rural America, as a result of these challenges, two important gaps remain. First, more studies

are needed to identify specific place-based attributes of rural areas that either promote or inhibit rural children’s development, these include its natural and physical built environment, economic structure, public and community institutions, social norms and cultural environment, and demographic characteristics. Research has developed constructs and measures for many of these place-based characteristics, but the characteristics that may be more important—the community institutions and social and cultural norms—are more difficult to measure. More qualitative research is needed to capture these dimensions. Studies that assess whether the impact of these place-based attributes differs in rural and urban areas would be especially useful in identifying policies and rural development strategies that were most effective in rural areas.

Second, longitudinal studies following rural children over their life course remain scarce. Such studies are essential to determining not only whether children raised in rural areas fare worse (or better) than urban-born children, but also the role of migration in shaping their adult outcomes. Such studies could directly address the question of whether children born in rural areas have equal opportunities as those born in urban centers by taking into account the outcomes of both those who stay in and those who move away from rural areas. In particular, we have surprisingly little knowledge of the fate of those who choose to leave. Last, more studies are needed to understand which specific rural attributes account for rural and urban differences in adult outcomes. For example, one of the few studies to examine this type of question finds that family structure, lower inequality, greater social capital, and better spatial job matching in rural counties facilitate upward income mobility among low-income youths who grow up in nonmetro counties (Weber et al. 2018).

Even well-designed cross-sectional and longitudinal quantitative studies examining the relationship between place characteristics and outcomes, however, would not reveal how places affect outcomes. And knowledge of the mechanisms through which outcomes are generated is critical in designing effective policies. The sparse populations and isolation from

large cities that define rural places lead to distinctive institutions (civic organizations and faith communities) and social and cultural norms. Studies in this volume (Brant 2022, issue 3; Miller and Edin 2022, issue 4; Parsons 2022, issue 3) as well as prior ethnographic research (Cramer 2016; Duncan 2015; Hochschild 2016; Sherman 2009b) provide valuable insights into the social and institutional processes in rural places, but more studies are needed on how they generate the social and cultural norms that affect the human behavior that leads to adult outcomes.

Policy Implications and Conclusions

Those concerned about rural people and places will often encourage policymakers to support place-based or, at least, place-sensitive policies. Most policies focusing on rural rejuvenation aim to strengthen local economies by promoting local businesses and industries, expanding and improving health and educational services, and enhancing civic institutions (see, for example, Austin, Glaeser, and Summers 2018). These place-based policies and programs offer the prospect of not only benefiting residents who remain in rural areas, but also increasing the human and social capital of those who leave. Many, of course, are concerned that policies that invest in rural places might deliberately or inadvertently encourage out-migration, particularly of high achieving youths. This concern appears substantiated in studies like that by Parker, Tach, and Robertson (2022), which shows that levels of federal place-based funding is strongly correlated with out-migration in nonmetro counties. High rates of out-migration, some contend, threaten the economic viability and civic vibrancy, and ultimately the very existence of their communities. Some scholars argue that, by promoting their “best and brightest,” rural schools are undermining future social and economic well-being of the communities they serve. To counter these concerns, some place-based policies aim specifically at stemming the tide of rural youth out-migration by promoting training in local trades and vocational programs, offering scholarships at community colleges, or subsidizing

professional training (such as medicine, dentistry, law) with the requirement of future service in rural areas.

Others concerned about investments in rural places worry about the opposite outcome—that investments in rural places may trap poor people in poor areas and impede movement of people and businesses to places that would enhance the overall efficiency of the economy and hence the general welfare. The debate over investments in people versus places has a long history, going back at least to Louis Winnick’s 1966 paper “Place Prosperity v. People Prosperity” that addressed the role of the federal government in assisting people and places that are economically distressed. Much ink has been spilled in this debate.⁶ In the end, many will conclude that investments must be made in both people and places, that these policies are complementary, and that the important decisions are about how much to invest in people relative to places (Weber 2008).

Importantly, these policy debates focus on the welfare of rural places and of the people currently living there, largely, though not exclusively, in economic terms (Nunn and Shambaugh 2018). Such policies are often focused on interventions to address underlying sources of underemployment or poor infrastructure that contribute to reduced economic prospects among working age adults. Notwithstanding the value of such priorities, these policies address a fundamentally different set of underlying issues than those focused on addressing geographic inequalities based on childhood residence, as is the focus of studies such as the Equality of Opportunity Project. Understanding the ways in which children raised in rural versus urban areas are advantaged or disadvantaged and identifying the distinctive challenges rural children face enables a clearer understanding of the types of policies needed to promote the welfare of rural children regardless of whether they stay or leave. Not only would a focus on place-based policies targeting early-life or childhood environments have the potential for “knock-on” effects that materialize in later life, they could also provide crucial new possibilities for measuring and monitoring im-

6. For discussion of the economic arguments for and against place-based policy, see Weber 2008, 117–20.

pacts over the life course—an area that remains underresearched.

Overall, the current literature on the impacts of growing up rural on adult well-being, including the new material presented in this double issue, yield complex and heterogeneous findings, reflecting the marked diversity of rural places in the United States. We find continuing examples of how chronic pockets of deep rural poverty create strains on rural families and limit the opportunities of young adults, but this volume also showcases evidence that this narrative needs tempering. Novel and nationally representative data show limited differences between rural and urban places in key child development indicators such as health and educational performance. Moreover, the longitudinal studies in this double issue suggest that exposure to rural places in early life can offer some health and economic benefits, though further studies are needed to ascertain whether these patterns are replicable. Overall, by focusing on the implications of growing up in rural America, rather than currently living in rural America, the new research presented in this issue offers a new perspective on rural life and its social and economic impact on rural people.

APPENDIX: WHAT IS RURAL?

The U.S. Census Bureau defines *urban* using a complex algorithm to aggregate census block groups based on population size and density into contiguous areas, creating two categories of urban territory: urbanized areas of fifty thousand or more people, and urban clusters of 2,500 to 49,999 people. *Rural* is the residual category, including all territory outside of urbanized areas and urban clusters. “Rural areas consist of open countryside with population densities less than 500 people per square mile and places with fewer than 2,500 people” (Economic Research Service 2019d).

The Office of Management and Budget considers both the size of core cities and the commuting patterns of outlying counties to urban centers in its classification of counties into metropolitan (metro) and nonmetropolitan (non-metro) areas. Starting in 2000, OMB created the Core-Based Statistical Area classification that identified two classes of core areas: metropoli-

tan statistical areas that have at least one county with an urbanized area of fifty thousand or more inhabitants plus any adjoining counties strongly linked through commuting and micropolitan statistical areas that have at least one county with an urban cluster of ten thousand to 49,999 plus adjoining counties linked to the core county by commuting. Nonmetropolitan counties include all those not in metropolitan statistical areas and thus include both the micropolitan counties and the noncore counties that are in neither a metropolitan nor a micropolitan core-based statistical area (for the defining features of each classification, see table A.1). The introduction of core-based statistical areas brought with it some inconsistency in using the OMB classification in describing rural places. Most analysts, including the Economic Research Service, define rural areas to include both micropolitan and noncore areas. Some researchers, however, define rural areas as consisting only of noncore areas. For example, Keith J. Mueller and colleagues (2020) apply the label *rural* to noncore statistical areas.

Recognizing that neither the Census Bureau urban-rural nor the Office of Management and Budget metro-nonmetro definitions captured the multidimensionality of the rural and urban concepts, there have been several attempts to create new classification schemes that better capture the rich diversity of both population size/density and remoteness across rural and urban communities. Perhaps the most widely used of these is the Rural Urban Continuum Code (RUCC) classification (sometimes called Beale Codes) developed in 1975 and updated regularly by the Economic Research Service. The RUCC divides the OMB metro counties into three categories based on population size of the metro area and it divides the OMB non-metro counties into six categories based on the size of the urban population and adjacency to metropolitan areas. Other classification systems have been developed by the federal government that capture distinct features of rural areas that are important for policy development. An extended discussion of two classification systems discussed plus five other classification systems can be found in the RUPRI Health Panel publication on which table A.1 was based.

Table A.1. Commonly Used Rural-Urban Classifications

Name	Geographic Building Block	Measure	Rural-Nonmetro Percentage of Land Area and Population of Total United States, 2010
Census Bureau	Census block	<i>Urban = Urbanized Areas and Urban Clusters</i> <i>Urbanized Areas:</i> contiguously built-up area with population of greater than 50,000 and at least 1,000 people per square mile and adjoining blocks with at least 500 people per square mile <i>Urban Clusters:</i> contiguously built-up area with population of between 2,500 and 50,000 and at least 1,000 people per square mile and adjoining blocks with at least 500 people per square mile <i>Rural =</i> all other census blocks	Land Area: 97 Population: 19
OMB	County	<i>Metropolitan =</i> counties with at least one urbanized area (population > 50,000) and adjacent, economically integrated counties. <i>Nonmetropolitan = Micropolitan and Noncore Counties</i> <i>Micropolitan:</i> counties with at least one urban cluster having a population of between 10,000 and 49,999 and adjacent, economically integrated counties <i>Noncore:</i> all other counties	Land Area: 72 Population: 14

Source: Authors' tabulation (Mueller et al. 2020, 10; Ratcliffe et al. 2016; Cromartie 2017).

Note: The *noncore* category was identified as *rural* in the original RUPRI table, but the label has been changed to be consistent with the official OMB guidelines. The description of the category has also been revised.

APPENDIX

Rural Definitions and Methodological Approaches to Studying the “Rural Effect”

This special issue focuses on the experience of growing up in a rural area and how this experience shapes people. This appendix reviews the various definitions of “rural” used by the researchers in this special issue and discusses the strengths and weaknesses of the various methodological approaches used in this special issue to identify a “rural effect.”

As noted in the introduction, rural places are the relatively sparsely settled territory that remains after defining urban places, and the

more remote territory surrounding the regional labor markets of large cities. The standard classifications divide territory into two categories: urban or rural and metro or non-metro. Most rural research (and most of the papers in this special issue) use these classification systems to define “rural.” Of the fourteen articles, eight identify “rurality” at the county level using the OMB metro and nonmetro dichotomous categories. Three use classifications developed by the USDA Economic Research Service: one uses the Rural-Urban Continuum Codes and one article uses Rural-Urban Commuting Area codes. Only one of the studies uses the Census definitions of rural and urban places. One of the papers, which exam-

ines schooling outcomes, identifies rural school districts using a National Center for Educational Statistics urbanicity code. The remaining two articles rely on their own unique method of defining rural as described below.

Authors in this issue chose the definitions of rural that best suited their substantive topic (that is, education, health, earnings), methods (cross-sectional, longitudinal, or qualitative), and data (which may have limited geographic identifiers). The diversity and complexity of definitions used, however, highlights the challenges to generalizing about “rural areas” or comparisons across studies. In table A.2, we have summarized important features of each of the fourteen studies in this special issue. The last column in the table reports how each of the studies identifies “rural.”

The seven quantitative studies used six different classification schemes to capture rurality.

- The OMB *metro* or *nonmetro* classification was used in two studies. Using a national database, Parker et al. identified respondents as rural if they lived in a county classified as nonmetro in 1990 and explore how federal funding in their counties of origin affected their education and earnings in later life. Bernsen et al. selected two nonmetro counties in Oregon and Maine to examine educational aspirations of youth in a survey of students.
- Roberts et al. used the Census definition of *rural* to capture the effect that growing up on a farm or towns of different sizes had on the mortality of an early twentieth century cohort of women in Iowa.
- Economic Research Service *Rural-Urban Continuum Code (RUCC)*. Morrissey et al. collapsed the nine-category RUCC into four categories in their effort to understand how early childhood education program provision and participation in the U.S. vary across rural and urban places.
- Economic Research Service *Rural-Urban Commuting Area (RUCA)*. Keister et al. collapsed the ten-category RUCA codes into seven categories to explore how rural residence during adolescence affects wealth in adulthood across the United States.
- National Center for Education Statistics *Urbanicity Locale Codes for school districts*. Drescher et al. explore differences in third grade achievement and subsequent five-year learning rates between rural and nonrural (town, suburban, city) school districts and between three subcategories of rural districts (rural fringe, rural distant, and rural remote).
- *Unique classification*: Miranda and Rodriguez created a unique classification system for Minnesota school districts to explore educational aspirations of public-school students. In their classification system, a district was considered an urban district if it was in Twin Cities metropolitan area or if it was in one of five cities with a population greater than 50,000. All other districts were considered to be Rural. This classification system thus has features of both the Census “urbanized area” of 50,000 or more population and the OMB metropolitan area classifications.
- Of the seven qualitative studies, six selected counties, parts of counties or groups of counties that were nonmetropolitan.
- Two of the studies selected a *single nonmetropolitan county* in which to do their ethnographic research. Parsons studied educational aspirations in “Central Delta County,” Mississippi. Miller and Edin studied poverty, health and economic mobility in nonmetropolitan Clay County, Kentucky.
- Bowen et al. selected *two nonmetropolitan counties* in North Carolina in which to do her semi-structured interviews, surveys and dietary recalls to study food insecurity.
- Two studies examined *regions comprised of nonmetropolitan counties*. Brant did interviews and observations related to opioid use and recovery in “an entirely rural region in nonmetropolitan Appalachian Kentucky”; and Niccolai and Damaske did

their interviews of unemployed prime-working-age adults in a five-nonmetropolitan-county region in Pennsylvania

- One study examined *part of a nonmetro county*. Sherman did her ethnographic study in “Paradise Valley,” a sixty-mile-long valley in a remote nonmetropolitan county in Washington state.
- One study created its own *uniquely defined region*. Francis did his qualitative study in a “largely rural” five-county region in northwestern Pennsylvania that included four nonmetro counties and one metro county in 1980 when his respondents were growing up.

Table A.2 also incorporates information about the methodological approaches used by the researchers in studying the relationship between rural residence and various outcomes over the life course (school readiness and test scores in childhood; educational aspirations in teen years; work choices, migration, earnings, employment, upward economic mobility and wealth in adulthood). The studies in this special issue employed three different types of analysis. Following Brooks-Gunn, Duncan, and Aber (1997), we distinguish two types of quantitative analyses: community studies and contextual studies. Community studies of a “rural effect” explain different community outcomes (education rates or employment rates, for example) as a function of community demographic and economic structure variables, including whether a community is urban or rural. Contextual studies of a rural effect explain differences in individual outcomes (individual educational attainment or individual earnings) as a function of individual demographic characteristics and community social and economic characteristics, including whether the

community is urban or rural. In this issue there are six contextual studies and one community study. The last approach is the qualitative and ethnographic studies, of which there are seven in this special issue. Through intensive interviews and observation, these qualitative studies provide rich detail about the lives and experiences of people growing up and living in rural places.

These approaches are complementary. Information from community studies about the effects of community characteristic on rates or levels of community outcomes can assist interpretation of contextual study results about how community characteristics affect individual outcomes. Qualitative studies can provide information about the community and individual processes that produce the outcomes observed in the quantitative studies. Qualitative studies provide rich detail that allows understanding of the underlying processes of individual and community change, but they are often less generalizable beyond the region under study. Community studies reveal how community characteristics and perhaps community policies can affect the community outcomes, but they suffer from several problems. Communities are not randomly distributed but tend to cluster geographically in ways that complicate statistical inferences, and the interpretation of results is subject to ecological fallacy problems if used to draw conclusions about individual outcomes. Contextual studies provide better inferences about how context affects individual outcomes and avoids the ecological fallacy problem but can be hampered by endogeneity and omitted variable bias. Estimates of a “rural effect” can be biased because people can choose where they live, and so rural residence is not exogenous and because other important factors that are correlated with rural residence are not included in the analysis.

Table A.2. How Rural Is Defined in This Issue

Author	Type or Geographic Scope	Source of Data	Definition of Rural
Rural Families			
Bowen, Elliott, Hardison-Moody <i>Rural Food Insecurity: A Longitudinal Analysis</i>	Qualitative study in 2 rural counties in North Carolina	Semi-structured interviews, a survey, and 24-hour dietary recalls with 124 poor and working-class households with female caregivers of young children [90 completed all three waves]	Nonmetro (OMB) 2 nonmetro counties
Brant <i>When Mamaw Becomes Mom: Social Capital and Kinship Family Formation amid the Rural Opioid Crisis</i>	Qualitative study in “entirely rural region within Central Appalachia”	In-depth interviews with 50 relative caregivers, 50 support/surveil institutions, and observations of 30 support group meetings for relative caregivers	Nonmetro (OMB)
Childcare and Schools in Rural Areas			
Morrissey-Allard-Pelletier <i>Access to Early Care and Education in Rural Communities: Implications for Children’s School Readiness</i>	Contextual study using a national database	Unique county-level ECE program data from the 2007–2011 American Community Survey (ACS) linked with child-level data from the Early Childhood Longitudinal Study-Kindergarten Cohort (ECLS-K:2011)	Rural Urban Continuum Codes (2013) collapsed into four categories: Large metro counties (with population 250,000 or greater), (2) Small metro counties (with population less than 250,000), (3) Large nonmetro counties (with urban population of 20,000 or more), (4) Small nonmetro counties (with urban population of less than 20,000)
Drescher-Podolsky-Reardon-Torrance <i>Geography of Rural Educational Opportunity</i>	Community study using a national database	Stanford Education Data Archive 3.0, 12,000 school districts (incl. 6,000 rural districts) average test scores in 3rd grade and average learning rates between 3rd and 8th grade	National Center for Education Statistics Common Core of Data (CCD) urbanicity locale codes, categorizing districts and schools by one of four locale types (rural, town, suburban, city), and additional rural subcategories (rural fringe, rural distant, and rural remote, in order of increasing rurality)
Sherman-Schafft <i>“Turning Their Back on Kids”... Gentrifying Rural Communities</i>	Qualitative study in a mountainous region in Washington state	Intensive qualitative field research that included 84 open-ended in-depth interviews and ten months of ethnographic observation and participation	Nonmetro (OMB) Paradise Valley, a remote rural area covering 60 miles with a population of roughly 5,000 year-round residents and four distinct communities

Table A.2. (continued)

Author	Type or Geographic Scope	Source of Data	Definition of Rural
Aspiring to Leave			
Miranda-Rodriguez <i>Educational Aspirations and School Grades of Rural Students</i>	Contextual study using a Minnesota database	Minnesota Student Survey from students in regular public schools in grades 5, 8, 9, 11. ACS data	Unique definition-School Districts 48 districts identified as “urban” included all districts in Twin Cities metropolitan area plus another five districts with community populations > 50,000. The remaining 253 districts identified as “rural.”
Bernsen-Crandall-Leahy-Biddle <i>Community Influences on Youth Educational Aspirations in Rural, Resource-Dependent Places</i>	Contextual study using a survey of students in northern Maine and coastal Oregon	Survey administered electronically to 2,027 middle (31%) and high school (69%) students at most public secondary schools in counties in two counties	Nonmetro (OMB) 2 counties: Piscataquis County, Maine, [N = 17,535] and Coos County, Oregon [N = 60,043]
Parsons <i>Moving Out to Move Up: Higher Education as a Mobility Pathway in the Rural South</i>	Qualitative study in central Mississippi	2 years of ethnographic fieldwork	Nonmetro (OMB) “Central Delta County,” Mississippi with a population of 25,000 with 10,000 in county seat
Choosing to Stay			
Miller-Edin <i>Coming of Age in Appalachia, Emerging or Expedited Adulthood?</i>	Qualitative study in Appalachian Kentucky	Intensive interviews with low-income parents as well as a broad range of community leaders to study “poverty to other dimensions of disadvantage, namely health and economic mobility”	Nonmetro (OMB) Clay County, KY [America’s poorest White-majority county, nested in its Appalachian region]. It is classified as “noncore” nonmetro.
Francis <i>Movin’ On Up? The Role of Growing Up Rural in Shaping Why Working-Class Men Do—and Don’t—Seek to Improve Their Labor-Market Prospects</i>	Retrospective qualitative study in “mostly rural” northwestern Pennsylvania	Semi-structured, in-depth qualitative interviews (narrative interviewing) with 61 mostly White, mostly working (¾ working) middle-aged (generally under 40) working-class men (defined as having less than a four-year college degree, working in a blue-collar occupation, or both). 85 percent born and raised in NW PA. Only 4 of them moved there as adults.	Unique definition A five-county “largely rural” area. Four of the counties were nonmetro in the 1980s. Three of the five counties were nonmetro in 2010. There were only a few interviews in these metro counties and these interviewees lived in the outlying areas of the metro counties.

(continued)

Table A.2. (continued)

Author	Type or Geographic Scope	Source of Data	Definition of Rural
Choosing to Stay (cont.)			
Niccolai-Damaske-Park <i>We Won't Be Able to Find Jobs Here: How Growing Up in Rural America Shapes Decisions About Work</i>	Retrospective qualitative study in rural Pennsylvania	Analysis draws on 72 interviews of unemployed working- and middle-class men and women (between the ages of 30–50, prime working and child-rearing years) who grew up in nonmetro counties and who worked full-time prior to their job loss, and those who experienced an involuntary job loss during the past year. Follow-up interviews conducted one year later.	Nonmetro (OMB) (2013)
Rural Roots			
Roberts-Rahn-Lazovich <i>Life-Course Transitions in Rural Residence and Old-Age Mortality in Iowa, 1930–2014</i>	Longitudinal contextual study in Iowa	Longitudinal Iowa Women's Health Study (IWHS) linked cohort of 10,375 women born 1916–1930 to early-life census records from 1920 and 1930. IWHS started in the 1980s and followed women through 2014. This cohort (age 55–69 in 1986) represents the mothers of children born during the baby boom.	Rural (U.S. Census) <i>Early life residence:</i> farm, rural nonfarm (township < 2,500), urban. (1920 and 1930 Census) <i>Later life residence:</i> farm, rural, and four categories of town or city size (Towns under 1,000, Towns 1,000–2,499, Towns 2,500–9,999, Towns or cities of 10,000 or more people) (1980 census)
Parker-Tach-Robertson <i>Do Federal Place-Based Policies Improve Economic Opportunity in Rural Communities?</i>	Longitudinal contextual study using linked national databases	Federal agency data on place-based federal expenditures between 1990 and 2015 linked with National Longitudinal Survey of Youth-97 data for 2015 adult outcomes of 8,984 youth born between 1980–1984	Nonmetro (OMB) (1990) Metro status for respondents refers to the county where the NLSY respondent lived in the first survey year (1997). In supplemental analyses they examine counties that were nonmetro throughout separately from transition counties (counties that changed from nonmetro to metro).

Table A.2. (continued)

Author	Type or Geographic Scope	Source of Data	Definition of Rural
Rural Roots (cont.)			
Keister-Moody-Wolff <i>Rural Kids and Wealth</i>	Longitudinal contextual study with national database	@ National Longitudinal Study of Adolescent to Adult Health [AddHealth] is a study of U.S. adolescents who were in grades 7–12 (ages 12–18) during the study's first wave (1994–1995) and were young adults in Wave 3 (2001–2002 (ages 19–25) and Wave 4 (2008–2009 (ages 26–32).	Rural-urban Commuting Area (RUCA) 10-category RUCA collapsed to 7 categories: metropolitan area core, metropolitan area commuting, micropolitan area core, micropolitan area commuting, small town core, small town commuting, and rural. Adolescent RUCA, Wave 1; Young Adult RUCA, Wave 4

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PART I

Rural Families: Coping Under the Strain

Rural Food Insecurity: A Longitudinal Analysis of Low-Income Rural Households with Children in the South



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ANNIE HARDISON-MOODY^{ID}

Researchers have noted large spatial variations in rates of food insecurity. But little research exists on why this is so and the impacts it has on rural families. Drawing on a mixed-methods longitudinal study with 124 poor and working-class households in North Carolina, we analyze the processes that shape lower-income rural families' access to food. We trace the narratives of three families whose stories are emblematic of themes from the larger data set to illumine how space and context influence families' experiences across the life course. As the caregivers in our study navigated how to feed their families, living in a rural area shaped the resources and often precarious forms of support that they drew on from their social networks, local communities, and the state.

Keywords: poverty, food insecurity, rural families, southern United States, rural food insecurity, food access

At the end of 2019, one in ten U.S. households was classified as food insecure, meaning they did not have “enough food for an active, healthy life for all household members” (Coleman-Jensen et al. 2021, i). In the early months of the COVID-19 pandemic, rates of food insecurity in the United States doubled overall and tripled

among households with children (Schanzenbach and Pitts 2020). Surprisingly to many, the U.S. Department of Agriculture’s (USDA) comprehensive report on U.S. food insecurity in 2020, released in September 2021, estimated that the overall prevalence of food insecurity did not increase from 2019 to 2020, but it did

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among specific groups, including households headed by Black people and households in the South (Coleman-Jensen et al. 2021).

Both before and during the pandemic, large spatial variations in rates of food insecurity suggest that place shapes experiences of food insecurity, but researchers do not fully understand why. Although many of the best-known qualitative accounts of how families cope with and experience food insecurity focus on major cities (Dickinson 2020; Poppendieck 1998; Reese 2019), the counties with the highest rates of food insecurity—the top 10 percent of counties—are disproportionately rural and located in the South (Feeding America 2019). Before and during the pandemic, rates of food insecurity have been higher in rural (nonmetropolitan) areas and city cores than in suburban area (Coleman-Jensen et al. 2021). The South was the only region where food insecurity increased between 2019 and 2020, and the prevalence of food insecurity in the South is higher than in other parts of the country (12.3 percent relative to between 9.3 and 9.5 percent) (Coleman-Jensen et al. 2021).

As noted in the introduction to this issue (Clark, Harper, and Weber 2022), low population density and remoteness from urban centers are two defining characteristics that fundamentally alter social and economic relationships in rural areas. These in turn shape and contribute to other factors—for example, lower access to food retailers but potentially greater access to emergency food outlets and gardens and farms—that influence how rural residents access food. However, few studies have asked why food insecurity rates are higher in rural areas or looked at the lived experiences of food-insecure rural residents. In this article, drawing on a large mixed-methods study that followed 124 poor and working-class households in North Carolina over eight years, we analyze the social processes that shape poor rural families' access to food.

EXISTING LITERATURE

As noted, rates of food insecurity are higher in rural areas and city cores than in suburban areas: 11.6 percent of nonmetropolitan (rural) households and 12.7 percent in city centers were classified as food-insecure in 2020, com-

pared to 8.8 percent of suburban households (Coleman-Jensen et al. 2021). Beyond this, regional variation in the prevalence of food insecurity across the United States is considerable, and many of the most food-insecure places are in the South (Feeding America 2019; Gundersen et al. 2017).

Few studies have explicitly looked at food insecurity in rural areas, but the literature on food insecurity in the United States (also summarized in Bowen, Elliott, and Hardison-Moody 2021) offers insights into some of the forces that influence and shape food insecurity in rural places. Geography shapes access to food retail outlets and other sources of food. As large food retailers have consolidated and populations have decreased in some rural areas, the number of grocery stores has declined steadily in those areas over the last three decades; meanwhile, dollar stores have proliferated (Stevens et al. 2021). Relative to their urban counterparts, people in rural areas travel farther to get to supermarkets and spend more time traveling to shop for food, and rural Supplemental Nutrition Assistance Program (SNAP) households are farther from food stores than rural non-SNAP households at the median (Rhone et al. 2019). On the other hand, rural residents' access to land and natural resources also likely shapes food access. Based on a small study, Lois Morton and her colleagues (2005) find that rural residents were more likely than residents urban to share or receive produce from gardens and to hunt or fish. Somewhat surprisingly, some evidence suggests that rural areas have greater access to food pantries and other emergency food resources, although this research also notes that the South has fewer emergency food resources than other areas of the country (Gundersen et al. 2017).

As Angela Piaskoski, Kristen Reilly, and Jason Gilliland (2020) note, achieving food security requires having food that is not only physically accessible, but also economically accessible, adequate, and acceptable. Previous studies suggest that income and resource constraints are more critical barriers to food access than distance (Rhone et al. 2019). The prices of some foods—especially fresh produce and other foods considered healthy—are sometimes higher in rural areas because of geo-

graphic isolation (distance from highways) (Hardin-Fanning and Rayens 2015). Given fewer (and more distant) food retailers, some rural residents—such as immigrants seeking specific ingredients from their home countries—may have a more difficult time finding culturally relevant foods (Bowen, Hardison-Moody, and Elliott 2021; Greder and Reina 2019). Scholars also note that rurality may influence people's experiences of stigma and shame in regard to receiving food assistance, which act as a barrier to accessing food (Haynes-Maslow, Andress, et al. 2020; Piaskoski, Reilly, and Gillingland 2020). For example, Lindsey Haynes-Maslow, Lauri Andress, and their colleagues (2020) note that due to the low population density in rural areas, residents worried that they would be recognized when they sought assistance from local food pantries or other programs. At the same time, Haynes-Maslow, Annie Hardison-Moody, and their colleagues (2020) find that rural residents' perceptions of SNAP were largely positive.

Researchers widely recognize that food insecurity is a structural problem, fundamentally linked to the factors, at multiple levels, that contribute to poverty and material hardship and undermine social mobility—for example, a lack of affordable housing and an inadequate social safety net (Bowen, Elliott, and Hardison-Moody 2021). These factors, too, are tied to place and rurality. Many rural areas are characterized by persistent poverty, unemployment, and economic disinvestment, and most counties with very high food insecurity rates are places defined by concentrated and persistent poverty (Feeding America 2019). As discussed in the introduction to this issue (Clark, Harper, and Weber 2022), with the exception of Appalachia, many persistently poor counties have a disproportionate share of non-White residents. Daniel Lichter, Domenico Parisi, and Michael Taquino (2012) note that people of color, especially Black people, are more likely to live in areas of concentrated poverty, and that rural Black residents are especially likely to be concentrated in poor places, many of which are in the South. They write, “Because

spatial and social mobility often go hand-in-hand, the segregation of the minority poor from the nonpoor connotes persistent racial injustice, limited opportunities for upward social mobility, and the reproduction of poverty and inequality from one generation to the next” (2012, 383).

Noting, as discussed, that people of color are more likely to live in places with high rates of food insecurity, scholars argue that experiences of food insecurity are not just tied to the allocation of material resources, but rooted in racism. The prevalence of food insecurity among Black and Latino/a/x-headed households has historically been at least double that of White households, and between 2019 and 2020, food insecurity rose in Black households but remained steady overall and dropped among White households (Coleman-Jensen et al. 2021). As we argue in another paper (Bowen, Elliott, and Hardison-Moody 2021; see also Burke et al. 2018; Odoms-Young 2018; Phojanakong et al. 2019), racism contributes to racial disparities in income and wealth and other economic resources that can help buffer against food insecurity (Fitzpatrick 2017; Gjertson 2016; Guo 2011), and racism is linked to food insecurity independent of poverty and socioeconomic status. For example, people of color are more likely to experience racial discrimination, itself directly linked to food insecurity (Burke et al. 2018; Phojanakong et al. 2019), and to live in states, many of them in the South, where stricter regulations and harsher punishments are tied to social assistance programs (Soss, Fording, and Schram 2011), including food assistance programs. Analyzing why poverty has long been persistently higher in the South than in other regions, Regina Baker (2020) finds, among other things, that government assistance is lower in the South, where the combined maximum TANF/SNAP benefit for a family of three is \$236.70 less than outside the South, and a maximum unemployment benefit that is \$86.66 less.¹

In addition to recognizing the structural roots of food insecurity, scholars note that food insecurity is linked to accumulating experi-

1. Regina Baker (2020) also finds that per capita GDP and economic growth are lower in the South. In general, Baker concludes that power resources (class-based collective political actors, such as labor unions and parties,

ences across the life course and across generations (Chilton et al. 2015; Chilton, Knowles, and Bloom 2017; Jackson et al. 2019; Jackson and Vaughn 2017). Even within places with high rates of food insecurity, many poor families manage to avoid becoming food insecure, which has long puzzled researchers (Gundersen, Kreider, and Pepper 2011). Households move in and out of food insecurity as they experience hardships such as unemployment, unexpected medical expenses, or loss of SNAP benefits (Heflin, Corcoran, and Siefert 2007). Sonya Jones and her colleagues (2018) find that food-insecure households experience more negative life course events (such as the death of a spouse or losing a job) and draw on fewer economic resources and lower levels of social support to weather these crises. Nonnegative life course events, such as the birth of a child, can also contribute to food insecurity by upending families' care and financial arrangements (Dubowitz et al. 2007). Karla Hanson and her colleagues (2016) find that, relative to at-risk households that remain food secure, households with food-insecure children have shifting and complex living and care arrangements, rely on jobs that are temporary or seasonal or have highly variable schedules, and frequently have to skip bills because of unpredictable earnings.

Multiple studies also find that people with stronger social networks are less likely to become food insecure (Martin et al. 2004; Morton et al. 2005; Vozoris and Tarasuk 2003). Conventional wisdom suggests that people in rural areas have stronger social networks than those in urban areas, but relatively few studies have investigated this claim, and existing studies find mixed results (Hofferth and Iceland 1998; Klärner and Knabe 2019; Sørensen 2016). Rural sociologists tend to agree, however, that place shapes (but does not determine) social capital. A recent Robert Wood Johnson Foundation report (2018) finds that a majority of rural Americans (67 percent) have received help or support from others in their community. Most rural Americans (81 percent) report a strong attachment to their local community (RWJF 2018).

In sum, research identifies multiple processes and pathways that contribute to food insecurity. The literature also clearly suggests that place plays a role—for example, through its effect on the resources people have access to, the job market in their region, and their social networks and connections. However, we do not understand a great deal about the causes and consequences of food insecurity and how place matters. Moreover, rural residents' experiences have been particularly understudied. In this article, drawing on a longitudinal, mixed-methods study of 124 poor and working-class households in North Carolina, we use qualitative longitudinal analysis to trace families' food insecurity trajectories over time. Our analysis focuses on household food insecurity between 2012 and 2017, before the COVID-19 pandemic. It offers important insight into the economically precarious status of low-income families prior to the major social and economic crisis that unfolded in 2020 as a result of the pandemic. We offer some preliminary thoughts on the impacts of COVID-19 for low-income rural families' food security in the conclusion.

The study took place in three counties in North Carolina, one urban and two rural. Many households moved in and out of food insecurity over the course of the study. Although our analysis is informed by the broader study, our focus is on the experiences of households in the two rural counties. Our findings are organized around three case studies of rural families.

METHODS

This analysis stems from a longitudinal, mixed-methods project, *Voices into Action: The Families, Food, and Health Project*, funded by the USDA and Russell Sage Foundation. The project examined low-income families' food practices, beliefs, and experiences. In 2012, we recruited and interviewed 124 low-income female caregivers of young children. Research took place in one urban and two rural counties in North Carolina; in this paper, we focus mainly on the two rural counties but provide some comparative context from the urban county. We took mea-

and the social policies they are able to institutionalize) are an important source of the poverty gap between the South and the non-South, although economic structure and other factors also play a role.

asures to ensure that participants came from diverse networks and that the racial and ethnic composition of our sample corresponded with that of the low-income population in our study sites. Participants were screened over the phone prior to scheduling the interview. In order to be included in the study, the participant had to identify as a woman and be the primary caretaker of at least one child between the ages of two and nine. Only grandmothers who were primary caretakers were included; the sample included ten grandmothers and 114 mothers. We chose to interview women because women are still primarily responsible for preparing meals in American households (Taillie 2018) and play key roles in mitigating food insecurity (Martin and Lippert 2012). Screening questions were used to exclude participants with household incomes over 200 percent of the poverty line (\$22,350 for a family of four in 2011). However, because of discrepancies in how participants answered the screening questions, six households had incomes between 200 percent and 252 percent of the poverty line at baseline. Many households' economic circumstances fluctuated over the course of the study. Our final sample of 124 women in year 1 was 42 percent Black ($n = 52$), 33 percent White ($n = 41$), 24 percent Latina ($n = 30$), and 1 percent mixed or other race ($n = 1$). At baseline, 48.4 percent of households ($n = 60$) were classified as food secure, and 50.8 percent ($n = 63$) of households were classified as food insecure. (One household had missing data.)

The project involved three major waves of data collection: in years 1, 3, and 5 (as well as short check-in interviews during the COVID-19 pandemic in year 8, which are not analyzed in this article). We conducted semi-structured interviews, a survey, and twenty-four-hour dietary recalls with female caregivers in all three major waves. We also conducted interviews with one child in each family in year 5 about their food preferences and habits and experiences of food insecurity (following Fram et al. 2011).² Of the 124 households that participated in year 1, 90 percent participated in year 3 ($n =$

112) and 73 percent participated in year 5 ($n = 90$). Interviews, surveys, and recalls were conducted in English or Spanish (according to participant preference) by a team of Black, White, Latino/a/x, and Asian American researchers from diverse class backgrounds. Interviews generally lasted between one and a half and two hours, and almost all took place in participants' homes. Our first round of interviews focused on caregivers' beliefs, decisions, and practices related to food and feeding.

After analyzing the data from year 1, we incorporated questions in years 3 and 5 about broader issues tied to food beliefs and practices, including experiences of domestic violence and discrimination, fears of deportation, precarious employment, and religious beliefs and practices. In 2020 (year 8), we reached back out to the families from the study and were able to conduct brief interviews (approximately thirty minutes, to reduce participant burden during the pandemic) with fifty-four caregivers about their experiences during COVID-19. We were able to follow up with only one of the families featured in this article and thus our longitudinal analysis does not include the 2020 interviews.

All interviews were audio recorded and transcribed verbatim, and pseudonyms were applied to conceal participants' identities. Interviews were coded for key analytic concepts using NVivo software by a team of researchers, including all of the authors. Throughout the project, we engaged in critical, self-reflective analysis (Elliott, McKelvy, and Bowen 2017). We used a grounded theory approach to develop the codebook, focusing on understanding women's experiences and how their food and eating beliefs and practices were influenced by their food environments and by social, cultural, and economic factors (Charmaz 2014). The total of seventy-five codes were coded in two rounds. We purposefully kept the codes broad so that we could conduct focused coding of these more general concepts. During coding, we reviewed 10 percent of the transcripts, re-coding or adjusting coding categories as neces-

2. In year 1, we selected one child in the household between ages two and eight as the focal child for the study. The dietary recalls and some survey questions (such as self-reported health) focused on the caregiver and this one child.

sary. We also wrote extensive memos that deepened the analytic process by elaborating on our insights and linking them to specific pieces of data (Emerson, Fretz, and Shaw 2011).

We used qualitative longitudinal analysis to trace households' trajectories over time. Longitudinal research designs enable "the identification and meaning of temporal change across lives," allowing researchers to examine how people interpret, negotiate, and respond to such changes (Hermanowicz 2013, 190). Focusing in particular on the ninety participants who completed all three waves of data collection, we followed participants and social processes across the full five years of our study, paying attention to "changes and continuities across biographical time and historical time" (Doucet 2015, 229). Following Sheila Henderson and her colleagues (2012), we developed case profiles for each household. We wrote memos on each case, reading all transcripts and field-notes related to the case and writing a summary tracing changes in each family's lives over the full course of the study. Treating each participant as a case (Small 2009), we looked for within-case patterns; we then examined the entire dataset to see how and where these initial analytic insights applied (for a similar example, see Fong 2020), exploring continuities and divergences across participants.

For this paper, our analysis focuses primarily on the narratives of the families living in the two rural counties, although our argument is informed by the experiences of families in the urban county. After our initial round of memoing, as described above, we divided households into three groups: those that remained food secure throughout the study, those that experienced intermittent food insecurity during the study, and those that experienced persistent food insecurity (throughout all five years of the study). We compared case profiles within each group to identify patterns in households that remained food secure and those that experienced intermittent and persistent food insecurity. Finally, we selected one

emblematic case from each group to illuminate, in narrative form, the key themes related to food insecurity that emerged across the data. In the analysis that follows, we trace these three rural participants' trajectories over time. We use this method to honor the complex and nuanced stories that emerged across the years of this project, to illustrate how context and place shape families' experiences across time, and to give voice to the struggles and resilience of the families we worked with. With each case, we focus on the broader structural patterns that emerged across the data. Although they are not generalizable across all families living in poverty or all families in rural areas, the stories of these three families illustrate how some rural families move in and out of food insecurity, how some families are able to remain food secure, and how specific resources, coping strategies, and circumstances play a role.

FINDINGS

As noted, we analyzed the narratives of the ninety families who participated in all three waves of the study. Although our analysis of the entire sample informs our argument, in this paper we focus primarily on the families in the two rural counties. As summarized in table 1, the prevalence of food insecurity in the rural counties fell over the course of our study, in line with national trends, as the United States recovered from the effects of the Great Recession.³

In analyzing the data, we grouped families into categories according to their food security status over the course of the study (consistently food secure, intermittently food insecure, and persistently food secure). One-third of rural households (33.8 percent, $n=21$) remained food secure in all three waves, while nearly half of households experienced food insecurity during one or two waves (45.2 percent, $n=28$). One-fifth of rural households (21.0 percent, $n=13$) experienced food insecurity in all three waves. These patterns are in line with findings from national surveys; the USDA reports that although some

3. Only participants who participated in years 1 and 5 of the study are included. Most participants participated in all three waves (with the exception of 5, who did not participate in year 3). Households experiencing very low or low food security are considered to be food insecure, and households experiencing marginal or high food security are considered to be food secure according to the USDA definition.

Table 1. Prevalence of Very Low, Low, and Marginal or High Food Security among Participants in Rural Counties—Years One, Three, and Five

	Year One (n = 62)	Year Three (n = 57)	Year Five (n = 62)
Very low food security	25.8 percent (n =16)	14.0 percent (n = 8)	16.1 percent (n =10)
Low food security	27.4 percent (n =17)	29.8 percent (n = 17)	17.7 percent (n =11)
Marginal or high food security	46.8 percent (n = 29)	56.1 percent (n = 32)	66.1 percent (n =41)

Source: Authors’ tabulation.

households are chronically food insecure, most experiences of food insecurity are intermittent, with households cycling in and out of food insecurity (Economic Research Service 2021).

Within our sample, we looked for patterns between and within categories, paying particular attention to how rurality shaped experiences of food insecurity and coping strategies. We selected three families as cases. One participant (Katina) lived in a household that managed to avoid becoming food insecure over the course of our study; one (Claudia) experienced intermittent food insecurity; and one (Clarissa) experienced severe food insecurity throughout the study. All three lived in mobile homes outside small towns or cities.⁴ These three families’ experiences represent many of the social processes we identified across our sample. A shortage of good jobs and affordable and adequate housing, combined with inadequate (and stigmatized) social assistance, made it hard to get ahead. Mothers and grandmothers sacrificed to feed the children they cared for, sometimes at the cost of their own health. Their rural communities offered both constraints (such as longer commutes) and opportunities (such as close-knit communities). Social support networks were critical to helping some families avoid food insecurity and these networks were closely tied to rurality. Across our sample, rural residents had lived in their homes and neighborhoods for longer, on average, and expressed a deeper sense of attachment to their communities than the urban caregivers we interviewed. Many had grown up in the communities in which they now lived, and they drew on these deeply rooted social networks for support during crises and tried to share food with oth-

ers when they had extra. But these ties were often contingent and fraught, not enough to help them get ahead or, in some cases, even get by. Additionally, for many of the women in the study, fraying state support—decreases in SNAP benefits, cumbersome bureaucracies, and decades of disinvestment in rural communities—meant that this contingent social support was even more essential. The three women profiled in this article, and the women who lived in rural communities in our larger study, vacillated between what we found to be precarious ties to the state, employers, and their social networks in order to feed their families.

(Barely) Food Secure: Katina

When we met her in year 1, Katina was a Black thirty-year-old mother of two, living with her mother, Leona, and her two daughters—Justice, age three, and LaFrea, age fourteen—in an old trailer on a sparsely populated rural dirt road just off a major highway. Katina had worked as a certified nursing assistant (CNA) for almost eleven years. Although the work did not pay well, Katina liked working with people and was good at what she did. She had lost her job three months before the interview, however, and still had not found a new one. She looked on the bright side. She had applied for school to get her associate’s degree and hoped to start in a few months.

Katina was glad to be raising her children in the same rural community where she had grown up. “I just like the country setting, I like the privacy,” she explained. Justice loved to chase the chickens around and splash in muddy puddles. Katina’s grandfather, who

4. Rural places are not monolithic, and rural counties often include towns or small cities. Nearly all of the participants in one of the two rural counties lived in sparsely settled areas, away from towns, but some participants in one county lived in a city in that county.

lived close by, had always planted peas, turnip greens, and cucumbers. Katina felt that growing up near his garden was helping her children appreciate just how delicious fresh produce could be. Although many of the rural participants in our study did not have a garden, the share of rural residents with a garden (25 percent in year 1) was still substantially higher than the share of urban residents with a garden (8 percent).

But Katina's childhood had been far from idyllic. Pregnant with LaFrea when she was seventeen, Katina found herself tied to a man who was controlling and emotionally abusive, which continued to shape Katina's interactions with others. "I should've learned from that mistake, but I didn't," she said. Her past made her continue to question others' motives. But her faith in a "higher power" helped Katina see that it was important to give people the benefit of the doubt. With the support of her family, Katina was able to get her GED, become a certified nursing assistant (CNA), and support her daughter.

When we first met her, however, she was out of work. It was stressful. Their SNAP benefits had at least increased after she lost her job, and Katina was hoping she could claim unemployment until she could find another job. Until then, Leona and Katina managed to stay food secure by pooling their SNAP dollars, visiting local food pantries, and eating most of their meals at home. We "just kind of make it work," Katina said. Katina's mother, Leona, made breakfast for Justice and helped watch her throughout the day. Justice's and Katina's days were filled with the endless cycle of meals, playtime, and TV that many parents of preschool-age children know well.

Katina's story demonstrates how close many poor working families are to becoming food insecure. It also shows how social networks—perhaps especially in rural communities, where people are not able to rely on as many formal social service organizations (Johnson et al. 2018; Whitley 2013)—are an important buffer against food insecurity, as earlier studies reveal (Martin et al. 2004; Morton et al. 2005; Vozoris and Tarasuk 2003). Contrary to our expectations, rural residents did not express more trust in or support from their neighbors than

urban residents (see Bowen, Hardison-Moody, and Elliott 2021), although they did consider their neighborhoods to be safer. For example, rural and urban participants responded similarly to survey questions about whether people in their neighborhood "helped each other out" or "watched each other's children." The women in rural areas, however, had lived in their homes for much longer: an average of almost five years (fifty-nine months), versus just over two years (twenty-seven months) for their urban counterparts (measured in year 1 for the entire sample). Many of the women in rural counties had grown up nearby and lived close to friends and relatives they had known since childhood.

When she lost her job, Katina relied on SNAP and food pantries to feed her family. But she also had a home that was paid for, thanks to her great-grandfather, and she benefited from her mother's help with food and babysitting. Katina was able to avoid food insecurity even after losing her job because of the social support from her mother and her ability to tap into increased SNAP benefits that came through during her brief period of unemployment.

Cases like Katina's help us see how important but fragile these social and state ties are, and how much hangs in the balance when and if they fail. "It doesn't take much," Katina said. "I mean especially when you know you're not working and then everything is just like I can't do this. How am I going to pay this bill? And this is coming up and it's just like, I need me a drink, you know."

When we first interviewed Katina in year 1, she was hopeful that she would land on her feet, and she did. Six months later, she secured a full-time position as a CNA at a nursing home. Unfortunately, the job was in a neighboring county, about a forty-minute drive from her house, and Katina's car had broken down, forcing her to rely on friends or family members to give her rides to work. Rural participants in our sample were more likely to have a car (with 85 percent reporting they had a car in year 1, versus 51 percent in the urban county), but for rural residents who did not have a car, getting to and from work and to go shopping and take care of basic errands could be very difficult. Al-

though she loved the privacy and space of her rural community, living out in the country meant that Katina could not find a steady job within thirty minutes of home. Sixty-two percent of residents in Katina's county travel outside the county to work, with an average commute time of thirty minutes, illustrating the challenges of finding work in rural areas (NC Chamber of Commerce 2021). Often the only jobs that are available in rural communities are low-wage and shift jobs that offer few benefits or labor protections. In describing the steady increase of rural working poverty over the past decade, Brian Thiede, Daniel Lichter, and Tim Slack (2018, 191) argue that the "good life," which includes "a secure job that pays a living wage," is far from realizable for many rural Americans. As they write, "In many, if not all (or more) of these cases, workers are employed in low-quality jobs that provide little stability and few benefits. . . . Poverty, as we have defined it, is likely just one dimension of the many disadvantages and limited prospects faced by these workers."

Katina was relieved to be working again, but as her hours at work increased, her SNAP benefits decreased, a common cycle that makes it hard for the working poor to get ahead (Haynes-Maslow, Hardison-Moody, et al. 2020). Like many of the families in the study, Katina wanted to feed her children the healthiest food she could, but struggled to do so with her limited food budget. A recent study finds that SNAP benefits are not adequate to cover the costs of what the USDA defines as a healthy diet (Mulik and Haynes-Maslow 2017). Katina managed to pay her bills but found it difficult: "It's stressful—it's stressful but I mean, I know people, friends or whatever, I can always get a little help." She laughed. "But I—I try to stay on a budget so that I won't have to have that problem. . . . But if something just happened to come up, then yeah."

Katina's nervous laughter conveyed the fragility of their living situation. Her utilities and phone had both been disconnected a few months earlier when she fell behind on the bills. Her job did not offer health insurance, so she paid for medical care out of pocket. And even with her steady income, Katina's SNAP benefits were critical to her family's food secu-

rity, and she continued to visit a food pantry when she ran low on food. Given her long commute to and from work, which left less time to cook, Katina's family relied more on convenience and fast foods. In year 5, Justice said that they ate a lot of "freeze meals," like chicken nuggets and macaroni and cheese, because her mother was working.

For an entire year, friends and family members gave Katina rides to work. When she finally did get a car, she was extremely excited to not have to "depend on other people to get back and forth to work." Having a car also made it easier to shop around at various grocery stores to get the best prices. As she told us, "And then if you run out of something, I can just jump in the car. Shoot up the street and get it. Instead of having to wait until I could get a ride to the store." Katina wasn't far from a grocery store, but this is not true of all rural residents. On average, people in rural areas live farther from their nearest food retailer (Economic Research Service 2009). This was also true of the households in our study. Lillian MacNell (2018) traced the shopping patterns of all of the women in our study. On average, rural participants were farther both from the closest store and the store where they preferred to shop the most (2.7 and 2.9 miles to the nearest store, compared to 1.1 miles in the urban county; 5.8 and 7.3 miles to the preferred store, relative to 2.9 in the urban county).

As a CNA, Katina worked two consecutive twelve-hour shifts followed by two days off and then a half day on Friday each week. Although juggling childcare and her job took a toll on her, Katina was eventually promoted to a better-paying position after her boss encouraged her to take a qualifying test. Katina liked her new job so much that she was reluctant to look for a job closer to home. "Even if something else better does come along I might just try to stay with them," she said, "because I really like my supervisor a lot. She's got a good heart and I like being there."

As Katina moved up the career ladder at work, her social networks changed as well. Around the same time, Katina's daughter LaFrea got pregnant and had her first child at seventeen. In year 5, LaFrea and the baby were both living with Katina in the same trailer

where Katina had lived throughout the study. Katina hoped that once the baby got a little bigger, LaFrea would be able to go to “community college and try to finish getting her education.” The same year, Katina’s mother Leona moved out to live with her boyfriend. This meant that unlike in previous years, Katina no longer had Leona’s help getting Justice ready in the morning or making dinner each night. LaFrea’s boyfriend stepped in to help, coming to put Justice on the bus during the mornings that Katina had to get to work for her 7:00 a.m. shift. Studies find that children in low-income families like Katina’s are more likely to be cared for by relatives than in formal childcare centers (Chaudry et al. 2017; Ruzek et al. 2014). Katina couldn’t afford childcare, so she relied on informal arrangements—first her mother, then her daughter’s boyfriend.

Katina managed to avoid food insecurity; in all three waves of the study, her family was classified as food secure according to the USDA definition. With the exception of a short period of unemployment when we first met her, Katina held a job throughout our study. In Katina’s case, the combination of steady employment and SNAP benefits allowed her family to remain food secure. Other studies find that families like Katina’s actively strategize to make sure children have enough to eat, redirecting resources from other domains to pay for food (Heflin, London, and Scott 2011). Katina juggled her bills each month, keeping food at the top of the list. With a wry laugh, she explained, “We don’t have to worry about food. We don’t have to worry about staying warm or staying cool. . . . I’m not able to go out and splurge all the time and just buy stuff, but if they need something, you know, they don’t have holes in their shoes.” Although Katina managed to get by, she was never able to keep her head above water for long, because “something” always seemed to come up—a car payment, medical expense, or a new baby in the home. Like Katina, most SNAP recipients who can work, do. An analysis of nondisabled adults participating in SNAP found that 52 percent were employed for that particular month, and about 74 percent worked at some point in the year before or after (Keith-Jennings and Chaudhry 2018). As traditional

welfare programs like Temporary Assistance to Needy Families have been cut, programs like SNAP have simultaneously increased in total funding with a particular focus on supporting working families. Maggie Dickinson (2020) shows that policymakers and politicians have reframed SNAP in the last two decades as a “work support.” Rather than transforming food assistance programs to support poor families, or raising wages so that people can afford to eat and live, the social safety net has instead been designed to “subsidize low-wage work, encourage community organizations to take responsibility for poverty, and help individuals maintain work-ready bodies” (Dickinson 2020).

Katina’s ability to work depended on the support of family members who could put her daughter on the bus each morning and provide a free place to live, and her story shows how even when poor and working-class families manage to get by and remain food secure, they never seem to get ahead. Although Katina’s struggle to get by was not necessarily unique to rural areas, aspects of her story illumine the challenges of poverty in the rural United States. Since the 1980s, “good” jobs in rural areas have become scarcer, with the loss of relatively well-paying jobs in manufacturing and agriculture and growth of low-wage service jobs (Ulrich-Schad and Duncan 2018). Living in a rural area meant that Katina had to commute forty miles from home to find work in her field, and there was no public transportation she could rely on when she didn’t have access to a car. She worried constantly that “something” would happen that she couldn’t prevent or prepare for, and she didn’t have the savings—or social network—that could catch her when or if that happened. Examining economic well-being and levels of poverty and employment in the rural United States, Thiede and his colleagues (2018) argue that rural workers like Katina are “falling rapidly behind America’s middle-class income standard,” if poverty is benchmarked to median family income. They note that the reality is that the working poor in the United States are increasingly challenged to get by, let alone be able to live comfortably enough that they could engage in what some might call “the good life.”

Intermittently Food Insecure: Claudia

"My children? I want them to be able to have their dreams come true," smiled Claudia, a mother of four. "Samuel says that he wants to be an attorney and a movie actor, and Angela said that she wanted to be a surgeon, but now she wants to be an attorney." Claudia, a Mexican immigrant who had been in the United States for fourteen years at the time, was petite, with long curly brown hair and a warm, cheerful face. Her trailer, nestled among a cluster of others along a country road, was the best-looking one in the neighborhood. Flowers and potted plants adorned the front; in the back, Claudia had planted tomatoes, garlic, and chiles and was raising chickens for eggs.

Claudia shared the trailer with her partner, Adrian, and the four children: fourteen-year-old Angela, twelve-year-old Samuel, two-year-old Alan, and one-year-old Benjamin. Even though the trailer was small, Claudia was thankful that she could offer her children more than she'd had as a child. Growing up in rural Mexico, Claudia and her six siblings did not go hungry, subsisting on a diet of beans, rice, soup, and eggs. But her family only ever had enough food for that day, and her mother could rarely afford to add beef or even chicken to the soups she made regularly. "It made me sad," Claudia recalled of what it was like to know how much her parents struggled to feed her and her siblings. "I wanted to grow quickly so I could work and give my mother some money to buy more food. I would say, when I work, we will eat beef every day."

Claudia did start working at a very young age. When she was just twelve, she moved in with a wealthy family to care for their baby and help around the house. After that job ended, she worked in various others, including cleaning houses and working in restaurants and stores. Given all these jobs, Claudia was not able to attend school. In the late 1990s, when she was in her early twenties, she migrated to the United States to join her then-husband. Claudia remembers the day she arrived vividly. Initially, she recalled, she felt "sad and desperate." "I wanted to go back soon because I didn't have any family here and all the people I met when I arrived here were not part of my family and I had never seen them before." Her hus-

band was abusive. "It got very ugly," Claudia explained. After living with him for six years, she left him, taking their two children with her. A counseling center helped her get a temporary visa and relocate to a neighboring state, but she preferred North Carolina and returned several years later. She met Adrian and they had two more children.

Claudia's stories of becoming a mother and migrating to the United States were intertwined; she couldn't think of one without the other. "I can't compare my life in Mexico and the United States," she said, "because there I was alone, I was single, and I was younger. I could go anywhere and it was not complicated. Here, I have my children. It's very different." Although life in the United States was not easy, Claudia felt it was easier to raise kids in the United States than in Mexico. "Here you can provide things for children; in our country you can't," she noted. Especially without any formal education, she felt she would have a hard time finding a job that paid enough in Mexico. "And even the school for the children is very expensive there," she said.

Still, Claudia and Adrian struggled to get by, and their family reported intermittent food insecurity during the course of the study, including at the time of the first interview. Claudia stayed home with the children, and spent a lot of time cooking—dishes like *estofado de pollo* (chicken stew), meatballs, tamales, and tacos, always with fresh tortillas. Adrian worked as a day laborer and, because work was scarce in their rural area, spent hours commuting to a nearby city. "He is sometimes gone all day—he has to work far away . . . so he spends a long time traveling and he isn't paid for all of those hours he is away from home," she said. Still, she felt it was worth it, because he was paid \$9.00 an hour. She explained that wages in Mexico were much lower; at the last job she had in Mexico, she worked six days a week and was paid \$9.00 for the entire week. But even though Adrian could earn a lot more in the United States, he was paid only when he could work, and their family experienced regular food shortages when he could not. Claudia described a recent time when he was off work for several weeks because of a health issue. "We suffered a lot, because for two days, we'd eat

just eggs and beans, and [the kids] didn't want it. I'd say, 'What can I do?' Because we didn't have anything else."

Their problems were exacerbated by complications with their SNAP benefits, which Claudia attributed to Adrian's irregular work schedule and outright discrimination by the case worker. She explained, "Last year, they took the [food] stamps away from me, because they said I was—I feel that the lady, the social worker that I have for my food stamps, that she's very racist. I've wanted to change [to a new caseworker] but I don't know where to call. I gave everything [required], and because [my partner] doesn't get checks, he gets a letter—I took the letter from his boss and everything and she said that I didn't qualify. We struggled a lot." Since then, their food stamps had been reinstated, but Claudia worried about what she would do when she had to go back to renew. Pamela Herd and Donald Moynihan (2018) use the term *administrative burden* to describe how public benefits are increasingly complicated or cumbersome to get and keep. They argue that administrative burdens are by design, used by politicians to reduce access to public benefits. In Claudia's case, her difficulties getting SNAP benefits were exacerbated by poor communication (perhaps due to language barriers) and discrimination from the person processing the paperwork. Research shows that food insecurity is linked to racial discrimination (Burke et al. 2018; Phojanakong et al. 2019); this is one example of how it might occur.

Claudia's story is also illustrative of the broader challenges faced by immigrant families, perhaps especially in new immigrant destinations such as North Carolina: unstable working conditions, tied to an increasingly restrictive labor market, and growing fears of surveillance and deportation in the face of "crimmigration" (the merging of immigration and criminal law) (Abrego and Schmalzbauer 2018; Menjívar and Abrego 2012; Straut-Eppsteiner 2020). Other studies note that in the late 1990s and early 2000s, when Claudia arrived in North Carolina, a more open policy and economic context made it relatively easy for immigrants to find work (Straut-Eppsteiner 2020). However, more restrictive immigration and employment policies, not just in North

Carolina but throughout the country, have made it harder for immigrants to obtain or move between jobs and more vulnerable to exploitation. To bypass the legal requirements, immigrants rely on temporary or gig jobs like Adrian's, which do not offer a steady income. Claudia's story also exemplifies how the threat of deportability, which increased over time, makes it difficult for immigrant families to seek the assistance they need (Menjívar and Abrego 2012). Claudia received a temporary visa but did not have permanent residency status, and Adrian was undocumented. As other research on immigrant families shows (Carney 2015), one of the reasons Claudia had migrated to the United States was because she did not want her children to experience hunger like she had as a child. Because feeding her children was a top priority, Claudia enrolled in federal food assistance programs like SNAP and Women, Infants, and Children (WIC), but doing so contributed to her fear and anxiety; some immigrant families—including some in this study—choose not to apply for government assistance in fear of repercussions for their family (Bovell-Ammon et al. 2019; Perreira et al. 2012; Perreira and Pedroza 2019). Claudia tried to compensate for her family's hardships with her extraordinary resourcefulness; like other rural mothers who harnessed skills they learned growing up in rural communities (see Morton et al. 2005) to feed their families, she raised chickens, grew her own food, and was adept at making something out of nothing. But sometimes even that wasn't enough.

When we checked back with Claudia two years later, she had had another baby, a girl named Catalina. Claudia was happy that Angela finally had a sister, but the pregnancy and birth had been complicated. Both Claudia and Catalina were fine now, but at two months old, Catalina was not sleeping consistently, and Claudia was exhausted. Catalina had been born in the winter, which was always a hard time for their family. "From October through March, when the cold weather starts, there is less work [for Adrian]," she said. Compounding their problems, Claudia had been treated throughout her pregnancy at a large hospital about an hour away from their house. On average, rural residents travel about twice as far to get to the

nearest hospital (Lam, Broderick, and Toor 2018), and rural hospitals are less likely to be full-service hospitals. In Claudia's case, although her medical care was mostly covered, the expenses of parking and driving back and forth added up. "We'd spend \$20 for gas, and I had to spend the whole day there so I'd have to pay \$10 for parking, and although they helped with medication, I had to pay \$20 for medication, and then sometimes I'd have to pay \$30 or \$40 for the pregnancy check-up (co-pay). I would spend \$120 in one day. And sometimes we didn't have that. Some weeks, we only ate eggs and beans," she said.

By the time we interviewed Claudia, it was spring and Adrian was finally working again. Their family was classified as food secure according to the USDA measure. However, Claudia recalled a very difficult period around the time of Catalina's birth. "We still didn't have the car seat and we didn't have any money. We had to borrow some money to buy the car seat. We had no money because we'd paid the electric bill, which was very high, because if we didn't have electricity we knew that would affect the children too," she said. When she got home from the hospital, she realized they were nearly out of food. They had no money and a zero balance on their Electronic Benefit Transfer (EBT) card, and their stock of food was not as large as it usually would be. Claudia blamed herself; as other studies also show, mothers feel morally responsible for what their children eat (and for ensuring that their children have enough to eat), even in the face of enormous challenges (Chen 2016; Elliott and Bowen 2018; Fielding-Singh 2017). Claudia's SNAP benefits ran out more quickly because she couldn't walk or drive as much due to complications with her pregnancy, which meant that she could not shop the way she normally did. Instead, she went to the closest stores, which were more expensive. When she returned home from the hospital, they had very little to eat for two or three days. Claudia reflected on that time: "Once I even felt like I wanted to go to work" (even though she had a newborn and could barely walk). "It was a desperate moment." She prayed that the food shortages would not affect her milk supply, given that she was breastfeeding. Tamara Dubowitz and her colleagues

(2007) note that the birth of a child can exacerbate food insecurity as low-income mothers navigate new responsibilities, financial constraints, and social and physical needs, often with limited resources for their own well-being and support.

The family experienced a new crisis when Claudia was involved in a serious car accident a little more than a year later. She was in the hospital for more than three months, and the accident had serious effects on her mobility. After Claudia came home, she and Adrian decided to move to a nearby city to be closer to the medical facilities where she was being treated. Claudia liked the new neighborhood. "Everything is closer and the kids can go out and walk. It feels safer," she said. Now that they didn't have to drive so far to go to the grocery store and take the kids to school, Claudia felt like they all had more time. "[Before] I'd worry that the day wasn't long enough. Over there [in the old neighborhood] we'd go out and it was already dark, and here I feel the days are longer. The children play more."

Despite these positive changes, Claudia's new life was much harder. Previously, she had cooked, cleaned, shopped, and cared for the children. Now she could not cook like she wanted to. She could neither stand very long to stir a pot of rice nor lift a dish to put it in the oven. Even making tortillas was impossible on her own. "I used to make tortillas for them, and now I can do it when Angela helps me, but when she's not here, it's more difficult," she said. She desperately wanted her mother to be there with her during this challenging period in her life, but her mother could not leave Mexico. "The truth is, I was very depressed [after the accident]," she said. "Thank God, I'm doing better [now] with the treatment (that the doctor prescribed for her depression)." Still, Claudia cried during the interview as she talked about how much everything had changed. "The truth is, yes, it's really difficult," she said.

Rent was much higher in the city, and their financial struggles kept getting worse. "This month we barely made [the rent]—we were able to pay it yesterday, I think," Claudia said. "Over there [in the rural county where they had lived previously], we struggled financially; here it's

even worse. It's a lot of money and Adrian is mad all the time." The rent was too high, but they did not see many alternatives. "It's just too much," she said. "[Once we pay the bills] we're so poor, until the day when we get the payment on the [EBT-SNAP] card, because we had nothing." To make matters worse, their food stamps had been cut by \$300. Claudia didn't know why. She had double and triple-checked that they had entered everything correctly, but nothing had changed. They regularly experienced food insecurity, usually at the beginning of the month, when they had to scramble to pay the rent and energy and water bills and were still waiting for the SNAP benefits to load. "On Monday, a friend brought me food, she made me a meal, and she saved my life, because I had nothing," said Claudia. Claudia's story shows how food insecurity and housing insecurity are intertwined, in this case because they moved to a more expensive urban area.

Claudia's experiences over the five years of the study also show how food insecurity is connected to experiences over the life course—in her case, the birth of a child and a health crisis—and structural conditions, like a lack of guaranteed health-care coverage, that exacerbate the impact of these experiences (Arlinghaus and Laska 2021; Jones et al. 2018). Research shows how food insecurity is associated with health-care expenditures (Berkowitz et al. 2017; Tarasuk et al. 2015). The causal directions may go both ways: food insecurity may contribute to health problems, and health issues (and the associated costs) may lead to food shortages. Claudia's family experienced food shortages both when Adrian could not work because of health struggles and as a result of the added expenses associated with Claudia's pregnancy and childbirth. Rurality also shaped Claudia's experiences. The reason they moved to the city in the first place was to be closer to the medical facilities where Claudia was being treated after her accident. Research finds that rural areas increasingly lack comprehensive hospitals and more highly trained specialists (Kirch and Petelle 2017). Claudia's move gave her better access to health care, but because rents were so much higher there, it also made it more difficult for Claudia and Adrian to avoid food shortages.

Claudia's struggles were intensified because of her family's tenuous legal status and subsequent fears of increased government surveillance and deportation. She had gotten a temporary visa after leaving her abusive partner but did not have permanent residency. She was working with a lawyer to try to get a green card, but worried about whether the election of Donald Trump would jeopardize her case. "The lawyers have said that yes, they can take away my visa," she said. With immigration in the news all the time, she also worried about Adrian, who was undocumented. If something happens, she said, "he'll leave to be with his family in Mexico." He drove to work because he had to, but when they went out as a family, Angela, who was now eighteen and had her license, drove them. Angela and Samuel, both born in the United States, told Claudia that they refused to go to Mexico if Claudia or Adrian were deported. They had never been to Mexico and did not want to move there. "I know that if I get deported, I don't know what will happen to my [older] children," she said.

Claudia's story shows how the increasing threat of deportation affects immigrants' everyday lives (Menjívar and Abrego 2012), including the way they feed their families. Undocumented immigrants like Claudia's partner are not eligible for SNAP, but their U.S.-born children often are, as are documented noncitizens who meet specific criteria. (We purposefully did not ask Claudia or other immigrants to disclose their legal status. Although most people eventually provided some explanation, we did not ask for specific details about her or other people's visas or immigration status, so we don't know whether Claudia's visa made her eligible. Her U.S.-born children, though, were eligible for SNAP). WIC, a food assistance program for pregnant and nursing mothers and young children, specifically does not restrict on the basis of legal status. Many immigrant families, then, are eligible for some forms of food assistance. As Claudia's case demonstrates, however, the barriers they face go far beyond legal restrictions. Research shows that the threat of deportation leads immigrant families to avoid government programs, including food assistance programs (Kaushal, Waldfogel, and Wight 2014;

Menjívar and Abrego 2012; Perreira et al. 2012). The “participation rate” for noncitizens who are eligible for SNAP is lower than that of citizens (Lauffer and Vigil 2021; Skinner 2011). Researchers find that some immigrants do not apply for public benefits because they are confused about the eligibility, intimidated by the application process, or fear being labeled a public charge (Perreira et al. 2012; Perreira and Pedroza 2019).

Some research finds that families have become even less likely to enroll as immigration policies have gotten more restrictive and more punitive (Bovell-Ammon et al. 2019). At the same time, studies also find that some immigrant families are actually prompted to apply for assistance because of the economic precarity that results from these same policies (Golash-Boza and Hondagneu-Sotelo 2013). In the case of Claudia’s family, increasingly restrictive employment policies meant that the only jobs available to her partner were in the informal labor market; his job as a day laborer offered few protections (for example, when he could not work due to a medical issue), and his income fluctuated widely. Studies find that with *de facto* immigration tools such as E-verify, implemented in North Carolina starting in 2013 (NC Department of Labor 2021), it has become more difficult for undocumented immigrants to obtain or move between jobs (Straut-Eppsteiner 2020). Leisy Abrego and Leah Schmalzbauer (2018) also note that place-specific factors (such as labor markets and social context) shape immigrants’ experiences and ability to earn a livelihood; in their study, immigrants living in rural communities in Montana (also a new immigrant destination) found it harder to join the paid labor force than mothers in the established immigrant destination (and urban city) of Los Angeles.

Still, like so many of the parents in our study, Claudia dreamed that things would get better. “That we have money, that we could buy a house, and I’d like to get them in college—that’s my greatest dream, for them to be someone in life,” she said. “I imagine that if I get my visa, I’ll go to school, so I can find work doing something, like in an office, and study English.”

Persistently Food Insecure: Clarissa

“I [have] the mommy instinct. It’s always been there. I don’t know how to not take care of somebody. Until the day I die, I’ll be taking care of somebody, somewhere,” explained Clarissa, a fifty-five-year-old grandmother who was caring for her three grandchildren. Clarissa described herself as “short and stocky.” She leaned back on the loveseat, fidgeting with her pink flip flops during the interview. Clarissa and her three grandchildren—eleven-year-old Autumn, six-year-old Eve, and two-year-old Cal—had just moved into the trailer, and the living room was still filled with big cardboard boxes. They had moved in after Clarissa separated from her second husband, a violent man who abused both Clarissa and the children. Their house went into foreclosure after she left him, and she felt lucky that someone told her about the trailer at the end of a dirt road, surrounded by several other trailers. She missed the convenience of being closer to grocery stores and gas stations but felt safer in the country. “Thank God. It must have been meant for me to be here. But I like it because it’s safe, it’s quiet.”

Having already raised two children, mostly on her own, Clarissa did not expect to be doing it all over again, but Eve and Cal, her daughter’s children, had lived with her nearly all of their lives. “Sometimes parents can’t be parents,” Clarissa reflected. “My daughter doesn’t have it in her to be a mom.” Clarissa’s son, on the other hand, had been a “very good father” to Autumn. He mostly cared for her until she was four, but then “made stupid decisions” and was incarcerated. In general, the rate of incarceration has more than quadrupled since the 1970s, with wide racial disparities (Travis, Western, and Redburn 2014). Rural incarceration has been understudied. However, Jacob Kang-Brown and Ram Subramanian (2017) identify a shift in the location of jails from urban to rural areas. This is due to a substantial increase—436 percent between 1970 and 2013—in rates of pretrial detention in rural counties, as well as growth in the number of rural jails, especially in the South and West, that are renting out jail beds to hold people for other authorities (Kang-Brown and Subramanian 2017).

After her father was incarcerated, Autumn moved in with her mother, who was addicted to drugs and alcohol. Clarissa saw her on the weekends. She suspected that Autumn was being abused, but her attempt to get emergency custody failed. Then Autumn and her mother abruptly moved without telling anyone, and Clarissa did not see Autumn for two years. One day, the Department of Social Services called and asked Clarissa if she would take her. Autumn had been living with Clarissa ever since.

Clarissa had experienced her own struggles growing up. “My mom grew up on a farm, poor in [Europe]. My father grew up on a farm here [in North Carolina], poor,” she said. Clarissa didn’t realize that her family was poor because they always had something to eat, but she eventually realized that the foods her mother cooked were “poverty foods,” cooked out of scarcity. “Biscuits with fatback on it. I thought fatback was a treat. It wasn’t. It was a fill-in. . . . I thought we were eating good, and it turns out, we were eating poor.” Clarissa vowed “to never be that bad off if there’s any possible way around it.” She was proud of how hard she had worked throughout her life. She started working at sixteen, eventually becoming a manager at a retail establishment, but in her fifties, she suffered from several complicated health issues that limited her mobility and meant she could no longer work. She got disability, SNAP benefits, and Medicaid. But it was not enough, she reflected. “Nowadays, money doesn’t go far.” Clarissa was grateful that she got both disability and SNAP benefits, but her disability check didn’t cover rent and the electric bill, and her SNAP benefits were reduced after she began receiving disability.

Clarissa’s family faced persistent food insecurity throughout our study: “They’ve cut my food stamps. Now I’m going to have to reevaluate how I’m spending. And right now I am pretty much out of food,” she said. Before her SNAP benefits were cut, Clarissa could stock the pantry each month, including the meat, peanut butter, and breakfast foods her grandchildren liked to eat. But the cuts in her benefits meant that now the family ran low on food nearly every month. Older adults are more likely to be food insecure if, like Clarissa, they

are caring for a grandchild (Ziliak and Gundersen 2016). Clarissa absorbed some of the costs that the foster care system would have to pay if she could not care for her grandchildren, and she also bore the familial “collateral consequences” of mass incarceration (Kirk and Wakefield 2018) and rising rates of addiction in rural communities. Clarissa never specified what “stupid decisions” her son had made that led to his incarceration; in general, however, pervasive rates of addiction are one of the factors that drive incarceration in rural areas (Kang-Brown and Subramanian 2017). Families like Clarissa’s perform the financial, emotional, and physical labor of care in the absence of an adequate social safety net.

Clarissa took in her grandchildren because there was no one else to do it. Their parents couldn’t raise them, and Clarissa didn’t trust the state. She experienced the state as a threat, vowing that “the state’s not going to put [the kids] anywhere. As long as I’ve got breath in my body, I will raise them.” At the same time, she relied on the state—not only to help support her family, but also to remove Autumn from her mother’s custody (see also Brant 2022, this issue). She had tried earlier and failed to get emergency custody and wished the state would have intervened sooner.

Clarissa expressed a fierce sense of individualism that reflects the contradictory relationship that many rural White Americans have with the state and the social safety net programs they need to get by (Hochschild 2016; Metzl 2019). Clarissa was proud that she had “raised [her] kids on [her] own with nobody’s help.” She felt conflicted about relying on social assistance, which she had started receiving only after she began caring for her grandchildren. As Jennifer Sherman (2009) finds, rural poor and working-class people assign moral value to different coping strategies. Some ways of getting by—particularly low-wage and subsistence work—are valued and considered morally and socially acceptable; others, such as receiving public aid in the form of welfare and food stamps, are stigmatized. Discussing how she sometimes went to a church that offered free meals, Clarissa said, “I feel bad, that I shouldn’t have to go there.” At the same time,

she railed against people who judged her for depending on public assistance or charities without knowing her situation. “I went to Walmart and got cussed out for using food stamps by people in line,” she recalled. “[They said] that’s where their tax dollars are going because my fat, lazy ass won’t get off my butt and get a job.” Clarissa admitted that she used to be the same way. “In my mind I would [say], ‘Look, they got all these kids and getting food stamps,’ but then when I wound up needing it, I understood.” Sherman similarly finds that the myth in the United States that the poor lack a work ethic and are lazy, deviant, oppositional, and dependent is so persistent that poor people often use these terms to describe “other” (that is, undeserving) poor people.

When we met Clarissa, she seemed quietly hopeful, determined to provide the children with some stability despite all of the challenges. “Family is the most important thing,” she said. But things only got worse for her family over the course of our study. She experienced problem after problem with her trailer: mold due to a leaky roof, an oven that didn’t work, a broken heating system and no insulation, and floors that were falling through. Her landlord refused to fix the problems, and Clarissa eventually fell behind on rent because she could not pay both her rent and the heating bills.

Two years after we met her, she lost custody of Cal, who went to live with his mother (Clarissa’s daughter). Eve, his sister, stayed with Clarissa. With one fewer child in the household, Clarissa’s SNAP benefits dropped by \$154 a month. “We have a lot more cereal nights,” Clarissa explained, referring to the nights when they would just have cereal for dinner, similar to the fatback and biscuits she thought of as treats when she was a child and only later realized they were eating because they were low on food.

Things started to look up when she found a new place to live, a farmhouse, closer to town. Eve and Autumn picked out their own bedrooms, and Clarissa looked forward to finally having a working oven and being able to bake again. The house had a big yard, so the girls could run around outside and see the cows in the field behind the house. Clarissa started

planning a garden, and hoped to grow tomatoes and watermelons. It did not last, however. A few months after they arrived, Eve went to visit her father, who lived several states away. When it came time for her to come home, he decided he would not take her back. Several months after that, Clarissa’s daughter asked Clarissa to move in with her. “I gave up my house and moved in with my daughter because she supposedly was sick. I was supposed to help take care of her and help pay the bills and stuff.” Clarissa soon learned that her daughter had not paid her rent in nine months. They were subsequently evicted. “They left me and Autumn on Thanksgiving with no power, no food, no nothing, in a cold house,” she remembered. “We were going up to McDonald’s and sitting in the warm until it was time to go to sleep. . . . I had no way, no money to buy no food, no nothing.” A former neighbor let Clarissa and Autumn stay with them through Christmas, and Clarissa managed to save up enough for the security deposit for another place.

In early January, having lived in four places over the previous year, Clarissa and Autumn moved into yet another trailer. “Every time it rains you can hear the water go between the little walls, there’s no insulation . . . The floor is falling through when you’re going into that bedroom. The floor is sinking already in the kitchen,” she said. Clarissa struggled to pay both the rent and the utilities. Given the trailer’s lack of insulation, thin walls, and structural problems, Clarissa’s electric bill sometimes climbed to \$350 a month, nearly as much as her rent. Clarissa tried to limit the amount of heat they used and had even stopped baking in the oven because it used too much electricity. “It’s keeping me stressed—trying to figure out [whether I] pay my rent or pay my utilities,” she said. The stress kept Clarissa from sleeping and gave her headaches. She had gained weight, and she felt that the stress couldn’t be good for her health. “I’m just worried that the stress is going to cause me to have a stroke,” she said.

Clarissa’s moves from one trailer to another illustrate how food insecurity and housing insecurity are interconnected. Many studies have demonstrated an association between food in-

security and unstable and vulnerable housing situations such as living “doubled up,” having to move frequently, or being evicted (Bowen et al. 2019; Huang and King 2018; King 2018; Kirkpatrick and Tarasuk 2011). However, determining the causal direction of the relationship is difficult. As Clarissa’s case shows, the linkages are likely cyclical. Moving itself is costly, and these costs are compounded by the higher heating and cooling bills that come with poorly insulated houses. Little money is left in the household budget for food. Many of the rural mothers in our study, including all three featured in this chapter, lived in mobile homes like Clarissa’s and struggled with similar challenges—high utility bills due to inadequate insulation, broken kitchen equipment, pest infestations, and flimsy structures that could easily be wiped away during a heavy storm or hurricane. As Esther Sullivan (2018) notes, mobile homes, more commonly known as trailers, provide the largest source of affordable housing in the United States. An estimated twenty million Americans live in mobile or manufactured housing (Salamon and MacTavish 2017). About half of these homes are located in mobile home parks or trailer parks, and three in four of these communities are found in rural areas (Salamon and MacTavish 2017), yet they are frequently unacknowledged or ignored by policymakers and in broader public conversations about housing and poverty. Studies show that the segregation of trailer parks, which sets them physically and legally apart from other rural communities, enhances othering the people who live there as “trailer trash” (Salamon and MacTavish 2017; Sullivan 2018). Moreover, many residents do not own the land their home is on (even if they own the home itself), and mobile homes have structural problems that create health and financial risks. Rental trailer parks tend to have the worst-quality housing (Salamon and MacTavish 2017). The social and spatial stigmas of trailer park life also intersect “to create a class of citizens for whom a precarious right to place is a daily reality” (Sullivan 2018, 25). With four moves in a few years and a series of poorly insulated houses that had been neglected by landlords, Clarissa’s story demonstrates how tenuous life in a rural trailer park could be. In the face of all of this, children had

to eat, putting mothers and caregivers in a double bind about where to spend the precious little funds they had.

Clarissa’s story also illustrates the importance of social and familial ties in the wake of mass incarceration and addiction epidemics that have swept across many rural communities (Kirk and Wakefield 2018). Without grandmothers like Clarissa to step in, children are left as wards of the state, taking their chances in a foster care system that may or may not protect them. At the same time, these caretaking arrangements are sometimes informal, often arranged with little notice, and lack the institutional and financial support that many children need—particularly those living in poverty or affected by family abuse and trauma (Braveman et al. 2018). Moreover, these caretaking arrangements can be easily ruptured by the state or family members, and they come with a large emotional and financial cost to families who are already struggling to get by. When Eve moved back in with her father, Clarissa keenly felt her absence. “She was with me for ten years,” she remarked sadly. “That’s my baby. I lost my baby.” As Marie Gualtieri (2019) notes, because grandparents often have informal rather than formal custody of their grandchildren, it is easy for them to lose their rights to care for the children when situations change within the family system, and they often do not have access to social services that they would have if they had formal custody.

Finally, Clarissa’s story illustrates how children experience the effects of persistent food insecurity even when the adults in a household work to protect them from it (Fram et al. 2011). Clarissa’s family was classified as experiencing very low food security throughout all three waves of our study, but like most caregivers (especially female caregivers) in food-insecure households, Clarissa tried to protect the children by feeding them first (Martin and Lippert 2012; Olson 2005). “The kids eat first. The youngest gets fed first, and then the next [youngest], and then the oldest. The children eat first, and if there’s anything left, I eat.” When we interviewed fifteen-year-old Autumn during the last year of our study, she expressed a clear understanding of her family’s food shortages. Sometimes, she said, she asked

for money to buy Takis or snacks, and her grandma told her they did not have enough. “I understand it because money is tight and stuff, so I’ll be like okay and I don’t get all upset or anything about it because I’m old enough now where I understand it.” Autumn also understood how having an extra child to feed put extra pressure on their food supplies. “The other week, my cousin was staying here and he eats a lot and so we started running low on food and we were out of ramen and we were out of milk.”

Although Autumn painted a picture of a house where her grandmother always managed to find something for them to eat, it all seemed to be taking a toll on her. Autumn was doing well in school, but she had chronic headaches and dizzy spells. Clarissa explained that she knew that “the stress of trying to figure out where I’m coming up with the money for bills isn’t helping her much either.” Autumn told us that she hoped to get a job as soon as she turned sixteen, at Walmart or Food Lion, so that she could help out with expenses. Autumn’s determination to help out was a common theme among families in our study with teenage children, who often started working so they could help pay bills or cover their own living costs (see also Burton 2007).

CONCLUSIONS

These cases, and our longitudinal analysis of the trajectories of rural poor and working-class families over a five-year period, reveal the ways rural families rely on the fraying resources of a fractured state and contingent family ties to address food insecurity. For the families in our study, even many of those considered food secure, SNAP often represented the difference between “getting by” and being hungry. In the wake of welfare reforms enacted in the mid-1990s, as social safety nets have become more contingent on paid employment (Collins and Mayer 2010; Hays 2003), SNAP has become an increasingly vital source of support to poor families, including the working poor (Dickinson 2020). SNAP helps people who cannot work (such as the disabled or elderly) and people who are between jobs; it also compensates for low-wage and volatile jobs that do not pay enough for families to get by (Keith-Jennings

and Chaudhry 2018). Even families who were relatively food secure and had steady employment, like Katina’s, needed SNAP. SNAP participants are overrepresented in jobs and occupations characterized by low wages and irregular schedules, including health-care aides (like Katina), cleaners, dishwashers, food preparation workers, and retail workers (Keith-Jennings and Chaudhry 2018).

Katina managed to stay food secure but felt that they were one step away from financial disaster. Katina worried constantly that “something” would come up. For Claudia’s family and many of the families in our study who experienced intermittent food insecurity, “something” did come up. Experiences of food insecurity were often associated with unexpected crises or hardships, echoing studies finding that food insecurity is linked to unexpected expenses, job loss or a lower than usual income, or other events that occur throughout the life course (Dubowitz et al. 2007; Jones et al. 2018). Over the five years of our study, Claudia’s family experienced health crises, seasonal shifts in employment, and a move to a new and more expensive city. They had few resources to weather these challenges. Their situation was made worse by complications with their SNAP and WIC benefits, including what Claudia perceived as discrimination by the case worker. As a mixed-status immigrant family, they worried about increased government surveillance and deportation, but sought out government assistance anyway because they needed to feed their family. Claudia relied on broader state networks that were ostensibly intended to help families like hers survive but also dehumanized her through bureaucratic entanglements of welfare reform (Hays 2003; Herd and Moynihan 2018) and brought the additional threat of deportation and surveillance (Menjívar and Abrego 2012).

Some of the families in our study were persistently food insecure, with several experiencing co-occurring bouts of homelessness or housing insecurity. For Clarissa, persistent food insecurity meant that her family had to rely on government benefits that she had long derided. Before she used the SNAP program, she had judged others for being dependent on the government. But in her mid-fifties, she

found herself with no savings, numerous health issues, and grandchildren to care for. The number of children being cared for by grandparents has increased as a result of mass incarceration and the opioid epidemic, which has decimated many rural communities (Dolbin-MacNab and O'Connell 2021). Grandparents function as a safety net not only for their families but also for the government, saving taxpayers approximately \$4 billion per year by keeping their grandchildren out of the foster care system (Generations United 2017). But, as occurred in Clarissa's case, this carework comes with emotional and financial costs, and grandfamilies experience higher than average rates of food insecurity (Ziliak and Gundersen 2016). Clarissa acquiesced to participating in SNAP only when she realized it was the only thing that would make sure her grandchildren would have something to eat. Her story of simultaneous dependence on and resentment toward the state is echoed in other studies of rurality and White working-class Americans more generally (Gest 2016; Hochschild 2016; Kramer 2016; Metzl 2019).

The interviews analyzed in this article took place between 2012 and 2017, before the COVID-19 pandemic, but we can expect that the pandemic will have long-term effects, exacerbating many of the inequalities described here. As of this writing, few studies have examined the impact of COVID-19 on rural households specifically. One study in the North American West, conducted in June 2020, found "the effects of the COVID-19 pandemic on rural populations have been severe," noting in particular higher rates of unemployment among rural residents compared to nationwide averages (Mueller et al. 2021). The authors note that rural jobs tend to be located in industries that were negatively affected by pandemic slowdowns and closures, such as tourism and factory work. Even before the pandemic, rural areas faced high rates of unemployment and underemployment. Early estimates suggested that food insecurity has been especially high in rural communities and counties during the pandemic (Feeding America 2020). The USDA's report on food insecurity in 2020 found that food insecurity rose in both city cores and rural (nonmetropolitan) areas between 2019 and

2020, but not among suburban households (Coleman-Jensen et al. 2021).

Given these projections, our research team reached out to all of the families in the study to understand how the pandemic was affecting their lives and experiences of food and food insecurity. Between May and November 2020, we conducted interviews with fifty-four of the families who were part of the original study. This was a brief interview (about thirty minutes, to minimize participant burden during the pandemic) to find out how the families were doing. We were able to interview only one of the participants from this article—Clarissa. When we interviewed her in July 2020, Clarissa was still facing the dual impacts of food and housing insecurity. She had moved again, and depended on SNAP and food pantries to get by, but said her SNAP benefits had decreased. With more people at home all the time and the increasing cost of food, Clarissa reported that she was not getting enough in benefits to keep her family fed. She also told us that because she was caring for her grandson informally while his father was incarcerated, she had not received the child stimulus payment for him. By failing to recognize informal caregiving arrangements such as Clarissa's, the stimulus package reproduced the long-standing practice of excluding family forms that deviate from the North American family ideal (Gualtieri 2019; Meyer and Floyd 2020; see also Brant 2022, this issue). As Kristina Brant (2022, this issue) finds, low-income families managing care at the intersection of incarceration may opt for informal caregiving arrangements to avoid increased state intrusion in family life, even though this comes at a cost of receiving less support from the state. Clarissa made sure her grandson ate before she did, skipping and cutting the size of her own meals, and had started buying cheap foods like ramen noodles and canned spaghetti that she would rather avoid. The rural area where she lived offered only two food pantries that Clarissa could access during the pandemic, and both were struggling to keep up with demand. Before COVID, nearly all of the families in our study, both rural and urban, made use of free and reduced lunches at school for their children. Many families told us, however, and we saw during nu-

merous school lunch observation visits, that children did not necessarily like the food. Like several other rural families we spoke with, Clarissa was not regularly picking up the free school meals being offered at her grandson's school, saying she felt that others were worse off and needed them more than she did. Other families talked with us in 2020 about how their children did not like the foods, or how they struggled to get to the school pick-up sites because they were working and could not take time off during the day (Elliott et al. 2021). Clarissa was also very worried about her incarcerated son. The prison had reported COVID cases, including in her son's block, and her son said that they were all put in solitary confinement to reduce the spread of the virus.

Before, during, and after the pandemic, the social processes that were associated with food insecurity—working in low-wage jobs, experiencing housing insecurity and health crises, facing increasingly restrictive immigration policies, and caring for children in the absence of state support—were not necessarily distinct to rural areas. However, the environmental, economic, and social context of living in a rural area shaped participants' experiences of food insecurity. Living in rural communities also offered both opportunities and challenges. Place mattered for the families in our study, particularly those who lived in rural areas. As Linda Burton and her colleagues (2004) argue, many people grapple with their sense of home throughout their lives; this is especially true for marginalized communities that draw on, or yearn for, a real or imagined “homeplace” that offers belonging, self-awareness, political consciousness, and respite from the harsh realities of lived oppression. Katina benefited from the support that came with living close to her family in the same place where she had grown up. But to stay in her rural community—her homeplace—and find work as a CNA, Katina had to commute forty miles, and her ability to stay employed required the support of family members who could put her daughter on the bus each morning and provide a free place to live. Moreover, Katina's job didn't pay enough to allow her to build a financial cushion. Rural sociologists argue that globalization and neoliberal trade policies have contributed

to a reduction in the number of good jobs in rural areas as better-paying manufacturing and agricultural jobs have decreased and low-wage, often part-time service-sector jobs have increased (Falk and Schulman 2003; Brown and Schafft 2011; Ulrich-Schad and Duncan 2018). North Carolina specifically lost more than a hundred thousand jobs between 1994 and 2000 as a result of free-trade policies (such as NAFTA), in textile, apparel, and furniture manufacturing, and rural counties have been the hardest hit (Hossfeld, Legerton, and Keuster 2004).

Like Katina and many of the other rural mothers in our study, Claudia was able to draw on skills from her youth to raise chickens and grow produce in her rural home, but this community was also far away from high-paying jobs and adequate health-care facilities, which she needed after being injured in an accident. Like other families in the study, Katina's and Claudia's families harnessed elements of life in a rural community—space to garden and (in Katina's case) supportive social networks—while paying the price in higher gas bills and a longer commute time to work. Rural communities often have no public transportation, and as Claudia's and Katina's cases show, families must go where the jobs are, often necessitating long commutes.

Rurality also influenced the housing situations of the families in our study. As Katherine MacTavish, Ann Ziebarth, and Lance George (2014) summarize, by many measures, rural Americans appear to be better housed than their urban counterparts. Rural residents are more likely to own their homes and pay less for housing than their urban and suburban counterparts. Yet rural areas face shortages of affordable housing and have substandard housing, and nearly half of rural renters are cost burdened, meaning they spend at least half of their income on rent (MacTavish, Ziebarth, and George 2014). Both Claudia and Clarissa were cost burdened; we observed how they struggled to pay the rent and buy food and how they constantly redirected resources from one part of their budget to pay for another (Heflin, London, and Scott 2011), running low on food near the end of most months. All three of the families described in this article, and many of the

rural families in our study, lived in mobile homes; Sullivan (2018) argues that mobile home residents experience social and spatial stigmas that contribute to their precarity (see also Salamon and MacTavish 2017). We saw how inadequate insulation led to exorbitant heating bills, and in Clarissa's case observed how substandard housing forced her to move multiple times in a short period. Clarissa was housing insecure throughout the study and experienced homelessness at one point. Her case illustrates how housing insecurity and food insecurity are often interlinked.

In sum, the narratives analyzed here support studies showing how food insecurity and other forms of hardship (such as housing insecurity, financial crises) are linked. Importantly, this study also illustrates how experiences of food insecurity are shaped by events that families experience across the life course, as well as social contexts, including the communities where people live (and the rurality of these places). The three rural families profiled in this paper, and the rural families in our larger study, navigated precarious employment, a lack of reliable transportation, housing insecurity, and an inadequate safety net as they fed their families. Living in a rural community offered both challenges and opportunities.

These cases demonstrate how rural families make their way when good jobs are scarce and social assistance is inadequate and stigmatized. Feeding their families was a top priority for the women in our study, and they sacrificed to be able to do it. The deeply rooted social networks of many rural residents helped them get by, but these networks were also precarious. Paying close attention to the narratives of three families, whose experiences are emblematic of the situations and stories we heard throughout this project, we find that living in a rural community affects how families experience common life course events (births, deaths, migration, health struggles, aging) and the resources and support they were able to draw on as they navigated feeding their families in challenging times. Future research should focus on how the COVID-19 pandemic and the resultant traumas it has enacted in many rural communities has impacted these realities and reshaped family and community life.

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When Mamaw Becomes Mom: Social Capital and Kinship Family Formation amid the Rural Opioid Crisis



KRISTINA BRANT 

Amid the opioid crisis, the number of kinship families—or children living with relatives—has risen dramatically, particularly in rural communities. Using in-depth interviews with relative caregivers and local legal actors in Appalachian Kentucky, I consider how rural kinship families are formed. I demonstrate how relatives' experiences depend on the social capital they hold with local legal actors who regulate kinship care. Whether a relative possesses positive, negative, or no social capital with these actors affects their ability to secure their ideal legal arrangement and the level of surveillance they must endure. These findings illuminate how seemingly rigid legal processes can reproduce inequalities in rural jurisdictions. In this case, the unequal distribution of legal-specific social capital precipitates different levels of stability and support afforded to rural kinship families.

Keywords: child welfare, kinship care, opioid crisis, rural communities, social capital

Over the course of the twenty-first century, the United States has experienced a widespread and increasingly deadly opioid crisis. By 2020, opioid-related overdose deaths had increased by more than 800 percent, reaching a peak of nearly seventy thousand deaths in 2020 (Ahmad, Rossen, and Pegram 2021). Even more are currently navigating opioid use disorders (OUD). In 2019, an estimated 9.7 million people misused prescription opioids, and 745,000 used heroin (SAMHSA 2020). Rates of OUD and opioid-related overdose have increased across age groups but have been consistently highest for individuals ranging from twenty-five to

forty-four years old—peak childbearing and parenting age (Scholl et al. 2019).

Although the opioid crisis has affected communities across the United States, certain rural regions—such as Central Appalachia—have been particularly affected (Rigg, Monnat, and Chavez 2018). These regions not only experienced the highest opioid prescribing rates, creating large local supplies of opioids (McDonald, Carlson, and Izrael 2012), but also faced structural challenges—such as lack of access to mental health care—which created high local demand (Keyes et al. 2013; Monnat and Rigg 2018). As economic restructuring produced

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grave economic shifts in single-industry labor markets, scholars have also suggested that opioids may have offered a refuge from hopelessness and despair (Case and Deaton 2015; Dasgupta, Beletsky, and Ciccarone 2018). And beyond seeing some of the highest rates of OUD, rural areas have also tended to criminalize and stigmatize OUD more so than cities (Beety 2019).

In these rural places where OUD is both prevalent and criminalized, increasing numbers of children whose parents use drugs are now in kinship care—meaning they live with and are primarily cared for by relatives, such as aunts and uncles, grandparents, siblings, and family friends (Anderson 2019; Contreras, Villarreal, and Cohen 2021). In 2020, the number of children in kinship families reached an all-time high of 2.7 million (Annie E. Casey Foundation 2020). An extensive literature has explored the unique financial, psychological, and social challenges that relative caregivers face (Dunifon 2018). More recently, scholars have turned to consider such challenges in the context of the opioid crisis (Davis et al. 2020; Dolbin-Macnab and O’Connell 2021). Much less is known about how caregivers understand and navigate the legal processes that formalize and regulate kinship care (Pittman 2014). I extend this line of research to consider how rural relatives are navigating the assumption of a primary caregiving role of a relative child—what I call kinship family formation—amid the opioid crisis.

This study uses qualitative data collected in Appalachian Kentucky—a rural region often considered the epicenter of the opioid crisis (Quinones 2015; Macy 2018). Not only has this region witnessed some of the highest rates of OUD and opioid overdose deaths (Rigg, Monnat, and Chavez 2018), it has also responded to the opioid crisis in a particularly punitive manner, arresting and prosecuting substance use at

high rates (Spalding 2017). Consequently, local school staff in the region estimate that as many as 40 percent of students are being raised by a relative caregiver.¹ I draw on fifty in-depth interviews with relative caregivers and forty-seven with actors in the local legal systems that regulate kinship families.

Caregivers’ experiences navigating kinship family formation vary by a specific form of social capital derived from their relationships with key local legal actors. In this case, those key local legal actors include street-level bureaucrats and decisionmakers within the legal systems that govern kinship family formation, such as judges and child welfare case workers. The symbolic resources derived from these actors include direct assistance—such as approaching the county attorney to file for emergency custody—and surety of positive outcomes—for example, knowing a judge will grant you legal custody on the basis of your reputation or relationship. Caregivers with positive connections can draw on their positive social capital to secure their ideal legal arrangement while minimizing the level of surveillance they must endure.² Conversely, caregivers with negative connections may not only lack the power to secure their ideal legal arrangement but also attract unwanted and intrusive surveillance and punishment. Because such social capital is specific to place—derived from relationships to specific legal actors who operate within a given jurisdiction—caregivers may benefit from positive social capital in their home communities but find themselves lacking these advantages if their cases are located elsewhere.

These findings add nuance to our understanding of how the opioid crisis has affected rural families. Although scholars have proven that the opioid crisis has increased the prevalence of kinship families in rural areas (Anderson 2019; Contreras, Villarreal, and Cohen 2021), detailed the challenges such rural fami-

1. This statistic is collected by the Census Bureau at the state level, but no database tracks at the county level.

2. Kinship families possess different legal arrangements, ranging from formal legal custody or adoption to informal situations that lack legal recognition. Different arrangements may be preferred by different families based on their own circumstances. Within formal arrangements, kinship families will be given orders and monitored by the child welfare system and the court. The level of such surveillance can vary, based on the discretion of these local legal actors. Higher surveillance is more likely to lead to punishment, as legal actors are more likely to find a relative disobeying an order if they are given more orders and monitored more closely.

lies face (Hansen et al. 2020), and explored the coping mechanisms they use to traverse such challenges (Dunfee, Brown, and Schoenberg 2020), existing work has not considered the possible variation across these families' experiences. My findings demonstrate how rural families are unequally equipped to navigate kinship family formation amid parental opioid use. Social capital can benefit caregivers with positive connections to local legal actors but harm caregivers with negative connections—ultimately leading to differing levels of stability and support. Local legal actors who have worked in both rural and nonrural legal systems suggest that such a dynamic is less salient or common in the urban context, as individual caregivers are unlikely to know the specific local legal actors relevant to their case.

These findings also contribute to our understanding of rural legal systems more generally (Pruitt 2007; Pruitt and Showman 2014). Because of low population sizes in rural legal jurisdictions, people are more likely to know not simply the legal actors who regulate kinship family formation but also those who execute other legal processes. The social capital individuals hold with local legal actors therefore likely matters not only for child custody shifts but for other legal processes—like applying for disability assistance, facing a criminal charge for drug possession, or contesting an eviction. Ultimately, this study not only points to the inequalities created and perpetuated among rural families during the opioid crisis; it also sheds light on the ways that rurality impacts people's navigation of legal processes.

RELATIVE CAREGIVERS AND KINSHIP FAMILY FORMATION

In both urban (Stack 1974) and rural (Duncan 1999) contexts, research has illuminated the numerous forms of social support provided by kin networks. One such form is childrearing assistance. Parents, for example, may choose to live in multigenerational or extended family households as an “adaptive strategy” (Moen and Wethington 1992) amid economic challenges to lessen childcare cost burdens (Cross 2018; Pilkauskas and Cross 2018). Rural residents are even more likely than nonrural residents to re-

side in such nontraditional households, as kin support can close the resource gaps in rural communities lacking organizational infrastructure (Brown and Lichter 2004; Barnett 2008; Yancura et al. 2020).

Yet family members may also take on primary caregiving roles when parents are not able to, perhaps due to health issues or incarceration. Research tends to focus on skipped-generation households, in which grandparents serve as primary caregivers (Dunifon 2018); however, a much broader pool of relatives may step into these roles, including aunts and uncles, cousins, siblings, and family friends (Zinn 2010). Transitioning a child to a relative-headed household—a “kinship family”—can again serve as a type of family adaptive strategy, whereby a relative can both support the parent and protect the child (Gleeson et al. 2009).

The state, however, may also call on relatives when seeking to remove a child from their parents, such as in instances of parental substance use (Crumbley and Little 1997). In these situations, the state initiates the creation of kinship families. In doing so, the state draws on the power of kin networks (Berrick 1998) while infiltrating and exploiting organic family support structures (Roberts 2001). The state enforces a transition that families may have made independently, potentially adding unnecessary intrusion and rigidity (Brown, Cohon, and Wheeler 2002).

Although kinship families may look the same—a relative head of household and no biological parent present—they take on diverse legal arrangements when formed. Relatives may serve as informal caregivers or guardians while legal custody remains with the biological parent; they may become legal custodians, suspending the biological parent's rights; they may adopt, terminating the parent's rights; or they may serve as relative foster parents while the state holds legal custody. Although the family initiates informal caregiving and the state initiates foster parenting, either party may initiate custody shifts and adoption. These legal arrangements dictate both the resources available to caregivers and their control in these roles (Pittman 2015). Arrangements that provide greater financial resources require caregiv-

ers to endure more intense surveillance and cede greater control over their families to the state (Mandelbaum 1995; Roberts 2001; Rankin 2002; Goodman et al. 2004).

Despite ample research on the outcomes of relative caregivers and their children, much less is known about how caregivers form kinship families. In one of few studies on the topic, LaShawnDa Pittman (2014) considers how Black custodial grandmothers in Chicago engage in “institutional decision making” to choose the legal arrangement best for their family. She finds that grandmothers’ decisions hinge on how parents respond to the grandmothers’ attempts to take on caregiving roles. Such decision making enables these grandparents to exert agency and achieve family stability, despite the disadvantages and challenges they face.

I extend this line of research to consider how rural relative caregivers navigate kinship family formation. Do all rural caregivers possess this power to choose the ideal legal arrangement for their family? If not, who does and does not possess this agency, and why?

NAVIGATING RURAL LEGAL SYSTEMS

In executing and navigating legal processes, both legal actors and everyday citizens draw on their “legal consciousness,” that is, their commonsense understanding of the law (Ewick and Silbey 1998). Across diverse legal contexts, from cockfighting (Young 2014) to welfare receipt (Sarat 1990), scholars show how legal consciousness structures people’s interactions with the law and legal actors. For example, legal consciousness can affect whether someone will report street harassment (Nielsen 2000) or try to evade paying taxes (Cornut St-Pierre 2019).

Scholars have found that legal consciousness varies by factors such as race and class, given that unequal experiences create varying levels of trust in the legal system and differing senses of entitlement (Merry 1990; Young and Billings 2020). Such differences in legal consciousness can ultimately lead to unequal legal outcomes because legal systems privilege cer-

tain interaction styles over others. For example, in his study of an urban criminal court, Matthew Clair (2020) finds that middle-class defendants tend to trust their lawyers on the basis of cultural similarities, whereas lower-class defendants have developed mistrust in response to a lifetime of surveillance and criminalization. Consequently, whereas middle-class defendants defer to their lawyers, lower-class defendants may withdraw from them—ultimately leading to worse outcomes.

Yet legal consciousness also differs based on context—for example, across urban and rural communities. Considering legal actors, Ke Li (2016) demonstrates how rural Chinese lawyers are often socially connected to their clients and adversaries because of low population sizes. Such social ties affect these lawyers’ decisions as to whether to extend or withhold legal services to a potential disputant; their case screening is socially motivated. Considering everyday citizens, Lisa Pruitt (2007, 2008) argues that the rural context can affect whether rural women report domestic violence. These women may choose not to seek help if they believe that law enforcement or support services might know the perpetrator and either delegitimize or deny their experiences.

If the low populations and social connectedness of the rural context shape how people understand and utilize the law, then we might imagine how rural relative caregivers’ navigation of kinship family formation could be affected by such features as well. In the analysis that follows, I investigate this premise using interviews with both rural relative caregivers and the local legal actors that regulate kinship family formation in their communities.

RESEARCH DESIGN

This study draws on qualitative data from Appalachian Kentucky—a rural region within Central Appalachia.³ Central Appalachia is often considered the epicenter of the opioid crisis (Quinones 2015; Macy 2018) because it was characterized by a perfect storm of conditions that made residents susceptible to opioid dependence. For decades, Central Appalachia was oc-

3. The Appalachian region extends from Mississippi to New York. Central Appalachia includes West Virginia, eastern Kentucky, southeastern Virginia, and northeastern Tennessee.

cupied by extractive coal industries, which controlled local governments and stifled economic growth (Gaventa 1980; Eller 1982, 2008). When the coal industry fell into decline, not only did high-paying jobs disappear, but so did workers' identities (Lewin 2019). Given the economic and social despair these industries left behind and particularly high opioid prescribing rates, Appalachian Kentucky witnessed one of the largest increases in the incidence of OUD (Wilt, Lewis, and Adams 2019).

Coincidentally, this region has also seen one of the largest increases in the prevalence of kinship care (Annie E. Casey Foundation 2020). From 2013 to 2017, the number of Kentucky children in kinship care increased by 75 percent (KYA 2018). This increase is partly due to overdose deaths but also a result of the increased punishments for parents who use opioids. From 2013 to 2017, low-level drug-related offenses propelled a 31 percent increase in Kentucky's jail population (Spalding 2017), creating some of the highest parental incarceration rates in the United States (KYA 2020). Even if an arrest does not result in sustained jail time, the state can still remove children for parental substance use alone (KYA 2018). Relatives may also choose to initiate kinship care independently, fearing that child welfare involvement would eventually be inevitable.

Rather than focusing on a single community, my interview sample includes respondents from several counties across the region. On the one hand, focusing on the region as a whole best protects the identities of a vulnerable group of respondents. Yet it also ensures that findings are not specific to the particularities of a single county's legal system. Because it is the low population size and social connectedness of rural areas that shapes rural legal consciousness (Li 2016; Pruitt 2007, 2008), including rural counties of varying sizes and distances to the nearest metropolitan area (Economic Research Service 2021) ensures that I can identify themes common across counties while keeping an eye to potential variation.

Data and Methods

This study draws on in-depth interviews with fifty relative caregivers and forty-seven local legal actors who regulate kinship families.⁴ I first recruited caregivers by visiting support groups hosted by schools and community-based organizations. After potential respondents provided their contact information, I followed up to set up private one-on-one interviews at a location of the respondent's choice, or via phone or FaceTime. This method, however, reached only families who are more connected to information and a support network. Therefore, starting with those recruited through support groups, I used snowball sampling, asking respondents to connect me with other kinship families (Weiss 1995). This strategy enabled me not only to reach respondents who were more isolated, but also to approach these families with familiarity and trust (Atkinson and Flint 2001).

Key characteristics of the sample of relative caregivers are summarized in table 1. The sample reflects the diversity of this population, including grandparents, great-grandparents, aunts and uncles, great-aunts and great-uncles, and fictive kin (that is, family friends). These caregivers had a variety of legal arrangements—from informal care to adoption, were from a range of class backgrounds—from those receiving only social welfare benefits to those who work as lawyers and teachers, and represented a large range of ages—from twenty-seven to eighty years old. Reflecting the demographics of a largely racially homogenous region, these caregivers were all White.

Interviews with these relative caregivers ranged from forty-five minutes to three hours in length. Interviews were generally open ended; I asked relatives to share their caregiving stories, and I probed to fill in the gaps in these stories along the way. All interviews covered typical demographic information, observations of the caregiver's community, relationships with the biological parent or parents, experiences with law enforcement and the criminal justice system, experiences with the

4. This article derives from a larger study, for which I also conducted ethnographic observation, interviews with parents who use or used drugs, and interviews with other (nonlegal) service providers. This article uses only the two subsets of data described here.

Table 1. Summary of Sample of Relative Caregivers ($n = 50$)

Characteristic of Relative Caregiver	<i>n</i>
Relationship of caregiver to children	
Grandparent or step-grandparent	32
Great-grandparent	5
Great-aunt or great-uncle	4
Aunt or uncle	3
Fictive kin	6
Household arrangement	
Only adult in house	13
Resides with at least one other adult	37
Legal status of kinship arrangement	
Informal arrangement or guardianship	9
Legal custody	30
Adoption	4
State custody (caregiver is a foster parent)	3
Some combination of the above	4
Process of kinship family formation	
State-initiated	21
Family-initiated	23
Both	6

Source: Author's tabulation of primary data.

Note: All characteristics are at the time of the interview. Some caregivers, for example, cared for a child informally before receiving legal custody later.

child welfare system, and access to financial and social support. I recorded interviews with a digital recorder, and after each interview took notes describing settings, facial or body language, and other interactions not picked up by the recording (Weiss 1995).

These interviews with relative caregivers also informed me on whom to include in my sample of local legal actors. Although I did not set out to conduct interviews with this group, it became evident that such data could provide useful perspectives for cross-validation. While interviewing relative caregivers, I took note of the legal actors they discussed when recounting their caregiving experiences. I then purposively designed a sample to include these different types of actors, contacting people in these roles in the caregivers' communities. The

Table 2. Summary of Sample of Legal Actors ($n = 47$)

Type of Legal Actor	<i>n</i>
Judges	
District court judge	8
Circuit court judge	3
Family court judge	2
Drug court administration	3
Prosecutors	
Commonwealth's attorney	2
County attorney	3
Public defenders	
Staff attorney	4
Social worker	1
Law enforcement	
Police chief	2
Legal aid	
Staff attorney	2
Protection and permanency (child welfare system)	
Office supervisor	9
Case worker	2
Case planning services	
Parenting class instructors	2
Family Support (social welfare system)	
Office supervisor	2
Child support enforcement	
Office supervisor	2

Source: Author's tabulation of primary data.

final sample, summarized in table 2, included child welfare case workers, public defenders, legal aid attorneys, prosecutors, judges, and child support workers, among others. These interviews ranged from thirty minutes to one hour in length and focused on how the respondent's respective institution views and interacts with kinship families.

I consider both sets of interviews to be ethnographic, given that they are situated within my observations living in the region and volunteering with institutions that serve both parents who use or used opioids and relative caregivers (Rinaldo and Guhin 2019). Such context informed the questions I asked respondents,

strengthened my ability to understand their circumstances, and enabled me to build trust and rapport. My local presence and knowledge were particularly useful for connecting with relative caregivers, many of whom were wary of governmental actors and academic researchers. Further, my visits to support groups introduced me to many respondents prior to their interviews, often providing me with context about respondents' situations that facilitated our conversations.

In conducting the interviews, I used sequential interviewing, drawing on each respondent to garner a deeper and more complete understanding of how relative caregivers were navigating their new caregiving roles, and how local legal actors shaped that process (Weiss 1995; Small 2009). Although I began by interviewing relative caregivers, I eventually conducted interviews with both samples simultaneously. Thus I could probe new topics with each group based on what I learned from the other. For example, as relatives explained how they approached county attorneys for help in their child custody cases, I then turned to county attorneys to ask who approaches them for help and how they proceed in these situations.

As data collection continued, I also transcribed and coded interviews along the way, writing memos on the themes that arose. Because I was initially interested in how rurality and place affected people's experiences—both as relative caregivers and as legal actors—I began coding with a primary code of “rurality.”⁵ I later developed a secondary code, “connections with legal actors,” and finally tertiary codes notating “positive connections,” “negative connections,” and “lack of connections.” I continued this interwoven process of caregiver interviews, legal actor interviews, and analysis until my understanding of how social capital shaped kinship family formation had stabilized (Patton 1980; Sandelowski 1995).

SOCIAL CAPITAL AND RURAL KINSHIP FAMILY FORMATION

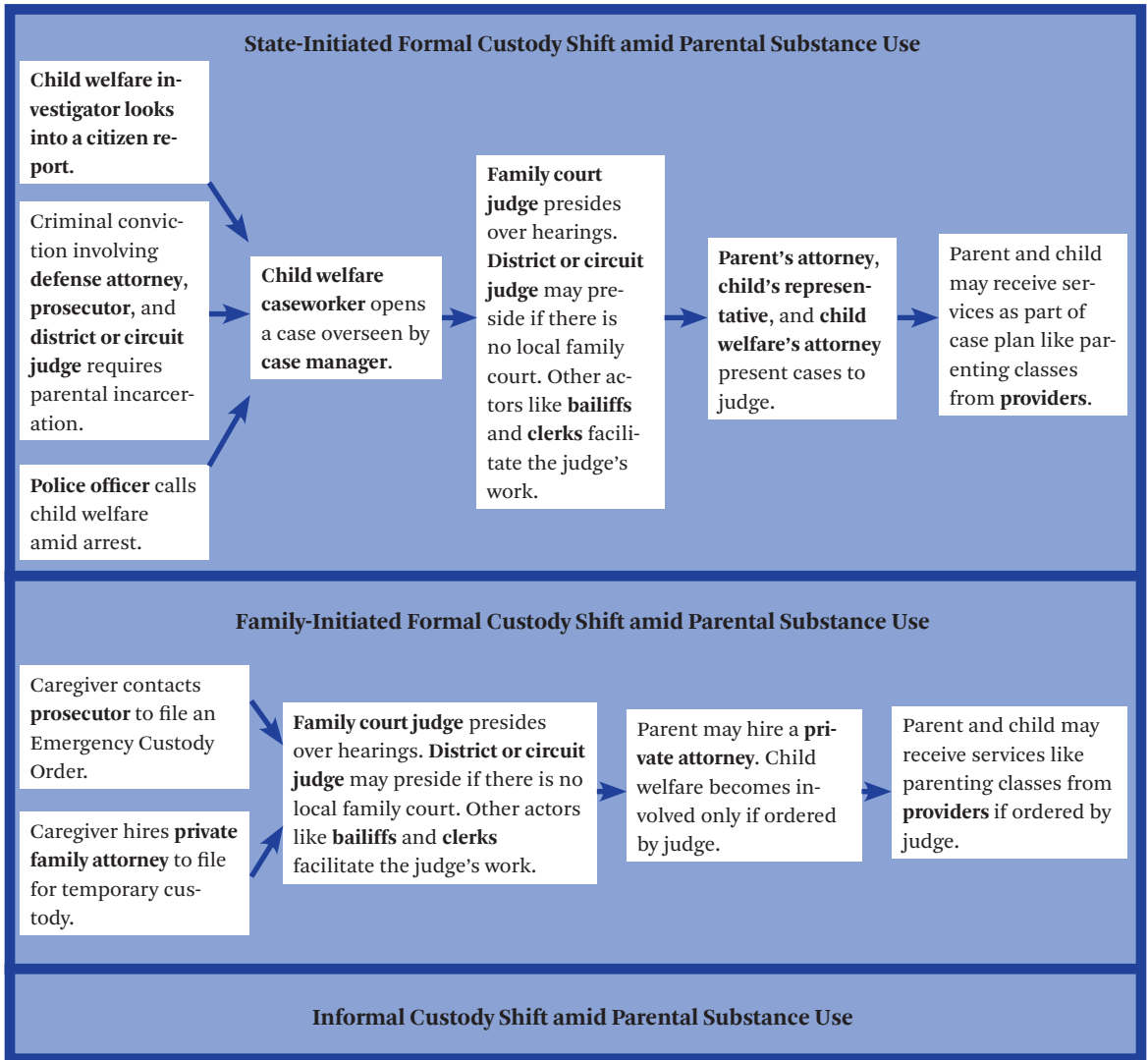
Across interviews, relative caregivers reported varying levels of stress and difficulty in their

initiation of kinship care. For some respondents, the process of kinship family formation was relatively smooth and involved little to no state intrusion. Although these respondents were navigating difficult familial challenges, they were able to secure legal arrangements that best suited their needs while avoiding unwanted surveillance. For other respondents, however, the process of kinship family formation was marked by fear, aggravation, and uncertainty. These respondents felt unable to secure a legal arrangement that met their financial needs and desire for stability, and they were overwhelmed by state surveillance and the threat of punishment.

Legal processes can be expensive, and certainly income impacts relatives' abilities to navigate kinship family formation. Relative caregivers face a trade-off between financial support and autonomy (Roberts 2001; Pittman 2015): whereas lower-income caregivers may feel coerced to trade autonomy for support, higher-income caregivers may be able to maintain autonomy without facing significant hardships. For families seeking to minimize state involvement, higher incomes also enable relatives to seek custody with a private attorney. However, even among families with similar economic capital, respondents experienced different levels of agency and comfortability in this process due to their direct and indirect connections with the local legal actors involved in kinship family formation. Figure 1 illustrates the process of kinship family formation when initiated by the state and when initiated by the family. Those local legal actors who execute and regulate this process are in bold, including such figures as child welfare caseworkers, judges, and prosecutors.

These legal actors themselves explained how they often know the parties in their work and the impact this can have on outcomes. When I met Allan, he was working as a public defender in a small rural county. Most of his caseload was drug related, and many of his clients were parents whose children were in kinship care. Regarding the nature of rural legal work, Allan said, “The first thing that you will

5. I also used other deductive primary codes, and added new primary codes inductively as I read. These, however, are not relevant here.

Figure 1. Legal Actors Involved in Kinship Family Formation

Source: Author's interviews with legal actors.

Note: Different actors are relevant if the process is initiated by the state or by the family. No actors are involved for an informal custody shift.

find in smaller counties is that they want to know who your people are . . . That's the first thing they try to figure out about everybody. They'll try to explain relationships based on how the networks interact. These people are the Smiths, and they've always been trash. That's common."

Allan contrasted the local legal system in the rural county where he was currently working with the legal system where he used to work in

a nearby medium-sized metropolitan area. Although this county is also in Central Appalachia and was also strongly affected by the opioid crisis, Allan found that social ties between legal actors and clients were not nearly as common: "There, no one remembers who your parents were. They don't remember your grandparents. The prosecutor doesn't know. A lot of times Social Services gets turned over enough that they don't really know either. But here, ev-

everybody knows. If your grandmother is a kook, or if she was in trouble the whole time your parents were younger, they're gonna know that. So yeah, there's a problem there. Especially in smaller counties, people will get remembered." Allan's clients were all low income, but he felt that clients' negative reputations and social ties could exacerbate the legal detriments they faced.

Judge Hansen echoed Allan, but she explained that though negative ties could serve as a detriment, positive ties could serve as a benefit. Speaking about rural legal systems, she said, "I think the biggest perk is everybody knows everybody, but the downfall is everybody knows everybody. It swings both ways." Thinking back to her work as a defense attorney, she recalled,

I was like, "My clients aren't calling me. Why am I here because they go directly to the county attorney?" Course it took me a while to figure out the county attorney wasn't gonna mess them over 'cause he knew them all . . . But then it swings the other way, when you walk in a court with your local person that's always in trouble, the judge knows that, the prosecutors, the police, everybody knows that, whereas if you're in a bigger city they may not know the backstory behind your client. But again that swings the other way in, yeah, they know the backstory, but they know their mom, they know their grandma, and they want to try to maybe help them a little bit more because it's not just a face; it's a person where they know the family.

Judge Hansen had recently begun her judicial position, and her hope was to ignore the "chat-ter" and make decisions based simply on legal facts. However, she recognized that in small towns, it is difficult to not know and be influenced by legal parties' backstories.

Although Allan and Judge Hansen were specifically speaking about criminal court, local legal actors also discussed how social ties could impact evaluations of potential relative caregivers in family law matters. Dave, a county attorney, often sees child abuse and neglect cases in his role, as relatives can approach the county

attorney's office to file for emergency custody. He expressed a concern that I heard from many legal actors: that relatives may not necessarily be the best caregivers for children, especially if they had "failed" raising the biological parents in question. However, Dave explained "exceptions" to this rule. He might know some relatives personally and feel certain that they would be good parents, yet eye others, about whom he had heard negative things, with greater skepticism.

D: The difficult part of that is you've got grandparents, you've got parents, you've got children. The parents are both drug addicts. Sometimes it's hard to give custody to the grandparents because you know, in the back of your mind, they raised these people, and look how they turned out—not good. Do we really want to send the grandchildren into that situation? And there are exceptions. There are exceptions where I know the grandparents, and they worked very hard. They tried to do as much as they could, and the kids, just for whatever reason, they got hooked on drugs. . . .

K: But how do you figure out who's who? Who's gonna be bad and who's the exception?

D: That's the good thing about being from here. Because even if I don't know, I know someone that does. I know someone that lives up the road. I know someone that goes to the church where these people go to church. Something where I can get a little more background than what you can get from reading the paperwork.

Dave's goal was to do what was best for the child, and he believed that knowing things about the relatives—whether good or bad—could help him make an informed decision. Consequently, a positive social tie with Dave may help a caregiver's case, while a negative tie may hurt it.

Outside the courtroom, social ties between parents, relatives, and actors in the child welfare system were also common. Brenda, a case manager for one county's child welfare office, explained that caseworkers typically either

know a family personally or know of the family because of past work with them or their extended relatives:

We kind of reached the generation where a lot of relatives had more than one set of relative placements. For example, I placed two children with a great aunt last year, and then her other niece had a baby, and she ended up with placement of that baby as well. We have reached the generational gap where people are raising different sets of children. . . . Here, even though it's a large county [area-wise], it's relatively small [population-wise]. Here in our county, people know each other, and a lot of times if we worked with the family before, we know who their families are.

Negative impressions of a family in general could lead caseworkers to view a parent or relative in that family with enhanced skepticism. Yet Andrea, an instructor who works with parents needing classes for child welfare case plans, noted that connections to child welfare caseworkers could also help families avoid child welfare involvement: "In this area too, a lot of people are kin to each other, and [there are] some people who get really good at hiding the things that they do, and that's a big problem with ours, is where they don't come out of the holler, and they don't tell everybody's business, and if they do find Social Services on their doorstep, if they're kin to someone who knows someone at the courthouse, then that kind of disappears. It's the culture here. They're gonna cover their family and hope that they're gonna fix their own problem." As Brenda and Andrea explained, legal actors' connections to parents and relative caregivers could influence how families were viewed and treated by the child welfare system.

That local legal actors are both connected to families and influenced by these connections has important implications for relative caregivers' navigation of kinship family formation. When relative caregivers possess social ties to these actors, the social capital derived from the ties may facilitate or impede their navigation of this process. Relative caregivers with positive connections to local legal actors

can draw on positive social capital to secure their ideal legal arrangement and minimize intrusive surveillance. Conversely, relative caregivers with negative connections may not have the agency to pursue their desired legal arrangement or may attract unwanted and degrading child welfare investigations. This social capital is inherently localized because legal actors only hold power within their places of work. However, relative caregivers' cases may take place outside their communities—for example, if the parent lives elsewhere or if they must travel for services. When relative caregivers must travel to a city or a rural county where they lack connections, they may face new uncertainties without the ability to draw on the social capital with the local legal actors they know.

The Benefits of Holding Positive Social Capital with Local Legal Actors

When I met Barbara, she and her husband were caring for three of their four grandchildren. By that time, the children's mother, Ashley, had suffered from OUD for nearly twenty years, serving multiple sentences in both the county jail and state prison. Barbara comes from a "good" family that has lived in the county for generations. She is a faithful member of her Baptist church, worked a respectable job in the school system for years, and is active in the community. Through her family, her church, and her work, she has accrued several connections to the local legal actors who regulate kinship family formation.

When Ashley, then a young single mother, was first arrested, Barbara knew to draw on the social capital inherent in these connections to secure Ashley's baby. As Barbara recalled,

I got a call that she'd been arrested for something, I can't remember exactly what it was for, so I said, "OK, we gotta get to that baby." I worked for the schools, so I made a call—"I need a favor." You know how that works. This person did me a favor, and he went through the court system and got the baby in our name, thank God. We had her in our name so they [the state and the baby's other grandparents] couldn't take her. Well my Amber [Bar-

bara's other daughter], she worked in the county next door for the state welfare department, so she was kind of telling us every move we had to make to make sure no one could get to the baby.

Barbara called this process “going through the back door.” She knew she wanted to obtain temporary custody of her granddaughter before the child welfare system could get involved and before the baby's father's parents could step in. Temporary custody would provide her the peace of mind that her granddaughter was stable with her until Ashley was in recovery. And, as Barbara learned from Amber, this legal arrangement would also qualify her for a financial support program. In addition to “going through the back door” for child custody, Barbara also described “pulling strings” to help Ashley too—helping Ashley get probation or a diverted sentence to enter treatment programs rather than sit in jail.

Barbara eventually gained temporary custody of Ashley's next two children, again circumventing the child welfare system and going straight to her contacts at the court. Over time, Barbara came to realize how essential it was that she had circumnavigated child welfare involvement. She detailed an incident that she believed could have turned into the removal of her grandchild from her care if the child welfare system had been involved in her cases. While Ashley was living with Barbara, Ashley took one of the grandchildren to another person's house, and the child watched Ashley and her friends use heroin. From her interactions with other relative caregivers, Barbara knew this was grounds for child removal for relatives who had open cases with the child welfare system. Luckily, however, Barbara had avoided such extended state surveillance. As she said, they were safe “because we never did actually go through the state. We went through the court system in the back door.” After the incident, Barbara never again left the children alone with their mother.

Technically, Ashley's parental rights have not been terminated because Barbara and her husband only hold custody and have not adopted the grandchildren. Ashley could attempt to win custody back. At this point—seventeen

years into their caregiving roles—Barbara and her husband would be happy to adopt their grandchildren. However, adoption is costly, and they are not able to afford it. The uncertainty of legal custody was a huge burden on some relative caregivers' minds, particularly those who feared that the parents could convince a judge to give custody back to them. This, however, was not a stressor for Barbara. Barbara felt strongly that if her daughter were to take her case to the local court system, the system would stand behind Barbara and her husband. She told me, “Matthew Campbell's the county attorney, and he swears that she can't come and get them, because they've been in our life for so long. I firmly believe that all the judges would—not a one of them would go against us. They're not going to . . . Because everybody in town knows us. And everybody knows Ashley.”

Barbara and her husband have been facing significant financial struggles. Caring for three grandchildren, their Social Security retirement income is pushed to the max. Now saddled with new medical expenses, their financial struggles have only intensified, and they have accrued significant credit card debt. But what Barbara has lacked in economic capital, she has made up for in social capital. By drawing on her connections with local legal actors, Barbara could select a legal arrangement that would ensure both short-term and long-term stability for her family.

Barbara stepped into a caregiving role on her own accord, but other relatives might not have been able to do so. In the event of an arrest or child welfare investigation, for example, a relative caregiver may either take custody or be a foster parent, but their range of potential legal arrangements is limited. Nevertheless, relatives could still draw on their social capital to secure their positions as caregivers or minimize intrusion by the state. Joyce, for example, called the state police herself when her two grandchildren, age two and three at the time, went missing from her daughter's home. After this incident, she planned to file for custody of the children on her own accord, but she realized that the state police were required to call Child Protective Services (CPS) to start an investigation. As a result, she was subject to ad-

ditional rules and procedures that would not have been in place had she avoided state involvement. She told me,

The social worker was asking things of us, and we're pretty level-headed people. We've got our game on. We just got these kids. It was like they were guiding us like sheep, and she told me, "You're gonna have to do this and this and this." I said, "Listen, I'll care for him and her, know we're giving them the best to their well-being possible. You've come in our home, you know what we are"—she actually knew my husband—but she was telling me I need to do this, and I need to do that. . . . She backed off.

Knowing their social worker personally, Joyce and her husband felt emboldened to stand up for themselves and minimize intrusion into their personal lives. Although they were not able to file custody independently and completely circumvent the child welfare system, they were still able to use their social capital to minimize state involvement.

Joyce and her husband still had to go to court every month, as the case workers updated the judge on their daughter's progress. At their permanency hearing, roughly a year after the children were removed, the judge was going to continue the hearing to the next month. Aggravated, Joyce decided to stand up and present her own case. As she recalled,

They don't want you to address the judge yourself, you're not allowed to talk, but finally I just stood up. I knew the judge, so finally I just stood up, and I said, "Can I say something here?" And he said, "What do you got to say?" And I said, "One, this is costing me a fortune. I had to take off work, shut down my business every month to come in here, and we're not going nowhere." They just wanted to continue it again, and I said, "Can we just finish it today?" I told them, "Drug test them." And finally he looked at them and said, "Can you all pass a drug test today?" He said, "If you can't, and you tell me you can, it's automatic ninety days' contempt of court," and they both said no they couldn't. He was gonna give them back that day. That was their day to

get them back, and they were gonna continue it because of something, and we're like, "Hey this is it, enough's enough."

Although the case was going to be continued, by standing up and speaking her mind, Joyce actually redirected the course of the hearing and was granted permanent legal custody. I had heard from others—including a foster parent—that this judge was typically short with parties, either not allowing them to talk in court or not listening to what they had to say. Yet Joyce's positive connection with the judge not only emboldened her to advocate for herself, but it also seemed to encourage the judge to listen to her. Ultimately, Joyce's social capital not only enabled her to minimize her case worker's involvement in their family life; it also helped her to secure permanent placement of her grandchildren.

The Detriments of Holding Negative Social Capital with Local Legal Actors

Not only did Barbara and Joyce know a number of local legal actors like prosecutors and judges, but these legal actors also saw Barbara and Joyce in a favorable light. The two could draw on the positive social capital inherent in these connections as they navigated kinship family formation. Although Barbara initiated this process on her own, and the state initiated Joyce's, both women achieved their ideal legal arrangement—gaining custody—and managed to avoid unwanted and invasive surveillance by the child welfare system.

However, the social capital inherent in connections to local legal actors is not always positive. For caregivers who have antagonistic connections with legal actors, whether directly or indirectly, social capital derived from the connections may be negative. In this case, caregivers may feel unable to take action in the kinship family formation process, choosing to avoid these legal actors at all costs. Although a caregiver would not approach a legal actor with whom they hold negative capital, as someone with positive capital would, these interactions may still be unavoidable. For example, a relative caregiver may have to interact with these legal actors at the time of a parent's arrest, at the time of child removal, or during an open

child welfare case. Therefore, negative social capital could also welcome increased surveillance and threats of punishment for the caregiver.

When I met Roxanne, she was caring for four relative children—a grandniece and three grandnephews. Roxanne's income was similar to Barbara's, the first grandmother I introduced; she works part time, and her husband receives Social Security Disability insurance. But Roxanne's reputation and social connections looked very different. When I asked Roxanne how her county supports parents and families navigating OUD, she responded, "I can't speak for other counties, but in this county—I don't know how to say this—if you don't have the name or if you're not in a clique, you're trash, no more than a fly. They don't care what happens to you. The court, the law enforcement, the social workers, the teachers. Nobody."

Like Barbara, Roxanne's family had also lived in her county for decades, but her people were considered "bad." Although Roxanne herself did not have many negative connections with people in her community, her family's negative connections spilled over so that she too was seen in an unfavorable light. Recognizing the importance of one's networks, Roxanne took a new job at a local institution to try to forge positive connections. Although she felt that some people were starting to recognize her and trust her, she could not overcome the more entrenched negative perceptions about her family.

Roxanne felt that her negative social capital with local legal actors—particularly with law enforcement and the child welfare system—had made her caregiving experience significantly more difficult. For example, Roxanne was subject to an especially extreme level of CPS surveillance, enduring multiple unsubstantiated investigations in only a short period. She believed this harassment was a result of two factors. First, she had spoken out about her past difficulties with the local child welfare office, pointing to their lack of transparency and questioning whether they truly follow procedures as they are supposed to do. In gaining custody of her relative children, she had felt that the child welfare office had not adequately

communicated with her, connected her with resources, or respected her. She believed that word of her complaints had gotten back to them and that they were now taking it out on her. Shortly after she had spoken out, Roxanne recalled,

Social workers up here start harassing me, calling me saying, "Well, we've got a report of abuse. Austin has a knot on his head. You need to take him to the ER and have him completely checked." So I take him over there and get him completely checked out. He's fine, no knot on his head nothing. . . . So then we go along, and I get a letter in the mail saying "Your case has closed. We found the report unsubstantiated. . . ." Couple months later, they come back. I think it was the social worker was angry—the one that I reported—so she sends them out. Jesse's got a bruise on his arm. How'd he get this bruise on his arm? So he told them he had a bicycle wreck. "OK, well we gotta keep the case open. . . ." A couple of months after that case was closed, they go to school to talk to my kids because Jesse has a cut on his arm where he had broken my window out of the back door—he elbowed the back window because he was mad. . . . So they pull all of my kids out of class, and this is like the third time they've been to school, taking my kids out of class, ostracizing them in front of all the staff. And you know the teachers know that those are social workers. So that makes the kids feel bad. . . . Last Friday I get a letter in the mail saying they want me to take Jesse to the next county over to have him evaluated for sexual abuse. By that time I'd had enough. . . . I'm tired of her harassing me. The only reason she's doing this is because I reported her for not doing her job.

Roxanne had never endured such a high level of surveillance until she spoke out against this caseworker, initiating a negative tie. Roxanne went from interacting very rarely with the child welfare office to enduring what felt like near constant open investigations for an entire year.

In addition, another child welfare employee knew Roxanne's niece (Jesse's mother), and Roxanne felt that this employee was waging a

personal vendetta against her. She believed that this employee encouraged the constant investigations, searching for something that would allow her to punish Roxanne and her family. She continued, “I heard Kasey [the employee] with my own ears telling the police officer how she could not stand my niece, she hated her guts, and she was gonna take her child one way or another. I heard her say that with my own ears. Yes, she is vindictive.”

Roxanne felt so beaten down and discouraged that she decided she could not continue—both for her sake and for the children’s. She did not believe that she had the social capital needed to make this harassment stop and achieve stability for her family. Her last resort—her only claim to agency—was to relinquish her caregiving role. Although she had legal custody of the four children, she planned to informally relocate three of them to live with other relatives. She told me, “They harassed me so much I just said it’s not worth it. And I told them, I said, ‘You know I’ve tried and tried and tried to help these kids, and you all will not let me do it. So I’m done, I can’t do it anymore.’”

Roxanne had initially been awarded legal custody of her grandniece and grandnephews by the state, their parents having suggested her as a relative placement at the time of child removal. Doris similarly came to be the primary caregiver for her great-niece, although the state had not been involved. When Doris’s niece had to flee the state due to a warrant, she left her daughter, Becca, with Doris and signed a note to give Doris educational and medical rights.

Unlike Barbara and Joyce, Doris did not think that she had the agency to pursue her ideal legal arrangement. As an informal caregiver, Doris had few avenues for financial support. She was facing considerable financial hardships, as she had recently battled cancer and was receiving only a meager Supplemental Security Income (SSI) check. Pursuing temporary custody would enable her to access other financial support programs, such as state-funded child support. Legal custody would also ensure that Becca’s father and other grandmother could not try to take Becca from her. Past visits had proven to Doris that neither would be an adequate caregiver, and she worried about what would happen should her

grandniece be in their care full time. Yet pursuing custody did not seem feasible and Doris feared that the process could open her up to lose Becca. Doris’s mother, whom she lives with, had gotten custody of Becca’s mother years back. She worried about the stigma that her family could face—child welfare workers would know that Doris’s mother raised Becca’s mother and “failed.” Doris could not ensure that they would give Doris and her mother a second chance. Unlike Barbara, she did not know for certain that she would be granted temporary custody if she filed for it in court. Doris explained,

We spoke to a lawyer, and she said hold off till Becca was about twelve, and then she can say who she wants to live with. McKayla [her niece] just left her. I’ve got a paper that McKayla signed that I can do all of her health stuff and all that stuff. Then McKayla came in and wrote a paper and had it notarized that she wanted me and mom to have her, but the lawyer said that wouldn’t hold up in court. If her dad comes in, she’s never been around him. We were trying to avoid that.

Doris felt stuck in this period of limbo. She did not want Becca’s other family to petition for custody, but at the same time, petitioning for custody herself could prompt the state to give Becca to the other family anyway. She was left waiting until Becca was old enough so that they could approach the court system with more certainty of their outcome.

As an alternative, a school employee had suggested that Doris cede custody of her grandniece to the state to try to become a relative foster parent, which provides monthly payments. Barbara, the grandmother with positive social capital, had tried to do this herself; although potentially ceding custody to the state was scary, she knew that her connections in the court system would ensure that the children would stay with her. Doris, however, refused to do so. Again, she worried that knowledge of her family’s situation—and the multigenerational pattern of addiction that resulted in both McKayla’s removal and then Becca’s abandonment—could prompt caseworkers to refuse to give Becca back to her. She told me, “I’d be

afraid to do that. I wouldn't want to put her through that. I mean that's crazy. And then the kid has to go through trauma. They [social workers] make you look like a bad parent, don't you think? I wouldn't trust them. I'd be scared to do it."

Unlike Barbara, Doris did not have the assurance that the child welfare system would grant her foster parent status. She not only lacked positive social capital to draw on, but also worried that her family's negative reputation could harm her outcomes.

The Uncertainty of Lacking Social Capital with Local Legal Actors

Whereas Barbara and Joyce were able to secure stability for their grandchildren, Roxanne's and Doris's stories demonstrate the tumultuousness and lack of control experienced by families holding negative social capital with local legal actors. Doris felt stuck in a tenuous and uncertain legal arrangement, in which her grandniece's father could try to seek custody. She was fearful of pushing for a legal change, which could provide her greater stability and financial support, because she felt that the state could choose to take her grandniece from her on the basis of negative perceptions of her family's history. Without having positive connections, Doris did not feel confident that she would maintain custody, as Barbara and Joyce did. Roxanne believed that her negative connections had attracted incessant CPS investigations and a constant threat of punishment. The only agency she had was to ignore CPS's orders and give her children up.

The social capital that can benefit or harm caregivers is specific to place: it is derived from the connections one has to the specific legal actors who hold power in that local legal system. Even if a caregiver holds positive social capital in their own town, derived from their networks there, they could lack such capital if their case spanned to another rural county or a nearby city. In these situations, caregivers found themselves in a new position of uncertainty; despite having more agency within their home counties, they felt powerless in communities where they did not have it.

Like Barbara and Joyce, Phyllis had positive social capital in her community. Although it

was her husband's hometown rather than her own, she had lived there for years. She was also an active volunteer for numerous organizations, doing work that put her in frequent contact with local legal actors. In their own county, Phyllis and her husband had obtained legal custody of four grandchildren, whose mother, their daughter, struggled with OUD. But their son John had moved to his wife's hometown in another county in the region where Phyllis and her husband did not know anyone. John's wife's family had lived in this county for years and was deeply embedded in the community's social fabric. Phyllis witnessed this family leverage their positive social capital with local legal actors to gain custody of their grandson. She explained: "Wanda [John's mother-in-law]—being very vocal and strong willed—she thought that they could get one over on him [John], and they did. They got Social Services involved because the mother-in-law knows everyone and has family down there. Knew everyone at Social Services. . . . So, by the time we got halfway over to the court that day, my son under duress had signed off the rights to his child, because that's what the mother-in-law and Social Services told them to do." Phyllis had suspected that Wanda had initiated this process in the first place because she was seeking to use her grandson's SSI benefits for herself.

Phyllis called lawyers to help John, but each one told her they could not take the case for a conflict of interest; when she called the child welfare office, she felt that she was blown off. She believed that she would never win custody over a family who was well connected in a county where she was not. Consequently, Wanda has held all the power in dictating when Phyllis can see her grandson and when John can see his son. John has since divorced his wife and has collected evidence that could get his in-laws in trouble, potentially allowing him to get his son back. However, Phyllis and John doubted that they would have any success because they recognized that the in-laws' positive capital protected them. Phyllis told me, "John has bettered himself. Their daughter has gone off the deep end. . . . We have everything and anything we could get on this woman. He's kept all the text messages to where they won't

let him see his son. He knows her [Wanda's] history because she's a drug addict, and she sells her pills and buys pills. He's got everything on her. . . . But when you live in a county where you can get by with whatever you want to, how can you get them in trouble?" Without their own social capital in this county, Phyllis and John felt that they had no say in determining the living arrangement for the child.

Although lack of social capital prevented Phyllis from achieving her ideal legal arrangement for her grandson—either securing custody for herself or for John—Maureen learned how a lack of social capital could open her up to surveillance and potential punishment. When I met Maureen, she held legal custody of her two grandchildren, whose mother was serving a state sentence for a drug-related crime at the local county jail. Maureen struggled financially because she had been denied disability benefits and was fighting her case to access support. However, like Barbara, what Maureen lacked in economic capital, she made up for in social capital. Multiple times, Maureen took care to tell me about how she was connected in her community—she runs a parent support group and sits on a community agency board. This work has put her in contact with many local legal actors, such as the caseworkers in her local child welfare office. She believed these connections had helped her gain legal custody of her grandchildren, juxtaposing her own case with others: "The judge that I had, he was great, but I do know he was a case-by-case judge. It was who you are, who you know. I knew him. This town is who you know, it's small, it's who you know and who you are. I know people it's hurt. Some people it's hurt them not necessarily by who they were but who they were associated with, like family members. It does impact the decision, it really does, it's sad to say but that's how this town is."

However, Maureen's social capital extended only as far as her county. Her grandchild had recently had a specialty doctor's appointment in the city, more than a two-hour drive from their home. While she was there, the hospital called CPS. She did not typically have to worry about interactions with CPS, because in her own county her positive connections with caseworkers meant that the local child welfare of-

fice would never open an investigation on her. This incident initially terrified Maureen, but she recognized that she was lucky the case was transferred to her local child welfare office. She explained,

Social Services got called on me the other day. My daughter [biological granddaughter] had to go to a hospital in Louisville, and they called on me. . . . Over something stupid, and [the local] Social Services knows that it wasn't anything, because I'm on the community council, and Social Services sits on that board with us, and I know all of them. It would have probably been a lot worse, they probably would've removed the kids. . . . When I had to go to Social Services, and the supervisor come out and say, "I knew your name. Oh my God, it's you Maureen." And I was like, "Yeah it's me."

Although Maureen was still shaken and embarrassed by the case, she at least had peace of mind that her local office was now managing it. They had to see the investigation through, but Maureen felt more at ease knowing that the caseworkers would look out for her and make sure she kept her grandchildren. Like Phyllis, Maureen had learned how much more autonomy and how much less intrusion she experienced in her own county—where she had positive social capital—than in other places where she had no connections to local legal actors.

DISCUSSION AND CONCLUSION

A robust literature demonstrates the importance of social capital and social support networks in rural communities (Clark, Harper, and Weber 2022, this issue), specifically in rural Appalachia (Miller and Edin 2022). For example, social networks can act as a buffer for poor rural families navigating food insecurity (Bowen, Elliot, and Hardison-Moody 2022, this issue), they can bolster educational achievement for rural children (Drescher et al. 2022, this issue), and they can facilitate wealth accumulation for rural young people entering adulthood (Keister, Moody, and Wolff 2022). Social networks also affect rural families' navigation of kinship family formation because of the social capital inherent in relative caregivers' connections to lo-

cal legal actors. Although relative caregivers in urban areas may know the legal actors who regulate kinship family formation, the low population sizes of rural communities simply make it much more common that rural caregivers will be directly or indirectly connected to those specific actors in their local legal system.

Research has considered how urban relative caregivers select from a diverse array of legal arrangements when forming kinship families (Pittman 2014). Here, I show that such agency is not possessed equally among rural relative caregivers. Rural relative caregivers' connections with the local legal actors who regulate kinship family formation affect their willingness to formalize kinship family structures and their comfort in doing so. Those with positive connections are confident that they have agency in the legal process behind kinship family formation because they can draw on positive social capital to secure their ideal legal arrangements and minimize state intrusion in their lives. Conversely, those with negative connections may feel that these processes are biased against them because of the perceptions that legal actors hold of them. These caregivers may feel stuck in legal arrangements that leave them without financial support or stability, or they may have to endure additional surveillance and threats of punishment.

Economic capital typically facilitates access to legal services; yet economic capital does not promise positive social capital, and vice versa. Barbara, for example, struggled financially but held positive social capital with her county attorney and family court judge. Conversely, another grandmother not profiled in this article was financially well off but felt disempowered in the kinship family formation process because she had a personal beef with the case manager in her local child welfare office. Social capital with local legal actors may also modify how class matters for individuals in the legal system. In his recent work on criminal court, for example, Matthew Clair (2020) finds that lower-class defendants are more likely than middle-class defendants to speak up in the courtroom, leading to strained relations with one's lawyer and worse outcomes. Yet recall that Joyce—a middle-class grandmother—felt emboldened to speak to the judge in her child

custody case on the basis of her positive personal connection to him. Although he was known for ignoring citizen appeals, the judge listened to Joyce and closed her case in her favor.

As the opioid crisis ravages on, greater numbers of rural families are navigating kinship family formation. Recent research on this population points to the unique ways that the rural context affects kinship families' experiences. For example, Anna Hansen and colleagues (2020) find that relative caregivers' worries for children's and parents' well-being are heightened due to the high levels of substance use in their community. Although kinship care has become more normalized because it is so widespread, the continued increases in kinship care and substance use also create an overwhelming sense of hopelessness. Other research, however, suggests that religion and spirituality—which are particularly salient in rural contexts like Central Appalachia—can facilitate coping by providing peace, purpose, and perspective (Dunfee, Brown, and Schoenberg 2020). My findings complicate our understanding of rural kinship care by demonstrating how relative caregivers' experience varied levels of stability and surveillance through the kinship family formation process despite the same familial challenge. Families with positive social capital can insulate themselves from some of the uncertainty that comes with child custody shifts; families with negative capital cannot.

In addition to illuminating inequalities across rural caregivers' experiences, these findings point to ways that rural communities and organizations can better support kinship families. Families like Doris's, for example, are currently hiding in informal kinship care arrangements that exclude them from many formal financial support programs such as state-funded child support. One grandparent said that she was fearful of approaching the social welfare office to apply for Supplemental Nutrition Assistance Program even though she met the program's criteria, believing that she would out herself as an informal caregiver and open herself up to potential state intrusion. Although the state cannot track numbers of informal relative caregivers, one caregiver support group leader explained that the number of

families she knew in such arrangements was increasing. Considering the legal vulnerability of these families, their exclusion from some financial support programs, and their fear of approaching state support services, nonprofits, faith communities, and schools should focus on providing an informal social safety net for these families.

Finally, the importance of social capital with local legal actors is likely portable from kinship family formation to other legal contexts. For example, if we consider the outcomes of these children's parents, it is likely that those parents with positive social capital can secure less punitive consequences when facing a drug-related charge. In addition to shedding light on the impacts of the opioid crisis on families then, these findings contribute to our understanding of the unique ways that the law perpetuates inequality in rural places (Pruitt 2007; Pruitt and Showman 2014).

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PART II

Childcare and Schools in Rural Areas: Surprising Equality and New Challenges

Access to Early Care and Education in Rural Communities: Implications for Children's School Readiness



TARYN W. MORRISSEY^{ORCID}, SCOTT W. ALLARD, AND
ELIZABETH PELLETIER

This study links county-level early care and education (ECE) program, economic, and demographic data to child-level data from the Early Childhood Longitudinal Study-Kindergarten Cohort of 2010–2011 to examine geographic variation in ECE program participation and provision. We find that public ECE programs, particularly Head Start, occupy a larger role in nonmetropolitan communities than in metropolitan areas. By contrast, children in rural counties are less likely to attend private center-based ECE, and nonprofit child-care program expenditures in rural areas lag. We also find rural-metropolitan differences in school readiness diminish when geographic characteristics are controlled. Results suggest that county-level context and state-level policy features shape children's early experiences, and that public ECE investments are key in narrowing disparities in ECE attendance and in children's outcomes.

Keywords: early care and education, early childhood education, school readiness, nonprofit, Head Start, rural, county, poverty

Attending high-quality early care and education (ECE), including at preschool and childcare centers, before kindergarten is widely shown to improve economic outcomes and well-being throughout the life course (Heckman, Humphries, and Veramendi 2018; Chaudry et al. 2021; Cannon et al. 2018). In turn, federal, state,

and local government spending on childcare, preschool, and other ECE programs—many designed to serve children in low-income families—has increased in the last several decades (Diffey, Parker, and Atchison 2017; Robert Wood Johnson Foundation 2018; DOE 2020). Funding for public subsidies that help families purchase

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home- and center-based childcare services has expanded over the last thirty years (Forry, Daneri, and Howarth 2013), and Early Head Start (EHS) and Head Start (HS) together provide ECE services to nearly one million low-income children from birth to age five (OHS 2019a).¹ Public ECE programs, however, continue to enroll just a fraction of children in low-income households. Fewer than 40 percent of four-year-old children in poverty participate in HS (OHS 2019a), and fewer than one of every six income-eligible children receive public childcare subsidies (Chien 2021). Increased private family spending on ECE services for young children mirrors increases in public expenditures (Kornrich and Furstenberg 2013), but many private ECE programs are too expensive for low-income families (Chaudry et al. 2021).

Although researchers and policymakers often focus on federal or state ECE program finance, local nonprofits and private businesses play a central role in the delivery of publicly funded or subsidized ECE programs. Delivery of ECE programs depends heavily on the capacity and funding of local private nonprofit organizations and for-profit firms, making the ECE playing field organizationally complex and fragmented. The inherent localness of ECE access suggests that greater attention should be paid to whether ECE program provision varies across local geographic areas. Indeed, evidence indicates state-level geographic variability around the availability of childcare subsidies, HS, publicly funded preschool, and ECE program quality metrics (Bassok and Galdo 2016; Chien 2021; Friedman-Krauss et al. 2020; Gordon and Chase-Lansdale 2001; Malik et al. 2018; Malik and Schochet 2018; NSECE Research Team 2016; OHS 2019b). However, researchers are only beginning to understand how ECE provision varies locally and how that spatial variation might shape participation in ECE programs and children's subsequent outcomes (McCoy et al. 2016; Mor-

rissey and Vinopal 2018; Paschall, Halle, and Maxwell 2020).

Nonmetropolitan areas, which we often refer to as rural areas, have been found to average lower participation rates in ECE programs than metropolitan areas (Swenson 2008; Temple 2009; Anderson and Mikesell 2019). This strongly suggests that research examining the impact of rural contexts on child well-being should be particularly concerned with local spatial differences in ECE program provision. Differences in ECE participation between metropolitan areas containing urban centers and nonmetropolitan communities are consistent with other research finding that children in low-income families growing up in rural places may lack access to programs and resources critical to healthy development and mobility. For example, rural areas have been found to lag metropolitan areas in the provision of key human service and safety net programs targeted at low-income households (Allard 2019). Numerous papers in this volume speak to rural-urban disparities across a wide array of other services and resources intended to support children, as well as how rural context shapes elementary, middle, and high school educational outcomes (see Bernsen et al. 2022, this issue; Bowen, Elliott, and Hardison-Moody 2022, this issue; Nicolai, Damaske, and Park 2022; Parker, Tach, and Robertson 2022). Thus we should expect geographic differences in ECE program resources to contribute to urban-rural disparities in ECE participation and school readiness (Drescher et al. 2022, this issue; Magnuson and Duncan 2017; Miller, Votruba-Drzal, and Setodji 2013; Votruba-Drzal, Miller, and Coley 2016; Miller, Votruba-Drzal, and Coley 2019). Local variation in ECE programming also may be relevant for understanding rural-urban variation in income mobility over the life course. Not only do ECE programs provide nonparental care that allows parents to work in the immediate term, but these programs also offer devel-

1. The Child Care and Development Block Grant (CCDBG) provides childcare subsidies for low-income working families and was funded at \$9.4 billion in 2017 (Chien 2020). The same year, Head Start/Early Head Start, which enrolls children under five in poverty, was funded at \$9.3 billion (HHS 2017). State-sponsored preschool programs vary widely in availability; in 2019, 78 percent of four-year-olds attended public preschool in Vermont, yet six states lacked public preschool altogether (Friedman-Krauss et al. 2020).

opmental support for children's long-term educational and economic success (Paschall, Halle, and Maxwell 2020; Chaudry et al. 2021). Inquiry into rural-urban differences in ECE program provision is even more urgent because of the COVID-19 pandemic, which decimated the ECE sector and likely exacerbated geographic, socioeconomic, and racial disparities in ECE access (Jessen-Howard and Workman 2020; NAEYC 2020).

This study adds to the ECE research literature by linking unique county-level ECE program data to nationally representative, child-level survey data to examine the association between the local context of ECE availability and two child-level outcomes: ECE participation and kindergarten readiness. These data allow us to assess county-level variation in the delivery of Head Start programs, annual expenditures reported by nonprofit childcare organizations, and children's attendance at public or private center-based ECE. We then move beyond identifying spatial differences in ECE infrastructure to analyzing whether geographic variation in ECE programming is associated with measures of children's math and reading skills at kindergarten entry. As a result, this study is able to make more geographic comparisons across more ECE program features and outcomes than is common in the research literature to date.

Our findings suggest that public ECE programs, particularly Head Start, play a larger role in rural communities than in metropolitan areas, whereas private nonprofit childcare program expenditures appear more highly concentrated in metropolitan areas. We also find descriptive evidence of geographic disparities in the types of ECE programs children attend, consistent with broader county-level patterns of program availability. Further, we find that rural-urban differences in school readiness measures, as measured by math and reading scores at kindergarten entry, greatly diminish when children's background and geographic characteristics are controlled, including county-level ECE supply. Combined, these results have implications for future research into the role that ECE programs play in communities and for policymakers seeking to under-

stand where to make ECE investments moving forward.

PLACING ECE PROGRAMMING IN A SPATIAL CONTEXT

Children learn and grow through interactions with their caregivers and environments (Bronfenbrenner and Morris 2006). Although the family is typically the primary developmental context for young children (Shonkoff and Phillips 2000), it has become common for children to participate in some type of ECE prior to kindergarten (Chaudry et al. 2021). ECE programs provide educational, cultural, and recreational opportunities for children, and childcare, whether in center-based or home-based settings, enables parental employment (Morrissey 2017). This public provision, however, falls short of families' needs, which means that households pay a majority of early education expenses before kindergarten (Gould and Blair 2020). Families spend an average of 10 percent of their incomes on childcare, and low-income families—those with income below 200 percent of the federal poverty line (FPL)—spend an average of 35 percent of their incomes on childcare (Malik 2019).

The high costs of center-based ECE program enrollment contribute to substantial income-based variation in program participation; children from low-income families are less likely to participate in center-based ECE relative to children from higher-income households. For example, nearly three-quarters of children age three to five regularly attended nonparental childcare in 2016, but the type of arrangement varied considerably. Thirty-eight percent were cared for by relatives or nonrelatives at the child's or caregiver's home, whereas 61 percent of children regularly attended center-based arrangements (NCES 2019). When children from low-income households do attend ECE, they are more likely to attend less expensive and lower-quality programs than children from more affluent households (Burgess et al. 2014; Magnuson and Waldfogel 2016; Chaudry et al. 2021). Lower-quality ECE offers fewer opportunities to develop the cognitive and social-emotional skills important for kindergarten readiness (Soliday Hong et al. 2019), which are

in turn predictive of later educational success (Duncan et al. 2007; Romano et al. 2010).²

Publicly funded ECE programs, including HS, EHS, and state-sponsored pre-K for which families pay little or nothing out-of-pocket, are important for narrowing income- and race-based gaps in ECE participation (Chaudry et al. 2021; Magnuson and Waldfogel 2016). Head Start and public pre-K provide part- or full-day ECE programming at centers or schools to three- and four-year-old children. Head Start serves children in poverty and provides ECE and comprehensive services, such as developmental and health screenings and mental health resources (Chaudry et al. 2021). State-sponsored prekindergarten programs often serve children across a broader income range, and a handful of states provide universal programs (Friedman-Krauss et al. 2020).

Evidence that attending high-quality private or public ECE benefits children's short- and long-term educational, health, and economic outcomes (Duncan and Magnuson 2013; Morris et al. 2018; Phillips et al. 2017; Yoshikawa et al. 2013) has led many experts to argue for greater and more consistent public funding for ECE programming in order to reduce disparities in school readiness, narrow inequality, and improve downstream mobility (Magnuson and Duncan 2017; Chaudry et al. 2021; Duncan and Sojourner 2013). To date, however, much of the policy research discussion around ECE programs focuses on federal or state spending and trends in aggregate enrollment or participation. That providing both private and public ECE programming is a highly localized activity often goes overlooked as a result. Yet early childhood programs and services are delivered through complex and fragmented local systems, including local schools, businesses, and nonprofit organizations. Community-based nonprofit organizations, such as religious organizations, community action programs, and broader youth-serving organizations (Boys & Girls Clubs, YMCA), play a particularly impor-

tant role in delivering ECE programs. A fragmented and complex funding environment also contributes to local variation in ECE provision. Most providers of ECE programming—public, nonprofit, or for-profit—draw operating revenue from multiple sources. Federal, state, and local government expenditures support ECE providers through direct program funding, revenue from subsidies, and other resources for social services targeted at children. Local service providers commonly bundle this public funding with fees paid by families, grants from local philanthropy, and private charitable donations (Allard 2017; Sandfort 2010). Finally, policy variation also drives local differences in ECE programs; provision of ECE is governed by a myriad of state and local regulations that dictate licensing, location, and administrative requirements.

To the extent that the funding and capacity of organizations operating ECE programs vary across local places, program provision itself should be expected to vary by local geography. Lower-income communities are more likely than others to face particularly high hurdles in providing an adequate supply of ECE programs. Many low-income families cannot afford to pay market-rate fees for ECE, and low-income communities may not have substantial public or philanthropic revenue streams, creating lower supply in poor places (Council of Economic Advisors 2014; Malik et al. 2018; Davis, Lee, and Sojourner 2019; Chaudry et al. 2021). Additionally, consistent with evidence that greater spatial access to social service programs is associated with higher rates of participation among low-income households (Allard, Tolman, and Rosen 2003; Herbst and Tekin 2016), we should expect that a greater local supply of ECE programs and resources will correspond to higher rates of participation. Conversely, lower levels of access to ECE programming should be expected to predict lower participation rates.

Although we should be concerned about the

2. Evidence suggests that the quality of programming matters more for children's outcomes than the funding source (public or private) or type of ECE setting, either center-based, including preschools, nursery schools, and for-profit and nonprofit childcare centers, or home-based care, such as family childcare or informal care by relatives, neighbors, babysitters, or others in the child's or caregiver's home.

presence of spatial disparities in ECE program access or capacity in all places, there is reason to pay particular attention to ECE access and participation in nonmetropolitan or rural communities. Persistent problems of rural poverty and high rates of hardship within rural communities create significant need for accessible social service and social assistance programs (Gundersen et al. 2017; Weber 2018; Ziliak 2019b). Yet social service program capacity in rural areas lags well behind that present in metropolitan areas and urban centers (Allard 2019). For example, Rasheed Malik and his colleagues (2018) estimate that, in 2017, three in five rural communities had fewer than one licensed ECE slot for every three children under age five. High-income suburban communities at the edges of metropolitan areas, on the other hand, were least likely to experience such ECE shortages. Similarly, rural communities in Minnesota are shown to have lower levels of access to licensed childcare programs, on average, than urban communities in that state (Davis, Lee, and Sojourner 2019). Rural gaps in ECE program access may reflect the challenges of operating programs in communities with small or sparse populations.

Other social and economic realities of rural America likely affect both supply of and demand for ECE programs. First, although gender roles within rural households are changing, evidence indicates that traditional gender roles around parenting remain present in rural communities, where women are less likely to work in jobs outside the home (MacTavish and Salamon 2003; Sherman 2009; Kristin 2017). Rural places average lower incomes (Thiede, Lichter, and Slack 2018; Ziliak 2018), likely reducing demand for ECE and the ability to pay for expensive programming. Moreover, the prevalence of nonstandard work and retail or service-sector jobs in rural areas often means that workers do not have access to on-site childcare, flexible scheduling, or family leave benefits, increasing pressure to find childcare options inside the home or family (Glauber and Young 2015;

McLaughlin and Coleman-Jensen 2008; Odle-Dusseau, McFadden, and Britt 2015). We also might expect families in rural communities with less population and nonprofit density than urban centers to have weaker information or referral networks about program opportunities, realities that can powerfully shape program participation (Allard 2009, 2017). Furthermore, rural areas are likely to present families with transportation challenges, long commuting distances, and high commuting costs (MacTavish and Salamon 2003; Ziliak 2019b). Many of these features of rural communities imply barriers to private ECE provision and participation; indeed, research suggests that public HS programs play a vital role in rural and low-income communities as well as for communities of color (Malik and Schochet 2018; Kim and Wang 2019).³

Despite growing research, not enough attention has been given to rural ECE program access and capacity. Most research examines only a narrow range of ECE programs within a specific state or region because of the limited data resources available that place program resources in space. Moreover, few studies explore the association between local ECE program provision and children's outcomes in early elementary school. Many pressing questions therefore remain about how ECE program resources are spatially distributed across rural versus urban communities. First, does the availability of public and nonprofit ECE program resources vary? Do public and nonprofit ECE resources vary? How does ECE participation vary? Is spatial variation in public and nonprofit ECE investments associated with child-level ECE participation or kindergarten readiness? Finally, do associations among local ECE resources, ECE participation, and children's kindergarten readiness vary across geography?

This study seeks to answer these questions to enhance our understanding of how ECE program provision and participation vary across nonmetropolitan and metropolitan America.

3. Gaps in achievement by family income for both elementary school and middle-school children tend to be larger in urban than in rural areas, which may reflect inequality in access to high-quality ECE in urban areas and the general limited presence of ECE in rural communities (Drescher et al. 2022, this issue; Chaudry et al. 2021; McCoy et al. 2016; Votruba-Drzal, Miller, and Coley 2016; Phillips et al. 2017).

We examine geographic variation in ECE program provision and provide insights into how spatial variation might matter to ECE program participation and school readiness. Our descriptive findings contribute to more accurate portrayals of the rural early childhood program landscape, which should inform scholarly work around nonmetropolitan safety nets and help guide future ECE programmatic investments in rural communities. Although our findings are relevant to public and private philanthropic investments in ECE programs moving forward, we also expect that the health, fiscal, and economic consequences of COVID-19 have exacerbated geographic disparities in ECE provision and participation. An additional contribution of this study, therefore, is to feature promising secondary and administrative data that might yield greater future insights into how ECE program provision varies by rural and urban geography.

DATA AND METHODS

This study links unique county-level ECE program data from 2009 to the 2007–2011 American Community Survey (ACS) and child-level data from the Early Childhood Longitudinal Study-Kindergarten Cohort (ECLS-K:2011).⁴ The ECLS-K:2011 is the most recent longitudinal dataset containing a representative sample of children attending kindergarten across the United States that includes information on children's ECE participation, direct assessments of

school readiness, and geographic markers of children's residence. Combined, these data allow us to assess spatial variation in the provision of ECE programming and to link spatial measures of ECE program provision to child-level outcomes in ECLS-K:2011 data for the year prior to kindergarten attendance (the child's prekindergarten year, 2009).

To ensure adequate ECLS-K:2011 sample sizes for geographic comparisons of ECE access and participation, we sort U.S. counties into a four-category metropolitan-nonmetropolitan typology. This typology is based on Office of Management and Budget definitions of metropolitan areas and county-level urban-rural continuum codes created by the U.S. Department of Agriculture (USDA) Economic Research Service.⁵ Counties within metropolitan area boundaries are categorized as metropolitan (or urban) counties, and counties outside metropolitan area boundaries are categorized as nonmetropolitan (or rural) counties. We make further distinction between large urban counties (populations over 250,000) and small ones (populations under 250,000). Similarly, we sort nonmetropolitan counties into large nonmetro or rural counties (population centers over twenty thousand) and small nonmetro or rural counties (population center less than twenty thousand).⁶

For *ECE program data*, we draw on several county-level data sources on participation and availability for our descriptive and multivariate

4. In accordance with IES requirements, all sample sizes for the ECLS-K:2011 are rounded to the nearest ten.
5. Although categorizing counties as metropolitan or nonmetropolitan produces a simple classification scheme, it is important to note these categorical or symbolic distinctions between urban and rural places smooth over the lived and social meanings of urban and rural places. Moreover, our categories smooth over the shifting and blurring of urban or rural boundaries at the edges of metropolitan areas (Lichter and Brown 2011; Lichter and Ziliak 2017). Metropolitan county categories also smooth over important suburban and central city differences when thinking about poverty, inequality, and safety net or human service provision (see Allard 2017).
6. For more information on our data and methods, see the online technical appendix. Technical appendix table 1 provides more detail about the metropolitan and nonmetropolitan codes used here (see also USDA 2020). USDA urban-rural continuum codes used in these analyses were released in 2013 and are based on data from the 2010 Census. The original USDA urban-rural continuum codes delineate three categories of metro counties and six categories of nonmetro counties, organized based on population size and proximity to a metro area. Our categories are as follows: large metro counties (with population 250,000 or greater), encompassing USDA codes 1 and 2; small metro counties (with population less than 250,000), encompassing USDA code 3; large nonmetro (rural) counties (with urban population of thousand or more), encompassing USDA codes 4 and 5; and small nonmetro (rural) counties (with urban population of less than twenty thousand), encompassing USDA codes 6, 7, 8, and 9.

analyses. First, county-level data from the 2007 to 2011 Five-Year Estimates of the ACS indicate the population of children in poverty by age, the percent of three- and four-year-olds enrolled in school, and the percentage of those enrolled who attend private school. Second, we report county-level nonprofit program expenditures per poor child under five years (in 2009 dollars) for nonprofit organizations that self-report as child day care or preschool service providers in the National Center for Charitable Statistics (NCCS) (2021) Core File for tax year 2009.⁷ Third, we use two HS data sources to estimate the number of HS program slots in each county. We use the 2009 grantee-level HS Program Information Reports (PIR), published by the Office of Head Start (OHS), to determine the number of program slots provided by each HS grantee in 2009. PIR data alone, however, fail to capture the true geographic distribution of HS slots because data are linked to the location of the grantee's administrative headquarters and grantees often offer HS services and operate HS centers at other locations, including in counties other than where the administrative headquarters is located. To address this issue, we link OHS center-level data from 2013 (the earliest year available) to grantee-level data using the grant number, program number, and program type. These linked data allow us to determine where grantees in the PIR data were offering HS services in 2013 and calculate the share of each grantee's slots operated in a given county. We then use the county distribution of HS program slots in 2013 to calculate a county-level distribution of HS slots from the 2009 PIR

data.⁸ If we are not able to match any of a county's grantees to HS centers, we assume that that county's grantees operated all their centers in the same county where the administrative headquarters is located. If no HS centers or PIR grantees were located in a county, we assume that the country had no HS program slots. To create a measure of programming relative to potential demand, using data on poverty from the 2007–2011 ACS, we calculate the number of HS program slots per one hundred poor children age three to four years per county. Finally, our data set also includes two state-level ECE policy measures (for 2009): enrollment in state-sponsored preschool for four-year-olds (Barnett et al. 2010) and the maximum childcare subsidy reimbursement rate for center care for a four-year-old from the Child Care and Development Fund Database (Urban Institute 2019).

The *Early Childhood Longitudinal Study-Kindergarten Cohort of 2010–2011* (ECLS-K: 2011) is a nationally representative dataset of approximately eighteen thousand children who attended kindergarten in the United States in the 2010–2011 academic year, collected by the National Center for Education Statistics (NCES) (IES 2019). We examine two measures of ECE attendance: whether the child attended HS or non-HS center care (inclusive of for-profit and nonprofit centers and other public programs such as state preschool), both parent-reported for the year prior to kindergarten. In addition, we use separate math and reading test scores that reflect school readiness in the fall of kindergarten.⁹ The ECLS-K:2011 also includes detailed information about the child and house-

7. For details on these NCCS data, see the technical appendix. Note that ACS data contain information on three- and four-year-olds' preschool attendance, and Head Start enrolls three- and four-year-olds, but nonprofit childcare programs serve children across the early childhood age spectrum.

8. This imputation procedure assumes that the grantees in a given county operated centers in a similar geographic pattern as 2013. Descriptive analyses comparing county-level enrollment based on administrative headquarters locations in the PIR data alone indicate that there was relatively little change in HS provision between 2009 and 2013. For more on the imputation procedure, see the technical appendix.

9. For more information on the child assessments, see IES/USDA, "Early Childhood Longitudinal Studies (ECLS) Program: Direct Cognitive Assessments," <http://nces.ed.gov/ecls/assessments2011.asp> (accessed November 12, 2021). Internal consistency scores for each dependent variable are available in the codebook (Tourangeau et al. 2017). At kindergarten, the reading portion of the assessment measured children's language and oral skills; phonological awareness; print familiarity; letter and letter-sound knowledge; print conventions; word recognition; and vocabulary. The mathematics assessment included questions regarding number sense; geometry; data

hold at the fall of kindergarten, including child sex; race-ethnicity (non-Hispanic white, non-Hispanic black, Hispanic, or other race); child age in months; whether the child's primary language was not English; whether the child had a disability; household size (adults and children); parent education (less than high school, high school degree or some college, or college degree or higher); parent employment (all parents in household employed, not employed); parent marital status (married or not married); household poverty status (below 100 percent of the FPL, between 100 and 200 percent of the FPL, above 200 percent of the FPL); number of books in the home (logged); and whether the household reported participating in the Supplemental Nutrition Assistance Program since the child was born. We include these as controls given their relevance for ECE participation, school readiness, and eligibility for public ECE programs, particularly HS. We also control for the non-Hispanic white percentage of the county population using data from the 2007 to 2011 ACS. We limit our sample to children with nonmissing data on sex, census tract, and dependent variables (sample sizes vary with dependent variable).¹⁰

In our analyses, we first descriptively examine our county-level and ECLS-K:2011 data. One set of analyses focuses on nonmetropolitan and metropolitan county differences in preschool enrollment, HS capacity, and nonprofit childcare expenditures. A second set examines differences in county preschool enrollment, HS capacity, and nonprofit childcare expenditures across demographic characteristics and the nonmetropolitan or metropolitan residential location of children in the ECLS-K:2011. We then estimate a series of multivariate models examining the associations between ECE access, county characteristics, child and family characteristics, and child outcomes (including

ECE participation and school readiness) in the ECLS-K:2011:

$$Y_{ij(t-1)} = Geog_{ij(t-1)} + X_{ij(t-1)} + ECE_{j(t-1)} + Demog_{ij(t-1)} + Policy_{ij(t-1)} \quad (1)$$

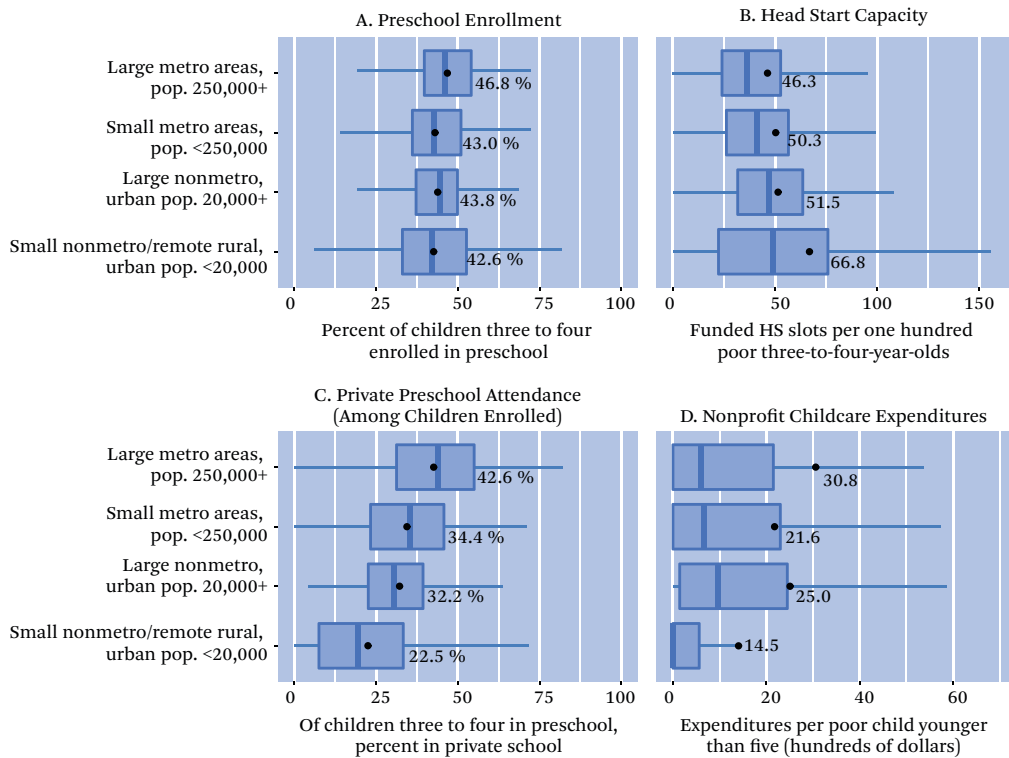
where Y represents ECE participation in the year prior to kindergarten ($t - 1$), for child i in county j at kindergarten (K) entry (t) or 2010; $Geog$ reflects the metropolitan or nonmetropolitan county code for the child's residence at K entry; X is a vector of child and household characteristics, as reported at K entry; ECE contains county-level measures of ECE resources in the year before kindergarten for county j (nonprofit childcare expenditures and HS capacity); $Demog$ represents the non-Hispanic white percentage of a child's county; and $Policy$ represents state-level policy variables. Standard errors are clustered at the state level. In models examining the factors associated with children's school readiness, we replace Y with math or reading scores at time t and add covariates for child-level participation in HS or other center-based care during the prekindergarten year. To test whether associations between county ECE capacity, children's ECE participation, and children's school readiness varied by geography, we also tested individual models that added interaction terms to equation (1).

FINDINGS

To provide insight into how ECE program participation and capacity varies by geography, figure 1 examines ACS preschool program enrollment rates among children three to four years of age, HS slots per one hundred poor children age three to four years, rates of private school attendance among three-to-four-year-old children attending preschool, and nonprofit childcare expenditures per poor child under five years of age across different types of metropol-

analysis; probability; and spatial relations. Assessments were administered in English or Spanish, dependent on a screener for children who spoke a language other than English at home. One hundred items were included on the reading test and ninety-six on the math test. Reliabilities were high, 0.92 for math and 0.95 for reading (Tourangeau et al. 2017). Both math and reading scores were standardized using the grand mean, 0 signaling the mean and 1 indicating a standard deviation from the mean.

10. We use multiple imputation using Stata's MI procedure to create ten datasets with imputed variables for missing covariates. We do not impute dependent or main independent variables.

Figure 1. Early Childhood Program Provision by USDA Urban-Rural Continuum Code, 2009

Source: Authors' tabulation (U.S. Census Bureau 2020; Tourangeau et al. 2017; Economic Research Service 2020; NCCS 2009; OHS 2019a).

Note: Labeled dots represent means; box and whisker plots represent distribution. Outliers (points that were more than 1.5 x the interquartile range below the first quartile or above the third quartile) are not shown. Counties with missing nonprofit expenditure data coded as having no nonprofit human service programming (see Allard 2017). To reduce the effects of a few outlying counties, we excluded seven counties from descriptive analysis because they reported one thousand or more Head Start slots per one hundred poor children three to four years old. For more information, see online technical appendix and appendix table 1.

itan and nonmetropolitan counties.¹¹ Figure 1, panel A indicates that the average rate of preschool enrollment among three- and four-year-olds in the 2007–2011 ACS was between 42 and 47 percent across counties.¹² Urban counties in the largest metropolitan areas had participation rates roughly 4 percentage points higher

on average than smaller metro counties and nonmetro counties. A percentage-point difference of this magnitude is equivalent to nearly a 10 percent difference in preschool enrollment between the largest metro area counties and the smallest rural counties.

Figure 1, panel B examines the mean funded

11. Technical appendix tables 4 through 6 provide additional descriptive analysis of early childhood program participation and provision by nonmetropolitan and metropolitan geography, including descriptive findings using the modified seven-category USDA urban-rural continuum code and metro versus rural analyses broken out by region of the country.

12. These rates are generally similar to figures from other sources. A study using the Current Population Survey (CPS) found that in 2011, 59 percent of three- and four-year-olds in families above 200 percent of the FPL, and 42 percent of children in families under 200 percent of the FPL, participated in preschool (Burgess et al. 2014).

HS slots per hundred children ages three to four years in poverty in 2009. Per capita HS slots varied across metropolitan and nonmetropolitan counties to a much greater degree than overall preschool enrollment rates. The most pronounced differences are between the smallest nonmetro counties and all other types of counties. Average HS per capita provision was roughly 44 percent higher in small nonmetro counties than in metropolitan counties with population over 250,000. These large metro counties had about forty-six HS slots per hundred poor children three to four years of age on average, relative to sixty-seven slots in small nonmetro counties. Similar patterns exist when looking at median per capita HS slots, although the differences between geographies are less pronounced. The typical metropolitan county with a population over 250,000 had about thirty-six HS slots per hundred poor children three to four years of age, whereas the typical small nonmetro county had roughly fifty-two. Although preschool enrollment rates were higher in urban counties than in rural ones, these findings suggest that HS is a particularly important provider of ECE in rural communities. Further, among nonmetro counties, HS provision appears more prevalent in areas with smaller population centers: the average small nonmetro county averaged fourteen more HS slots than nonmetro counties with larger population centers. The importance of public preschool in rural regions is underscored by evidence that the share of three- and four-year-old children in preschool attending private schools was much lower in rural areas than in urban ones (see figure 1, panel C). On average, 43 percent of children in preschool in urban counties from the largest metropolitan counties attended private preschools, relative to less than 25 percent of their peers in the smallest rural counties.¹³

To further assess the importance of private nonprofit provision of ECE in urban versus rural counties, figure 1, panel D displays the

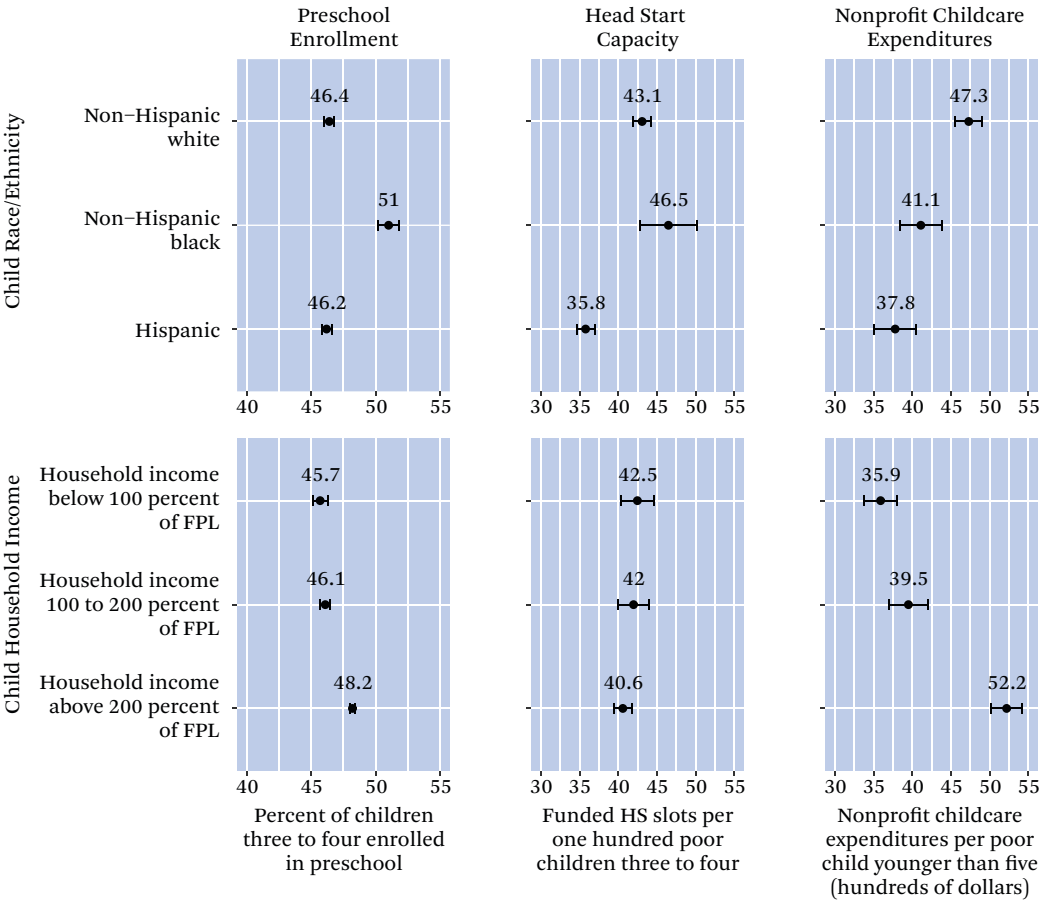
mean and distribution of expenditures per poor child under age five by nonprofit childcare organizations across nonmetropolitan and metropolitan geography in 2009. In contrast to HS, which shows greater capacity in nonmetropolitan versus metropolitan areas, we see the opposite pattern for nonprofit childcare expenditures; the largest metro areas had a substantial nonprofit resource advantage relative to smaller nonmetro communities. For example, the average urban county in a metropolitan area with more than 250,000 people reported roughly \$3,080 in nonprofit childcare organization expenditures per poor child under five years relative to \$1,450 in the average small rural county. Mean differences in nonprofit childcare expenditures are distorted somewhat by the fact that some metro and large nonmetropolitan counties have much more expansive nonprofit childcare sectors than others. As a result, median nonprofit childcare expenditures per poor child under five indicate that the typical large metropolitan county spending is quite comparable to that in small metro and large nonmetro counties (\$960, \$950, and \$1,080, respectively). Nevertheless, the resource disadvantage in less populated rural communities is underscored by the fact that the typical, or median, small nonmetro county reported no expenditures for nonprofit childcare organizations in 2009 (see technical appendix table 2 online).¹⁴

Figure 2 presents the average values of the same ECE program provision measures by race, ethnicity, and household income across our sample of children from the ECLS-K:2011 (see also technical appendix table 3). Children in our sample, regardless of race, ethnicity, or household income relative to the FPL, lived in counties where the average preschool enrollment rate was near fifty percent. Mean county preschool enrollments were higher for non-Hispanic black children versus Hispanic children in our sample (51.0 percent versus 46.2 percent). On average, Hispanic children in the

13. Technical appendix table 6 provides ECE program provision descriptive information by region, and appendix table 7 provides ECE program information for the two states that had universal public preschool in 2009—Georgia and Oklahoma—and their neighboring states. Technical appendix tables 10 and 11 display ECE program provision by non-Hispanic black and Hispanic shares of the county population, respectively.

14. See technical appendix online.

Figure 2. Early Childhood Program Provision in the ECLS-K:2011: Weighted Means and Standard Errors by Child Characteristics



Source: Authors’ tabulation (U.S. Census Bureau 2020; Tourangeau et al. 2017; Economic Research Service 2020; NCCS 2009; OHS 2019a).

Note: Plots show means and 95 percent confidence intervals for county-level ECE provision measures, by characteristics of children in the ECLS-K:2011. Observations rounded to the nearest ten in accordance with NCCS requirements. All child-level variables assessed at the fall of kindergarten. Counties with missing nonprofit expenditure data coded as having no nonprofit human service programming (see Allard 2017). To reduce the effects of a few outlying counties, we excluded seven counties from descriptive analysis if they report one thousand or more Head Start slots per hundred poor children three to four years old. For more information, see online technical appendix table 2.

ECLS-K:2011 lived in counties that had thirty-six HS slots per poor hundred three- and four-year-olds, relative to forty-three slots and forty-seven slots for non-Hispanic white and black children, respectively. Mean nonprofit childcare expenditures per poor child under five did not significantly differ by the race or ethnicity of children in our sample, roughly \$4,000 in 2009.

As shown in the bottom panel of figure 2, children entering kindergarten with household incomes over 200 percent of the FPL lived in counties with higher preschool enrollment rates than their peers in low-income households, although the differences are relatively small (48.2 percent versus 45.7 percent). We find no significant differences in county-level HS slots per capita by household income rela-

tive to the poverty line. We do find, however, large differences in mean nonprofit childcare expenditures by household income. Children in households with incomes over 200 percent of the FPL lived in counties with average nonprofit childcare expenditures that were about 40 percent higher than their counterparts living near or in poverty (approximately \$5,220 versus \$3,590 respectively).

Table 1 displays weighted frequencies and means for our child-level dependent variables (ECE participation and school readiness), county-level ECE capacity, economic, and demographic characteristics, and state-level policy variables for children in our ECLS-K:2011 sample by the modified USDA urban-rural code.¹⁵ Children living in less populated non-metropolitan counties were nearly 30 percent less likely to have attended any center care in the year before kindergarten than those in large metro areas (35.8 percent versus 48.8 percent). At the same time, we find evidence that children in the ECLS-K:2011 from small nonmetro counties were more likely to have attended HS than those in large urban counties (24.3 percent to 14.6 percent). Further, HS attendance among children varied based on county population size: those in the least populated nonmetro counties were more likely to enroll in HS than those in more populous nonmetro counties (24.3 percent versus 18.5 percent, respectively). These descriptive findings highlight, again, the importance of HS in rural communities as well as the child poverty in these counties, given HS program eligibility. At kindergarten, children in nonmetro counties averaged lower math and reading test scores than those in metro counties.¹⁶ Children in large, nonmetro counties scored about one-twentieth of a standard deviation below the mean in math, whereas those in suburban counties scored about one-fifth of

a standard deviation above the overall mean. In reading, children in small nonmetro counties scored one-tenth of a standard deviation below the mean; those in large metro areas scored one-tenth above the mean.

The second panel of table 1 shows how county-level ECE program capacity indicators vary by geography for children in the ECLS-K:2011. Similar to the national county analyses, we find that children in our ECLS-K:2011 sample living in small nonmetro counties had access to more than twice the per capita HS capacity as children living in large metro counties (seventy-seven versus thirty-eight slots). Again, among ECLS-K sample children, mean county-level nonprofit childcare expenditures per poor child under five in 2009 were more than twice as high in metro areas than rural counties—averaging nearly \$5,000 in large metro areas, nearly \$6,000 in smaller metro counties, and less than \$2,000 in rural counties. The bottom panel of table 1 presents key state-level features. On average, children lived in states in which between 19 and 26 percent of four-year-olds were enrolled in state-sponsored pre-K programs, and maximum preschooler childcare subsidy rates averaged between \$600 to \$700, but neither of these state policy factors significantly differed by metropolitan or non-metropolitan county status.

Although we find important descriptive differences in ECE program provision and participation between urban and rural spaces, it is not clear whether these differences reflect the effects of geography or are a function of other factors. To explore this further, we estimate a series of descriptive regression models that assess the cross-sectional predictors of two sets of child outcomes: ECE program participation in the year prior to kindergarten and two measures of kindergarten readiness. Figure 3 pres-

15. Additional descriptive characteristics for children in the ECLS-K data are provided in technical appendix tables 8–9 and 12–13. Specifically, characteristics of children analogous to those in table 1 but by the seven-category rural-urban code are provided in technical appendix table 8. Racial and ethnic characteristics of children's counties of residence by the four-category rural-urban code are detailed in technical appendix table 9. Multiple demographic and economic characteristics of children's counties of residence by the four-category code are displayed in technical appendix table 12. Appendix table 13 provides more detail on the mean number of children and adults in the household for children in the ECLS-K by the four-category rural-urban code.

16. Math and reading scores in table 1 reflect the average deviation of the scores of children living in that county type from the mean scores for the entire sample.

Table 1. Characteristics of ECLS-K:2011 Sample by Urban-Rural Continuum Code

	In Metro Areas of +250,000 Population (1)	In Metro Areas of <250,000 Population (2)	Large Nonmetro, Urban Population +20,000 (3)	Small Nonmetro or Remote Rural, Urban Population <20,000 (4)
Dependent variables:				
Attended center care in pre-K	48.8% ^a	45.9% ^b	42.3%	35.8% ^{ab}
Attended Head Start in pre-K	14.6% ^a	11.5% ^b	18.5% ^b	24.3% ^{ab}
Math score at fall of K(std)	0.08 (0.01)	0.21 (0.03) ^a	-0.05 (0.05) ^a	-0.02 (0.03) ^a
Reading score at fall of K(std)	0.10 (0.01) ^a	0.016 (0.03) ^b	0.01 (0.05)	-0.10 (0.03) ^{ab}
County-level characteristics:				
Nonprofit childcare expenditures per poor child younger than five (in \$100)	49.28 (0.82) ^a	58.10 (1.85) ^b	21.87 (1.20) ^b	18.11 (0.97) ^{ab}
# of Head Start slots per one hundred poor three-to-four-year- olds (2009)	37.62 (0.50) ^a	35.07 (0.90) ^b	44.18 (0.42) ^c	76.71 (2.43) ^{abc}
Percent non-Hispanic white	60.9% ^a	78.0% ^a	83.1% ^a	83.6% ^a
State-level characteristics:				
Percent of four-year-olds enrolled in state pre-K	23.6%	21.5%	19.2%	26.4%
Max. childcare subsidy reimbursement (four-year-old, center care, in \$)	616.75 (1.78)	709.87 (6.25)	663.37 (8.15)	601.34 (8.62)
Observations	13,600	1,750	840	1,250

Source: Authors' tabulation (U.S. Census Bureau 2020; DOE 2020; Tourangeau et al. 2017; Economic Research Service 2020; NCCS 2009; Barnett et al. 2010; Urban Institute 2019).

Note: Weighted frequency or mean shown. Superscript letter pairs indicate within-row cell-pair mean differences statistically significant from zero at or below the .05 level. Observations rounded to the nearest ten, in accordance with NCCS requirements. All child-level variables assessed at the fall of kindergarten. All county variables assessed in 2009. All differences in population significant across rural-urban categories.

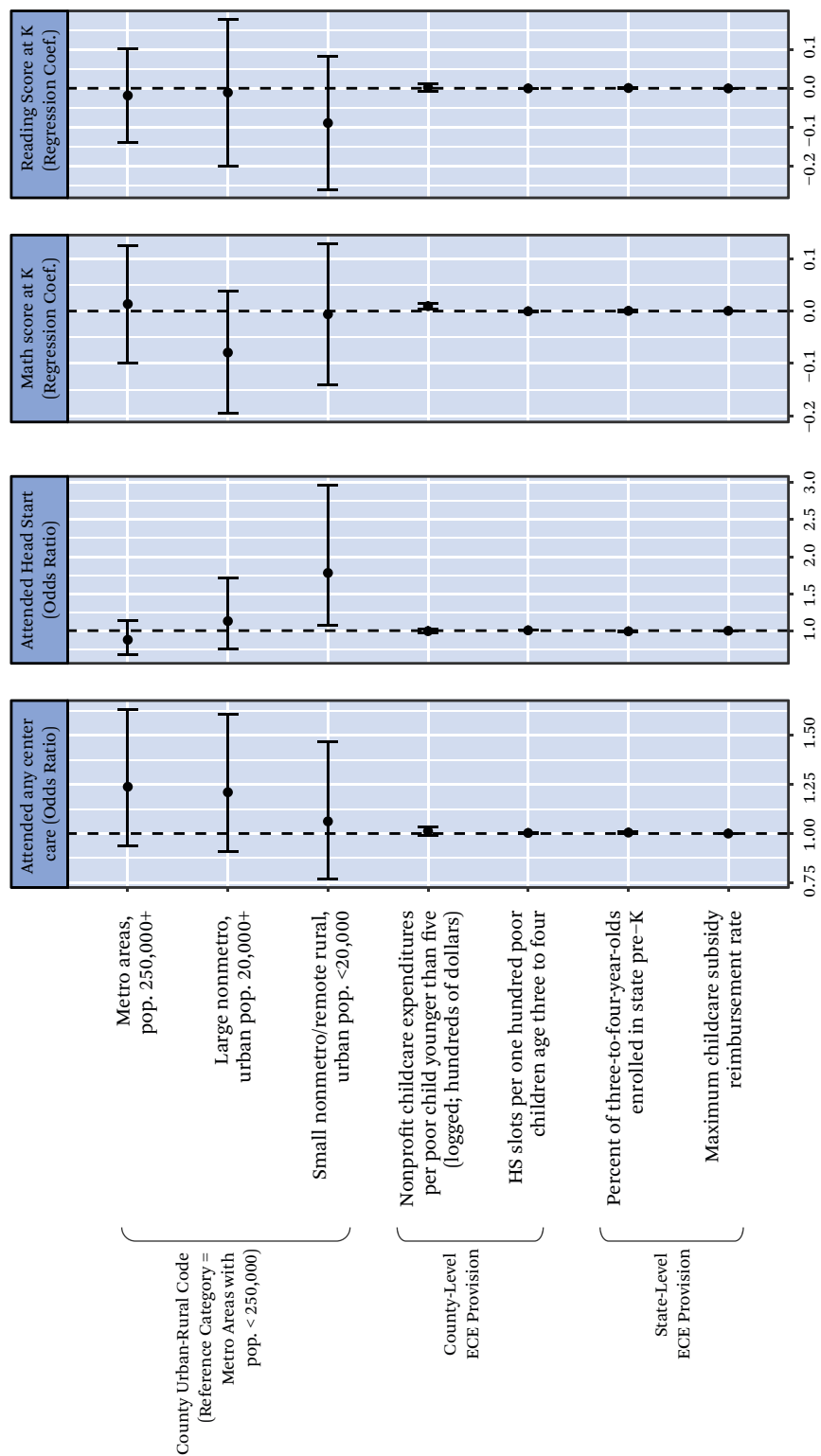
ents the odds ratios for the binary center and HS participation measures and coefficients for the continuous math and reading score measures across county geography, county ECE capacity, and state ECE policy variables only.¹⁷

We see little evidence of a residual association between county metropolitan or nonmetropolitan status and ECE participation when controlling for county-level indicators of ECE provision and child- and household-level fac-

tors, with one exception. Living in small non-metropolitan counties was associated with 1.78 greater odds of participating in HS, relative to children in small metropolitan counties (the reference category). Notably, this is the case even when controlling for county HS capacity, which, as expected, is positively associated with HS participation as well as any center care attendance. Higher state-level enrollment in state pre-K was positively associated with any

17. Full model results are reported in technical appendix table 4. Regression coefficients, odds ratios, and 95 percent confidence intervals for these estimates are visualized in technical appendix figure 1. Appendix tables 14 through 17 provide full results for the progressive regression models for each of the four main dependent variables. Appendix table 18 provides the full model results for the seven-category USDA code.

Figure 3. Factors Associated with ECE Participation in the Year Prior to Kindergarten and School Readiness



Source: Authors' tabulation (U.S. Census Bureau 2020; DOE 2020; Tourangeau et al. 2017; Economic Research Service 2020; NCCS 2009; Barnett et al. 2010; Urban Institute 2019).

Note: Each column represents a separate regression. Odds ratios shown for binary dependent variables (attended center care or Head Start). Coefficients shown for math and reading scores. All child-level variables assessed at the fall of kindergarten, except for household food insecurity, which is assessed at the spring. All county-level variables assessed at 2009 (the year prior to children's K entry), or for ACS variables, in the five-year 2007–2011 estimates. Standard errors clustered at the state level. Estimates use weights as specified by IES. Full model results reported in online technical appendix table 4.

center attendance ($OR = 1.005$), and negatively associated with HS attendance ($OR = 0.991$).

Similarly, after controlling for ECE context and background characteristics, few geographic differences in school readiness measures were evident. Interestingly, higher county nonprofit childcare expenditures were associated with higher math scores, and the non-Hispanic white percentage of the county was associated with lower reading scores. We interpret these findings as evidence that ECE availability predicts child-level participation in ECE, whereas, conditional on ECE participation, child and household level covariates and local resource levels capture much of the variation in children's school readiness levels. Together, the findings regarding county-level HS capacity and state public preschool enrollment suggest that public investment in ECE infrastructure affects children's propensity to attend ECE.

As found in other research, child and family background characteristics are highly associated with ECE participation and children's math and reading scores (panel E in technical appendix table 4 online). Family income and structure, public assistance participation, and parent education—indicators of household effective demand for ECE—were predictive of ECE attendance. We find a negative association between non-Hispanic black and Hispanic racial or ethnic identity and center care attendance, but positive associations with HS participation, highlighting the importance of HS in addressing racial and ethnic disparities as well as geographic disparities in ECE access. Consistent with previous research (Yoshikawa et al. 2013), attending center-based care during the pre-K year was associated with higher math and reading scores in kindergarten compared to children who did not. Finally, children in

households in which parents were married and in which at least one parent attended college were more likely to participate in center care and averaged higher test scores than their peers, whereas household size was negatively associated with center care attendance and test scores.¹⁸

To better understand whether associations between ECE access, participation, and kindergarten readiness vary by geography, we also tested a set of analyses exploring interactions between ECE program access and place (results available upon request). We find that per capita nonprofit childcare expenditures are negatively associated with center-based program attendance in large nonmetro counties relative to smaller metro areas. We also find that per capita nonprofit childcare expenditures interact with residing in large metro areas such that nonprofit expenditures are no longer predictive of HS or math scores attendance in these communities. It is possible that nonprofit childcare expenditures are a proxy for local resources and ECE availability in rural or nonmetro areas but less so in more urban communities with more variation in and more robust ECE infrastructure. Associations between HS capacity, ECE participation, and kindergarten readiness did not vary by geography, however.

CONCLUSION

This study examines rural-urban variation in early care and education supply, children's ECE participation, and children's school readiness, with a focus on differences between rural and urban communities. Findings suggest geographic disparities in ECE capacity, which translate into geographic disparities in the types of ECE children attend in the year prior to kindergarten. We find that public pro-

18. The online technical appendix includes additional models and sensitivity tests. Results from them are nearly identical with the main models presented here. Technical appendix table 18 shows the full regression models for our four dependent variables, using the seven-category rural-urban definitions. As true of the four-category models, we find that children in rural counties are more likely than their counterparts in small metro counties to attend Head Start. We also find small differences in any center care attendance for children in small rural counties adjacent to metro areas, and lower math scores for children in large nonmetro counties, relative to small metro counties, controlling for background characteristics. Additional sensitivity tests include additional controls for racial and ethnic composition, models include measures for the number of children and the number of adults separately, and another set of models that include additional county-level economic characteristics (see technical appendix tables 19 through 22). Results for these additional models are substantively similar to those in the main specification (figure 3; see also technical appendix table 4).

grams—specifically Head Start—occupy a larger role in nonmetropolitan compared to metropolitan communities, while private nonprofit resources for childcare are more highly concentrated in metropolitan locations. HS appears to fill important supply gaps in ECE in rural counties, serving a vital role in narrowing urban-rural gaps in ECE participation—and presumably in children’s school readiness and later outcomes. Some descriptive evidence indicates that public ECE program participation rates and provision are greater in less populous rural counties than in more populous rural counties. We also find that higher state-level enrollment in state-sponsored preschool is associated with lower odds that a child attends HS; these results may reflect the considerable overlap in ages and backgrounds of children enrolled in HS and public preschool. Greater public ECE investments in all geographic areas are key in narrowing disparities in ECE attendance and improving children’s readiness for kindergarten.

Descriptive findings regarding urban-rural differences in ECE program capacity and participation are consistent with prior work examining social program provision in rural areas (see Malik and Schochet 2018; Kim and Wang 2019; Nolan, Waldfogel, and Wimer 2017; Warwick 2017; Ziliak 2019b). Evidence that private ECE program provision and participation are more robust in urban than rural counties echoes research elsewhere showing the private nonprofit safety net to be more robust in major cities and less so in smaller metros, suburbs, or rural areas (Allard 2017, 2019). Similarly, evidence that public ECE provision, particularly HS, is a critical source of ECE capacity in rural areas parallels research findings elsewhere that public assistance benefits make up a much higher share of county income in rural or nonmetropolitan areas than in urban areas (Ziliak 2019a).

In general, we find fewer geographic disparities in children’s school readiness than previous research (Miller, Votruba-Drzal, and Setodji 2013). These results may reflect this study’s use of multiple measures that capture local characteristics and ECE capacity as well as an analytic

sample of children drawn from a more recent year. Importantly, we find no significant geographic differences in children’s math and reading scores at kindergarten entry after controlling for child-, household-, county-, and state-level factors—suggesting that policies that expand ECE public programming can mitigate geographic differences in early opportunity and early educational outcomes. School readiness, particularly math, is predictive of later academic success (Duncan et al. 2007), so the lack of geographic disparities in our findings adds to the evidence for policies that enhance the availability of high-quality, affordable ECE.

We interpret findings carefully and within the context of the study’s limitations. Results presented here show descriptive patterns rather than causal associations between geography, ECE availability, ECE participation, and school readiness. To this point, decisions around residential location may be shaped by unobserved preferences that also highly correlate with household investments in children’s development. County-level measures of capacity are less vulnerable to selection bias than municipal or school district-level measures, but selection may still be an issue. Furthermore, our county-level metropolitan-nonmetropolitan continuum measures may fail to capture important distinctions within different types of urban and rural geographies, particularly in light of evidence of considerable heterogeneity in educational outcomes among rural regions (see Drescher et al. 2022, this issue). For example, given sample size limitations, our ECLS-K analyses cannot accurately assess differences in ECE attendance and school readiness between economically disadvantaged rural communities and more advantaged rural communities. In addition, our county-level measures of access are somewhat blunt indicators of the context of ECE provision and participation. Nonprofit childcare expenditure data from the NCCS likely undercount overall philanthropic and other private investments in early childhood because the data only reflect nonprofits that identify primarily as childcare providers, and our NCSS and HS data do not include for-profit centers.¹⁹ In addition,

19. Thirty-two percent of children were enrolled in for-profit centers in 2012 (NSECE Research Team 2014).

data limitations force us to assume that the spatial distribution of HS program slots was similar in 2009 and 2013, when we have more geographically textured data. Our matching approach requires reasonable assumptions (for more detail, see the technical appendix), but we believe that the matched dataset is better than alternative approaches that take only grantee headquarters location into account. Finally, the ECLS-K:2011 kindergarten-year data, although constituting the most recent nationally representative dataset that includes geographic identifiers, children's ECE participation, and direct child assessments, are now more than ten years old, a period during which the landscape of public ECE has changed considerably.

The gaps and limitations in currently available ECE data, however, do suggest several avenues for future research. There remains relatively little research exploring trends in ECE provision by geography and little consistent data through which researchers could explore such trends (for example, Gordon and Chase-Lansdale 2001; Malik et al. 2018). Such data gaps are striking given how private and public funds are invested in ECE and how central expansion of ECE is to policy recommendations for reducing societal inequality, especially in the aftermath of the pandemic that dramatically reduced the availability of ECE (Bassok, Markowitz, and Bellows 2021; Chaudry et al. 2021). Future investments should focus on developing new data resources and improving the use of what limited data are currently available. Part of the challenge may be to find ways to link spatial data about ECE program provision—ideally with finer spatial granularity than county levels and with quality information about the ECE programs—to ongoing surveys of children or administrative records. These types of linked data resources would allow researchers to link context to outcomes and generate stronger evidence about the causal impacts of ECE accessibility. Moreover, ample room remains for future scholarship to consider how ECE program provision and participation varies across rural areas with larger black or Hispanic communities, the nature of the local economy, and proximity to urban centers. Finally, our findings suggest that future

research examine the strength and resilience of local ECE systems, given the dramatic and uneven effects of the pandemic and its economic fallout on ECE program provision and costs (Malik et al. 2020; Bassok, Markowitz, and Bellows 2021).

Our study contributes to a growing discussion about how policy and philanthropy can reduce spatial variation in ECE program provision and thus narrow observed spatial gaps in children's outcomes. Observed geographic variation in both public and private ECE provision are driven in part by differences in policies at the federal, state, and local levels. Solutions for improving ECE program access and reducing spatial disparities in ECE program capacity, therefore, implicate public and private actors operating in many different areas of policy (Forry, Daneri, and Howarth 2013; Gormley 2017; Greenberg et al. 2018; Davis, Krafft, and Forry 2017; Chaudry et al. 2021). First, federally funded HS programs constitute a large share of rural ECE program capacity, with considerable variability across counties, suggesting there is room to expand program investments within nonmetropolitan and metropolitan America alike given the role HS plays in supporting children's short- and long-term health and economic success (Haan and Leuven 2020; Deming 2009). Additional funding for HS (and EHS) would narrow ECE supply and quality gaps between rural and metropolitan areas (Kim and Wang 2019; Malik and Schochet 2018; Paschall, Halle, and Maxwell 2020) as well as other urban-rural disparities in well-being. HS also plays an important role in narrowing racial and ethnic disparities in ECE attendance. Combined, reasons for bipartisan support for proposals that expand public ECE investment are numerous. Second, geographic disparities in private ECE program provision require greater philanthropic attention. Private investments appear most concentrated in urban settings, and our findings suggest that these may have important downstream consequences for children. Building private ECE capacity—particularly high-quality programming—in currently underserved areas should be a key priority for philanthropy and one that would pave the way to greater public provision as well.

Ultimately, the ability of local economies

and households to recover from the pandemic will hinge on how well our systems of early childhood education and childcare can bounce back from both the public health challenges of the near-term and the long-term fiscal challenges that await.

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The Geography of Rural Educational Opportunity



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We use nearly 430 million standardized test scores, including test scores from more than 6,500 rural school districts, to describe educational opportunity in rural America. Although we find modest differences in outcomes between rural and nonrural students overall, these disparities are larger for specific socioeconomic, racial-ethnic, and geographic groups. We also find that the relationship between socioeconomic status and achievement is somewhat weaker in rural areas compared to nonrural areas. Variation in third-grade achievement and learning rates is considerable among rural districts, indicating that rates of early and middle childhood educational opportunity are not evenly distributed throughout rural America.

Keywords: rural, opportunity, inequality, education

Until recently, no comprehensive data source described local educational opportunities and outcomes in rural America. Many rural school districts are small, most state achievement tests are not comparable, and urban education issues have historically commanded more policy and research attention than rural ones. Nonetheless, rural youth collectively make up 20 percent of public school students in the United States; the nine million-plus students who attend rural schools amount to more than

the enrollments of New York City, Los Angeles, Chicago, and the next seventy-five largest school districts combined (Showalter et al. 2019). Policymakers are often unfamiliar with the unique challenges of teaching and learning in rural settings, and even within academia, conflicting narratives about rural education and opportunity persist. Fortunately, recent developments in the field have opened the door to a more robust view of educational opportunity in rural places.

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In this article, we provide new insight about the state of educational opportunity in rural America. Our analysis is based on data from the Stanford Education Data Archive (SEDA, version 4.0; Reardon et al. 2021), which uses nearly 430 million standardized test scores from all U.S. public school students in grades three through eight to construct measures of educational opportunity and academic achievement for every community in America. The test score measures in SEDA are placed on a common scale, making it possible to compare student achievement and learning rates nationwide, even though the tests vary across states, grades, and years (Reardon, Kalogrides, and Ho 2019). We use the SEDA data to examine differences in student outcomes in rural versus nonrural settings, as well as to examine differences among rural communities. Our analysis uses data from nearly 12,500 public school districts—including more than 6,500 rural districts—representing 97 percent of all school districts in the United States.

We use two measures of educational outcomes: average test scores in third grade and average learning rates between third and eighth grade. We interpret the average third-grade test scores among students in a given community as a measure of the average set of early childhood educational opportunities available to children in that community; this includes educational opportunities provided by families, as well as opportunities children have to learn in their neighborhoods, from their peers, in their childcare and preschool settings, and in their kindergarten and early elementary schools. We interpret learning rates between third and eighth grade as measures of the average set of available middle childhood educational opportunities, particularly opportunities to learn provided by local elementary and middle schools. Although learning rates may also be affected by average family resources, neighborhood characteristics, the availability of after-school programs, and other local conditions, learning rates largely reflect the quality of local elementary and middle schools, given the central role of schooling in teaching math and reading skills for this age group (for additional

details, see Reardon 2019). Under this conceptualization, gaps in achievement and learning rates between student groups are understood as opportunity gaps: that is, they reflect local inequalities in educational opportunity undergirded by differential access and exposure to resources and stressors (Flores 2007; Ladson-Billings 2013; Reardon, Kalogrides, and Shores 2019).

Using these measures, we investigate differences in average third-grade achievement and average learning rates between rural and nonrural students. Because rural America encompasses a wide variety of heterogeneous communities—as Shelley Clark, Sam Harper, and Bruce Weber (2022) describe in their introduction to this issue—we explore patterns of variation in these measures among rural school districts, describing differences in student outcomes by region, relative geographic isolation, and characteristics of the local economy. Given that average patterns of both early and middle childhood educational opportunity are closely linked with community socioeconomic status and racial-ethnic composition, we investigate how much of this variation is associated with demographic differences among rural communities. Our goal is to describe rural levels of achievement and learning rates at a level of granularity not previously possible and to highlight the ways in which place, geographic isolation, and local economy influence educational opportunities for different populations of rural students.

Our results suggest that rural students have, on average, modestly higher third-grade achievement but modestly lower learning rates than nonrural students. In addition, the outcomes of students in rural communities vary significantly across several dimensions, including by students' socioeconomic and racial-ethnic backgrounds, region, degree of geographic isolation from larger and denser communities, and type of business activities underpinning their local economies. Although the average socioeconomic status of families within a district most strongly predicts this variation in outcomes, socioeconomic status is less predictive of student achievement in rural districts than in nonrural districts.

GEOGRAPHIC VARIATION IN EDUCATIONAL OPPORTUNITY

Research conducted on geographic variation in educational outcomes has often focused on achievement disparities within and across urban and suburban spaces, generally finding that achievement gaps are larger in cities or metropolitan areas with higher levels of racial-ethnic and socioeconomic inequality and segregation (Owens 2018; Owens and Candipan 2019; Reardon, Kalogrides, and Shores 2019). In addition, the literature on neighborhood effects on educational outcomes in densely populated areas is robust (Chetty, Hendren, and Katz 2016; Sharkey and Faber 2014). These analyses provide important insights on the distribution of educational opportunity as well as racial-ethnic and socioeconomic gaps in opportunity across the country's largest metropolitan areas, but do not extend their reach to the rural areas.

Descriptive research on geographic variation in educational opportunity that includes rural areas is sparse but growing. A recent paper used national 2010–2011 data to examine racial-ethnic educational disparities and segregation across rural communities and found that rural elementary schools, on average, have poverty rates that are only modestly lower, and test scores that are only modestly higher, than urban schools in nearby metropolitan areas. These findings complicate the typical narrative comparing predominantly Black and Hispanic students in city schools with predominantly White students in wealthy suburban schools and point to the need to better understand the experience of students in poorer rural schools (Logan and Burdick-Will 2017). Because the paper includes only within-state comparisons, however, it does not provide a comprehensive national portrait of educational opportunities in rural America. Another recent paper that focused on rural student learning rates found evidence suggesting that rural White students appear to learn more in elementary and middle school than White students elsewhere. Rural Black, Hispanic, and Native American students' learning rates in the same grades, however, appear slower than their groups' respective national averages (Johnson, Kuhfeld, and Soland

2021). It relies on data from a large but nonrepresentative sample of schools that includes 25 percent of all public schools in the United States in the 2016–2017 school year. Although these papers have made useful contributions to the literature, neither provides a thorough description of educational patterns in rural communities.

We have identified one paper that uses SEDA to explore rural educational outcomes. Douglas Gagnon and Marybeth Mattingly (2018) find evidence that racial-ethnic test score gaps are smaller in rural districts than they are in urban districts—a difference that persists even after accounting for socioeconomic factors, levels of segregation, and other district characteristics. Although the authors were unable to determine whether this smaller gap is attributable to higher performing White students in high-gap districts or to higher performing Black and Hispanic students in low-gap districts, their finding suggests the importance of local context in mediating test score gaps. The authors additionally find that, unlike city and suburban districts, the level of relative affluence in a rural district has little bearing on local test score gaps. These recent findings are a helpful start, but more evidence is required for a comprehensive picture of educational opportunity across America's wide variety of rural communities.

Our analysis aims to fill this gap in the literature by providing a detailed descriptive analysis of third-grade achievement and third-through eighth-grade learning across rural America. We conduct a set of analyses to address the following questions:

How do patterns of average academic performance and learning rates differ for rural versus nonrural students? Do these patterns vary for different student groups?

Among rural districts, do student achievement and learning rates vary across region of the country, relative geographic isolation, and type of local economy?

If present, are regional differences in student achievement and learning rates simply an artifact of demographic factors such as community socioeconomic status and racial-ethnic composition?

EDUCATIONAL OUTCOMES IN RURAL COMMUNITIES

By definition, rural communities have smaller and more widely dispersed populations than their metropolitan counterparts. Beyond this, they differ in ways that might be linked to educational opportunity: through community socioeconomic and racial-ethnic composition, through relative geographic isolation, and through local economic conditions. These factors might lead to differences in educational opportunities, which we discuss in the following section.

Regional Differences and Demographics

The demographic makeup of rural America differs from region to region. Although White students are the majority in rural classrooms in most areas, rural minorities are often clustered geographically and thus make up significant portions of the student body in particular rural communities across the country: Black students are largely found in the rural south, Hispanic-Latinx students are disproportionately found in the rural southwest, Native American students are concentrated in the west north central and west south central states, and Asian students make up large portions of the student body in the rural west (Housing Assistance Council 2012; Lichter 2012). Many of these groups have traditionally been integral to rural America, but immigrants are increasingly settling in as well, offsetting population loss and increasing population diversity. Between 2000 and 2010, racial and ethnic minorities accounted for 83 percent of rural population growth, and as of the 2010 census, minority children made up nearly 28 percent of the child population in rural areas (Johnson 2012; Crockett, Carlo, and Temmen 2016). Lisa Crockett, Gustavo Carlo, and Chelsie Temmen posit that “the diversity of rural settings and the heterogeneity of racial and ethnic minorities mean that the implications of rural residence for minority youth and children will depend both on their individual (and group) characteristics and on the specific features of the rural communities they inhabit” (2016, 11). Given these regional differences in rural demographics, we consider whether and how regions differ in educational

opportunity and outcomes for different student groups.

Additionally, rural schools may lead to differences in educational opportunity for different student groups by virtue of size and relative integration of the student body. Although nonrural students of different racial-ethnic and socioeconomic backgrounds can lead entirely different lives, “it stands to reason that the more limited range of possibilities and conditions in many rural locations could serve to attenuate the differences in achievement along socioeconomic lines” (Gagnon and Mattingly 2018). Thus we investigate racial-ethnic and socioeconomic patterns of differences in student outcomes between rural and nonrural places. We anticipate that there are other ways educational outcomes will differ by region, given the differing historical, political, and economic contexts in which school systems have taken shape.

Geographic Isolation

Rural communities differ in their degree of geographic isolation from metropolitan areas, and evidence suggests that there may be meaningful differences among these different types of rural communities. These types, which are defined by the National Center for Education Statistics as “rural fringe,” “rural distant,” or “rural remote” based on population size and proximity to an urban cluster, have varying levels of access to social services, health resources, educational programs, and other community factors (Greenough and Nelson 2015; Hancock et al. 2017; Holder, Fields, and Lofquist 2016). Some literature has also highlighted the relationship between rurality and early childhood readiness, finding students in remote counties are less cognitively prepared for kindergarten compared to their peers in more populated areas (Morrissey, Allard, and Pelletier 2022, this issue). Because more remote rural areas have less access to these types of community resources, we expect to see lower levels of achievement and rates of learning on average as district rurality increases.

Local Economy

Research has also identified links between life outcomes and the composition of local econo-

mies. In an analysis of spatial inequality and poverty among American children, researchers found that child poverty rates are closely linked to local industrial composition (Friedman and Lichter 1998). Similarly, in a survey of poverty and opportunity structures in rural America, Ann Tickamyer and Cynthia Duncan (1990) find that rural resource-based economies are particularly vulnerable to cyclical economic forces, with such forces negatively impacting individual poverty and long-term earnings levels. Researchers have linked this to educational outcomes as well: a study on Texas school districts directly links a decline in student achievement to oil and gas booms in local regions, finding that districts in these areas increased spending on capital projects instead of on teacher salaries, and leading us to suspect that local economic dependencies may explain some variation in school district performance (Marchand and Weber 2020). An earlier study on plant closures in North Carolina in the textile and manufacturing industries finds that such closures lead to declines in local educational achievement for lower-income students, though this seems more attributable to within-family stress than structural financial changes (Ananat and Gibson-Davis 2011). Given this evidence that local economic composition imparts social and economic differences on communities, we consider whether a region's primary industry may explain some variation in local school district performance.

DATA

The primary data source for this article is the Stanford Education Data Archive (version 4.0), which reports nationally standardized measures of student achievement for nearly all schools and districts in the United States, including measures disaggregated by student race-ethnicity, gender, and socioeconomic subgroup. SEDA is based on assessment data from the *EDFacts* database at the Department of Education, which annually collects third-through eighth-grade standardized assessment results in mathematics and English Language Arts (ELA) from all fifty states and Washington, D.C. Following collection from *EDFacts*, achievement score estimates are linked to a common scale using the National

Assessment of Educational Progress math and reading scales, enabling comparisons of achievement scores across the nation (for details on methods used to construct measures of achievement comparable across the country, see Reardon, Kalogrides, and Ho 2019). Estimates from SEDA v4.0 span academic years 2008–2009 through 2017–2018, including scores from approximately 430 million assessments. Further details on sample construction are available from the SEDA v4.0 technical documentation (Fahle et al. 2021).

The SEDA data include estimates of the average test scores, average learning rates (within cohorts, from grade three through eight), and trend in average test scores (across cohorts); these estimates are constructed by pooling test score data from ten years (2009–2018), six grades (grades three through eight), and two subjects (math and reading) within each school and district (for details, see Fahle et al. 2021). The estimated parameters are available for schools and districts; estimates disaggregated by race-ethnicity, gender, and economic status are available at the district level. In addition, SEDA v4.0 includes standard errors for these estimates, as described in the technical documentation (Fahle et al. 2021). The public v4.0 data suppresses estimates for small districts and schools and those for whom the estimates are not precise: this has the effect of disproportionately removing rural schools and districts from the public data. We therefore use an unsuppressed version of the data in an effort to maximize the number of rural observations in our analysis.

The outcomes of interest here are average third-grade achievement and learning rates. As stated, we consider students' third-grade achievement scores to be a reflection of their early childhood opportunities, including the in-school and out-of-school resources often tied to a neighborhood's socioeconomic status (Reardon 2019). Our second outcome of interest is the linear grade slope on average achievement across grades three to eight (we multiply this rate by five and refer to it as the five-year learning rate), which provides a measure of how much the average student learns from third through eighth grade. Following Sean Reardon (2019), we consider this to be a reflec-

tion of middle childhood opportunity. Although these measures can be biased if in- or out-migration of high- or low-achieving students from a district or school is systematic, Reardon, John Papay, and colleagues (2019) find that these measures are, on average, unbiased and are highly correlated with average learning rate measures based on student-level longitudinal data. Estimates for both third-grade achievement and learning rates are standardized and expressed in terms of standard deviations (SD) of the national student-level test score distribution.

To interpret the magnitude of our learning rate measures, we note (following Fahle et al. 2021) that nationally, the average student's score improves by one-third of a standard deviation per grade. This measure can be used to convert differences in average test scores to rough grade-level equivalents for interpretability. For example, in a district where average test scores are 0.33 of a standard deviation higher than the national average, we can say that the average student is roughly one grade level ahead of the national average for students in her grade. Since the average student test score improves by 0.33 SD per year, a district with an average five-year learning rate of 0.033 SD per grade is one where the average student's score improves from grade three to grade eight by 0.10 grade levels relative to the national average; since the national average five-year learning rate is 5.0 grade levels per grade (by definition), students in this district are learning at a rate 2 percent faster than the national average. A district with an achievement or learning rate score of zero sits at the average of the national distribution for that outcome.

We use measures of socioeconomic status and racial-ethnic composition for both our school- and district-level analysis. The school-level covariate data is drawn from the Common Core of Data (CCD), which provides the percentage of students eligible for free or reduced-price lunch and the racial-ethnic composition of students in each school. The district-level socioeconomic status measure is estimated from the National Center for Education Statistics (NCES) Education Demographic and Geographic Estimates (EDGE) program data, which tabulates American Community

Survey (ACS) data within geographic school district boundaries. The ACS and EDGE data are reported as five-year averages; we use the 2005–2009 through 2014–2018 waves of EDGE data. The socioeconomic status (SES) measure constructed by taking the first principal component of six variables reported in the EDGE data: median family income, proportion of adults with a bachelor's degree or higher, household poverty rates, proportion of unemployed adults, proportion of households receiving Supplemental Nutrition Assistance Program benefits, and proportion of households with children headed by a single mother. We use an empirical Bayes “shrunk” estimate of the SES composite in our analyses. The district-level racial-ethnic composition measure is derived from the school-level CCD data (Fahle et al. 2021).

Our analysis uses a number of community classification measures to describe a school or district's context: community locale (rurality-urbanicity), geographic region, and type of local economy. For community locale, we use SE-DA's school- and district-level urban-centric locale codes sourced from the NCES. This geographic indicator categorizes communities into four primary types—rural, town, suburban, and city—that each have three subtypes according to population size or proximity to urban centers. This scheme differs from the Economic Research Service's Rural-Urban Continuum Codes commonly used by researchers performing county-level analyses in that the units are both more granular and defined by proximity to densely populated areas rather than by specific municipal boundaries. Under this scheme, rural locales are census-defined rural territories that are located outside of densely settled areas known as urbanized areas or urban clusters (for more detail, see NCES 2006). Our analysis uses these locale classifications in two ways. First, we use the four primary types to distinguish between rural and nonrural students: we consider students in rural locales to be rural students, and we consider students in city, suburb, and town locales to be nonrural students. Second, we use the three rural subtypes—rural fringe, rural distant, and rural remote—to discern the influence of relative geographic isolation on rural student

achievement (for additional definitions, see table A.1).

We use two additional community classifications. First, we classify districts according to their state's 2017 Census Bureau division code to understand how educational opportunity varies across large regions of the country (for a geographic distribution of districts by their Census Bureau division code, see table A.2). Second, we classify districts according to the economic subtype of their county using the 2015 U.S. Department of Agriculture (USDA) county typology categorization. This typology includes six mutually exclusive categories of economic dependence, including farming, mining, manufacturing, federal or state government, recreation, and nonspecialized counties. The USDA's Economic Research Service assigns economic dependence classifications based on the proportion of labor earnings or employment in relation to a set threshold for each industry, averaged from 2010 through 2012. For example, if a county's farm-based earnings accounted for at least 25 percent of the county's overall earnings, then that county was eligible for the farming-dependent classification in this period (Pender 2019). Counties are classified as nonspecialized if they did not fall into one of the other five other categories. This measure provides an understanding of the extent to which the concentration of jobs in a certain industry potentially influences local educational opportunity (for a distribution of districts by economic subtype, see table A.3).

ANALYTIC SAMPLE

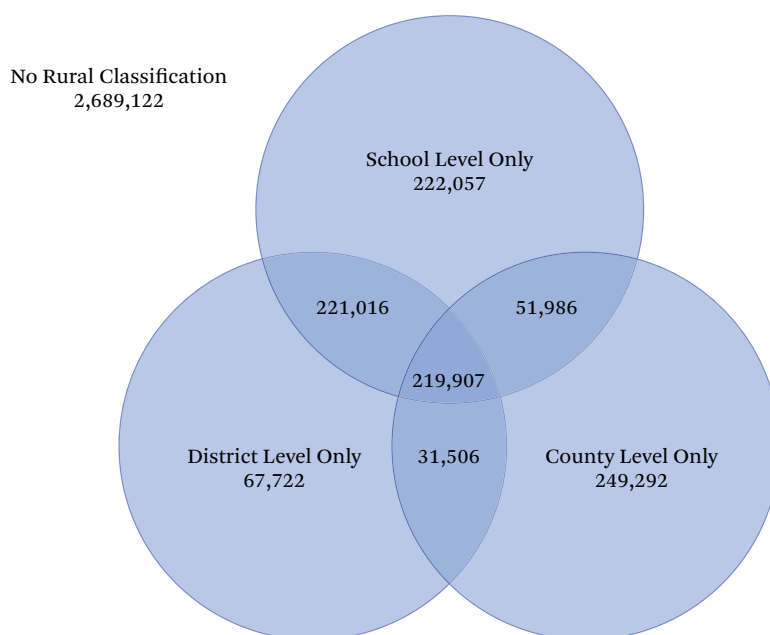
We focus in this article on rural students. However, the sample of students classified as rural varies across different definitions of rurality and different levels of aggregation. We use the twelve-category urban-centric definition created by NCES and the Census Bureau, which broadly defines rural areas as regions located several miles from urbanized areas and clusters. NCES categorizes schools within this framework according to the community in which the school is physically located, and categorizes districts according to the locale type assigned to the majority of its students (Geverdt 2018). As a result, a small number of students living in rural areas but attending schools in

nonrural areas may be classified as nonrural; further, districts and the schools within them sometimes have different classifications (not all schools in rural districts are classified as rural; not all rural schools are in rural districts). For this reason, our sample of rural students differs depending on whether we use schools or districts as the unit of analysis.

Figure 1 provides information on the differences in the size of the rural student population depending on whether school, district, or county classifications are used. Of an average nationwide enrollment of 3.75 million students per grade, approximately 715,000 (19 percent) attend rural schools; 540,000 (14 percent) attend rural districts; and 553,000 (15 percent) are in rural counties (as defined by the NCES and USDA). Of the 814,000 students per grade (22 percent of U.S. students) in either rural schools or rural districts, only 441,000 (54 percent) are included in the sample under both classifications; 99,000 attend nonrural schools within rural districts and 274,000 attend rural schools within nonrural districts.

Because our goal is to understand geographic variation in educational opportunity for rural students, we conduct our initial analyses at both the school and district level and include both sets of results in this article. For the remainder of our analysis, however, we examine educational achievement at the district—rather than school—level. Although analysis at the school level may better capture the set of students in what we think of as locally rural places, a district-level analysis may better capture students whose broader educational context is “rural.” Districts wield significant administrative authority, as Gagnon and Mattingly (2018) note, through actions such as teacher hiring, student assignment and school choice policies, and resource allocation decisions. The strong role of districts in shaping schooling contexts suggests a value in understanding district-level patterns of educational opportunity in rural America. In addition to the conceptual value of studying district-level achievement, reasons for this choice are practical: although SEDA v4.0 incorporates school-level achievement data, achievement and socioeconomic status data broken down by subgroup are not available at the school level.

Figure 1. Rural Student Enrollment per Grade, by Classification, Grades Three Through Eight, 2009–2018.



Source: Authors' calculations based on the Common Core of Data (<https://nces.ed.gov/ccd/>).

Note: Figures based on the sum of student enrollment within each classification type.

Our final samples include all U.S. schools and districts for which SEDA achievement estimates and covariate data are available. This amounts to 12,448 districts and 75,080 schools, representing 97 percent of all districts and 93 percent of all schools; 52 percent of these districts and 29 percent of these schools are classified as rural. In total, 99 percent of all students in the United States are included in this sample; 99.9 percent of students attending rural districts are included, along with 94 percent of students attending rural schools (for a breakdown of districts by rurality and demographic subgroup, see table A.4).

METHODS

We first provide estimates of the average achievement and learning rates in rural and nonrural communities for students from different demographic backgrounds. For these estimates, we weight SEDA's pooled achievement estimates by the per-grade enrollment of each subgroup within a rural or nonrural district (table 1) and then perform the same analysis for students within a rural or nonrural school; we

do these parallel analyses in order to compare results from these slightly different samples. These estimates reflect the average third-grade achievement and learning rate of students from a given background who attend school in rural versus nonrural environments.

Next, we restrict our sample to students from rural districts and fit a set of regression models to estimate the associations between test score outcomes (third-grade average achievement and average learning rates) and district characteristics. The models take the form

$$\hat{Y}_d = \mathbf{X}_d \mathbf{B} + e_d + \varepsilon_d \quad (1)$$

where $\hat{Y}_d$ is the estimated average third-grade achievement (or learning rate) in rural district d , averaged across subjects (mathematics and ELA) and years, and $\mathbf{X}_d$ is a vector of district covariates. The model has two error terms; e_d represents the true residual for district d , net of the characteristics in $\mathbf{X}_d$, and ε_d represents the measurement or estimation error in $\hat{Y}_d$. The true residuals are assumed homoscedastic with

Table 1. Demographic Composition of Rural and Nonrural Districts and Schools, Weighted by Enrollment, 2009–2018

Characteristic	Districts				Schools			
	Rural		Nonrural		Rural		Nonrural	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Socioeconomic status	0.22	0.78	0.31	0.93				
Percent F/RP lunch	50.81	19.39	52.27	22.66	49.23	22.28	52.41	27.47
Percent Native American	2.36	10.46	0.93	4.12	2.08	9.91	0.86	3.90
Percent Asian	0.97	1.64	5.92	8.52	1.60	4.35	5.89	10.38
Percent Hispanic	9.75	15.44	27.91	25.33	12.50	19.35	27.82	28.47
Percent Black	8.76	15.77	17.08	19.60	9.92	17.80	17.43	23.90
Percent White	78.15	22.84	48.15	29.43	73.90	26.90	48.00	32.52
N	6,530		5,918		21,499		53,581	

Source: Authors' calculations based on SEDA v4.0 (Reardon et al. 2021).

Note: SD is standard deviation. Percent F/RP lunch is the percentage of students eligible for free or reduced-price lunch. We use percent F/RP lunch at the school level because the socioeconomic status composite is available only at the district level.

variance to be estimated; the measurement error is assumed to be normally distributed with district-specific variance equal to the estimated sampling variance of $\hat{Y}_d$ (that is, equal to the squared standard error $\hat{Y}_d$). We fit these models via maximum likelihood, using the `metareg` command in Stata 15 (Harbord and Higgins 2008).

RESULTS

We start by comparing the characteristics of the rural student population when drawn at the school level versus the district level. Defining the rural student population at the school level results in a sample with higher proportions of Asian students, Hispanic students, and Black students, whereas defining the rural student population at the district level results in a sample with higher proportions of Native American and White students (table 1). Although the magnitude of these differences is relatively small, the shift is important to acknowledge. Because our composite measure for socioeconomic status is available only at the district level, we include the percentage of students eligible for free or reduced-priced lunch for both schools and districts to compare any differences; we find that these rates are essentially the same. Overall, though these samples are

not directly comparable they are similar enough to suggest the potential importance of careful attention to how we define rural students.

We next compare achievement and learning rates between rural and nonrural students to answer our first research question: Do students achieve and learn at higher or lower levels in rural versus nonrural communities, and do these patterns vary by race-ethnicity, economically disadvantaged status, gender, or region? Table 2 reports the mean values for third grade achievement and learning rates for the average student in rural districts compared to the average student in nonrural districts, whereas table 3 reports a subset of these values at the school level. Because not all schools include third-grade students, table 3 reports average achievement in the middle grade of each school's tested grades in lieu of third-grade achievement.

The first row of table 2 shows that the average rural third grader performs similarly to the nonrural third grader, with only a 0.01 SD difference at the district level. We see similar results at the school level, though the difference is slightly larger (0.03 SD); in other words, the average student attending a rural school scores approximately one-tenth of a grade level higher

Table 2. Mean District Values of Third-Grade Achievement and Learning Rates, by Student Group and Location, Weighted by Enrollment, 2009–2018

	Third-Grade Achievement				Learning Rate (Five-Year)			
	Rural	Non-rural	Difference	SE ^o	Rural	Non-rural	Difference	SE ^o
All	0.01	0.00	0.01	0.00	-0.02	-0.01	-0.01	0.00
Race-ethnicity								
Asian	0.36	0.46	-0.10	0.00	0.18	0.19	0.00	0.01
Black	-0.46	-0.43	-0.03	0.00	-0.06	-0.08	0.01	0.00
Hispanic	-0.31	-0.33	0.02	0.00	0.06	0.02	0.05	0.00
Native American	-0.52	-0.37	-0.15	0.00	0.04	0.03	0.00	0.01
White	0.12	0.30	-0.18	0.00	-0.02	0.00	-0.02	0.00
Income								
Economically disadvantaged	-0.25	-0.34	0.09	0.00	-0.04	-0.03	-0.01	0.00
Not economically disadvantaged	0.30	0.41	-0.11	0.00	-0.01	0.01	-0.02	0.00
Gender								
Female	0.05	0.04	0.01	0.00	0.05	0.05	-0.01	0.00
Male	-0.02	-0.03	0.01	0.00	-0.08	-0.06	-0.02	0.00
Division								
New England	0.33	0.26	0.07	0.00	-0.01	-0.05	0.04	0.01
Middle Atlantic	0.13	0.13	0.00	0.01	-0.02	-0.02	0.00	0.01
East North Central	0.10	0.01	0.09	0.00	0.01	0.03	-0.02	0.00
West North Central	0.11	0.13	-0.01	0.00	-0.03	-0.02	-0.01	0.00
South Atlantic	0.01	0.10	-0.09	0.00	-0.10	-0.12	0.02	0.01
East South Central	-0.12	-0.11	-0.01	0.00	-0.01	-0.04	0.03	0.01
West South Central	-0.07	-0.06	-0.01	0.00	0.00	-0.01	0.01	0.01
Mountain	-0.09	-0.05	-0.04	0.01	0.04	0.07	-0.03	0.01
Pacific	-0.32	-0.19	-0.13	0.00	0.15	0.08	0.07	0.01
N	6,530	5,918			6,530	5,918		

Source: Authors’ calculations based on SEDa v4.0 (Reardon et al. 2021).

Note: Third-grade achievement and five-year learning rates are measured in standard deviations of the national student-level within-grade distribution of test scores. Learning rates reflect average changes in test scores over five years (from grade three to grade eight).

^oSE is the standard error of the difference in means between rural and nonrural districts.

than the average student attending a nonrural school. This is a very small difference, much smaller, for example, than the difference in scores resulting from being exposed to teachers of higher or lower effectiveness (Rivkin, Hanushek, and Kain 2005; Rockoff 2004; Kane and Staiger 2008).

Within each racial-ethnic group, rural students have lower third-grade achievement than those in nonrural districts, with the exception of Hispanic students, where rural students perform marginally better than their nonrural peers (0.02 SD). White students and Native American students experience the largest dif-

ferences in achievement, the typical rural student scoring about a half a grade lower than their nonrural counterparts (0.18 SD and 0.15 SD, respectively). Asian students attending rural districts are scoring about a third of a grade level lower than their nonrural peers (by 0.10 SD). It may seem paradoxical that average achievement is lower among rural students within each racial-ethnic group, but higher among rural students overall. This apparent contradiction (a version of what is known as Simpson’s paradox) is due to the fact that White students, who have above-average test scores in both rural and nonrural places, make

Table 3. Mean Values of School Mid-Grade Achievement and Learning Rates, by School Location, Weighted by Enrollment, 2009–2018.

	Mid-Grade Achievement				Learning Rate (Five-Year)			
	Rural	Non-rural	Difference	SE ^o	Rural	Non-rural	Difference	SE ^o
All	0.02	0.00	0.03	0.00	0.04	0.07	–0.03	0.00
Division								
New England	0.29	0.25	0.05	0.00	0.04	0.02	0.02	0.01
Middle Atlantic	0.17	0.12	0.05	0.00	0.02	0.05	–0.04	0.01
East North Central	0.12	0.03	0.09	0.00	0.07	0.09	–0.02	0.01
West North Central	0.12	0.10	0.02	0.00	0.04	0.07	–0.02	0.01
South Atlantic	0.00	0.03	–0.03	0.00	–0.07	–0.10	0.03	0.01
East South Central	–0.13	–0.15	0.02	0.00	–0.01	0.02	–0.03	0.01
West South Central	–0.05	–0.06	0.01	0.00	0.10	0.11	–0.02	0.01
Mountain	–0.02	–0.01	0.00	0.00	0.14	0.12	0.02	0.01
Pacific	–0.19	–0.15	–0.04	0.00	0.17	0.17	0.00	0.01
N	21,499	53,581			21,499	53,581		

Source: Authors' calculations based on SEDA v4.0 (Reardon et al. 2021).

Note: Achievement and five-year learning rates are measured in standard deviations of the national student-level within-grade distribution of test scores. Learning rates reflect average changes in test scores over five years (from grade three to grade eight).

^oSE is the standard error of the difference in means between rural and nonrural schools.

up a much larger proportion of the rural student population than the nonrural population (see table 1).

Whereas economically disadvantaged students in rural districts have higher third-grade achievement than their peers in nonrural districts (by 0.09 SD), non-economically disadvantaged students in rural districts actually have lower scores than their nonrural counterparts (by 0.11 SD). In other words, wealthier rural students are about a third of a grade level behind wealthier nonrural students, and poorer rural students are nearly a third of a grade level ahead of their nonrural counterparts. Although not the focus of our analysis, we find that both male and female third graders in rural districts marginally outperform their nonrural counterparts (0.01 SD).

Tables 2 and 3 likewise present rural-nonrural comparisons in learning rates over five years. These differences are statistically significant, given the enormous samples, but are very small: the five-year learning rates differ by just 0.01 SD (the average student's score improves by 0.33 SD per year, or by 1.67 SD over five years, so a difference of 0.01 SD in five years

is less than 1 percent of the average learning rate). The typical student in a rural district learns at a rate just 0.01 SD slower over five years than that of the typical student in a nonrural district, whereas the typical student attending a rural school learns at a rate just 0.03 SD slower over five years than students in nonrural schools. District-level patterns differ slightly by race-ethnicity, but the differences remain small: Black rural students improve 0.01 SD more over five years than their nonrural counterparts, and Hispanic rural students improve 0.05 SD more over five years than theirs. In contrast, rural White students improve 0.02 SD less than their nonrural peers. Asian and Native American students' scores do not differ between rural and nonrural districts. Rural economically disadvantaged students improve 0.01 SD less than economically disadvantaged students in nonrural districts, and non-economically disadvantaged students in rural districts improve 0.02 SD less than their nonrural counterparts. Finally, male and female students in rural districts learn at rates 0.02 SD and 0.01 SD slower than their nonrural counterparts, respectively.

Table 4. Mean District and School Values of Achievement and Learning Rates, by Locale, Weighted by Enrollment, 2009–2018.

Locale	Districts				Schools			
	Achievement	SE	Growth	SE ^o	Achievement	SE	Growth	SE ^o
City, large	-0.17	0.00	0.02	0.01	-0.20	0.00	0.09	0.00
City, midsize	-0.12	0.00	-0.02	0.00	-0.18	0.00	0.05	0.00
City, small	0.00	0.00	-0.02	0.00	-0.01	0.00	0.06	0.01
All cities	-0.13	0.00	0.00	0.01	-0.15	0.00	0.07	0.00
Suburb, large	0.16	0.00	-0.01	0.00	0.14	0.00	0.07	0.00
Suburb, midsize	0.07	0.00	-0.02	0.00	0.06	0.00	0.04	0.01
Suburb, small	0.03	0.00	0.01	0.01	0.00	0.00	0.05	0.01
All suburbs	0.14	0.00	-0.01	0.00	0.12	0.00	0.06	0.00
Town, fringe	0.01	0.00	0.01	0.00	0.00	0.00	0.09	0.01
Town, distant	-0.07	0.00	-0.03	0.00	-0.10	0.00	0.03	0.01
Town, remote	-0.10	0.00	0.00	0.00	-0.11	0.00	0.06	0.01
All towns	-0.06	0.00	-0.01	0.00	-0.08	0.00	0.05	0.00
Rural, fringe	0.07	0.00	-0.02	0.00	0.07	0.00	0.04	0.00
Rural, distant	-0.02	0.00	-0.02	0.00	-0.03	0.00	0.03	0.00
Rural, remote	-0.10	0.00	-0.02	0.00	-0.10	0.00	0.04	0.01
All rural	0.01	0.00	-0.02	0.00	0.02	0.00	0.04	0.00
All locales	0.00	0.00	-0.01	0.00	0.00	0.00	0.06	0.00

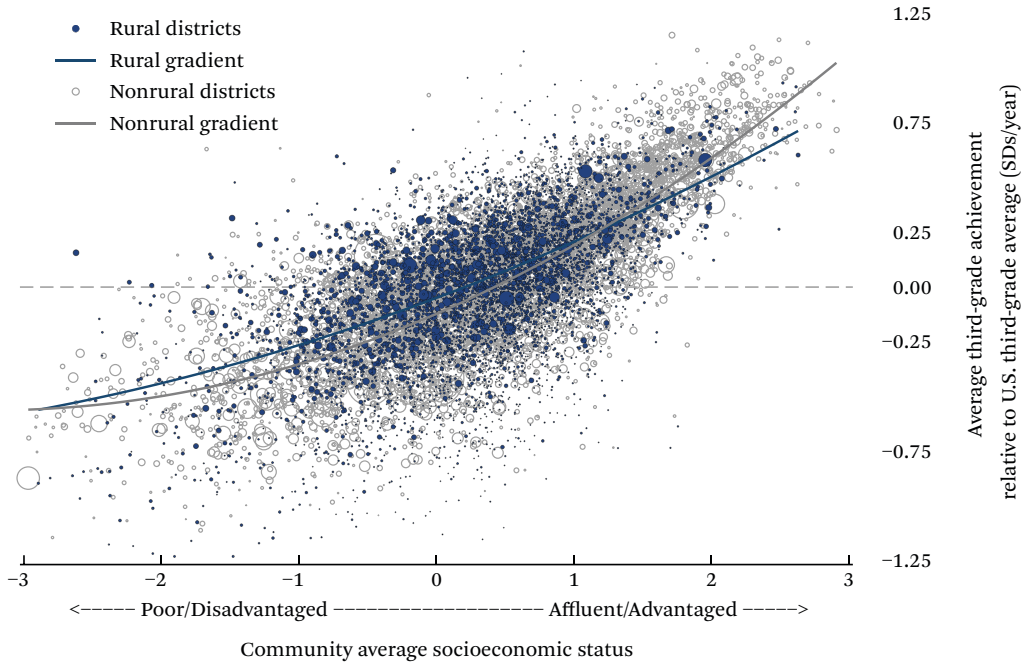
Source: Authors' calculations based on SEDA v4.0 (Reardon et al. 2021).

Note: Achievement and five-year learning rates are measured in standard deviations of the national student-level within-grade distribution of test scores. Learning rates reflect average changes in test scores over five years (from grade three to grade eight).

^oSE is the standard error of the achievement and growth estimates.

Most regional differences between rural students and nonrural students are small. Rural students in the district-level sample are performing marginally worse than their nonrural peers in most divisions. This pattern has a few exceptions: rural students in the New England and east-north-central regions of the United States are outperforming their nonrural peers (by 0.07 SD and 0.09 SD, respectively), and rural students in the Pacific and south Atlantic regions are underperforming their nonrural peers (by 0.13 SD and 0.09 SD respectively). Regional differences in learning rates are also small when using the district-level sample: the largest difference occurs in the Pacific region of the United States, where rural students are learning 0.07 SD more over five years than their nonrural peers. For both achievement and learning rates, these differences become more consistent at the school level (table 3).

Because our nonrural student category represents a very heterogeneous group of communities, we provide a detailed breakdown of achievement and learning rates in urban, suburban, and town environments. Although the nonrural students in aggregate are not dissimilar from rural students on these measures, table 4 shows considerable variation both within and across locales. At both the school and district level, the average city student scores well below the national average and the average suburban student scores well above it. Students living in towns—communities within an urban cluster but located outside an urbanized area—fall slightly below. Although the stark city-suburban differences in achievement harken to the dominant narrative in education research and policy, the outcomes for rural and town students—who together make up all students living outside urbanized areas—high-

Figure 2. Third-Grade Average Achievement and Community Socioeconomic Status

Source: Authors' calculations based on SEDA v4.0 (Reardon et al. 2021).

Note: Thirty-three districts with achievement greater than 1.25/less than -1.25 or SES greater than 3/less than -3 omitted to improve visual display.

light the need to better understand what is taking place in the middle. We see little variation in learning rates between locales.

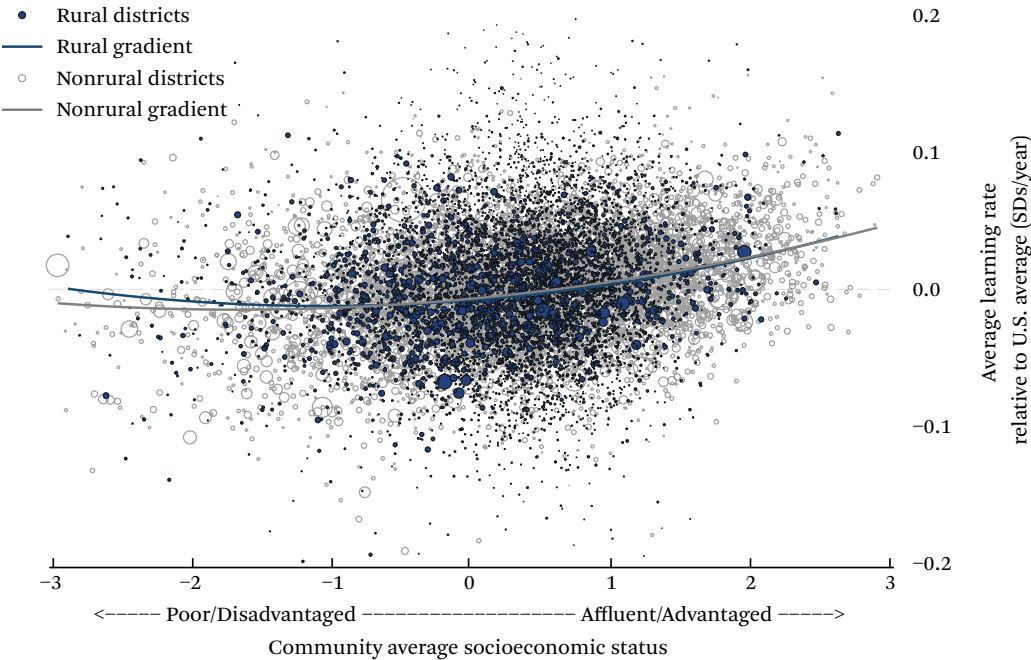
Before turning to our analysis of variation among rural school districts, we investigate the contrasting rural-nonrural trends for different socioeconomic groups by examining the extent to which community socioeconomic status is differentially associated with rural and nonrural test score patterns. To do this, we plotted the relationship between the average socioeconomic status of families in a district (the composite SES variable described above) and the average third-grade achievement or learning rate in a district (figures 2 and 3), weighting by district enrollment so that the fitted lines reflect the test scores of the average student, conditional on district SES.

Figure 2 shows a visibly shallower slope between district socioeconomic status and achievement for rural districts, meaning that community socioeconomic status is less predictive of average third-grade achievement in rural districts than of nonrural districts ($F_{2,12421}$

$= 7.28, p < .001$). This difference is modest but meaningful, showing achievement differences at extreme ends of the socioeconomic spectrum to be less dramatic in rural settings. For example, the difference between the average achievement of districts with socioeconomic values of ± 2 is approximately 10 percent smaller among rural districts than nonrural districts. Figure 2 also shows our previous finding that average third-grade achievement is higher in rural districts than nonrural districts, though this pattern reverses among the highly resourced communities. Figure 3, however, shows that the learning rate per SES gradient for rural and nonrural districts is virtually identical ($F_{2,12421} = 1.24, p > .288$).

Having explored differences in student outcomes between rural and nonrural districts, and the extent to which these differences vary between the district and school level, we next explore variation in educational opportunity among rural districts. Because we are interested in the influence of community factors on student outcomes, our analysis focuses on dis-

Figure 3. Learning Rates and Community Socioeconomic Status



Source: Authors' calculations based on SEDA v4.0 (Reardon et al. 2021).

Note: Forty-one districts with a learning rate greater than 0.2/less than -0.2 or SES greater than 3/less than -3 omitted to improve visual display

trict- rather than student-level variation (for the corresponding unweighted district descriptive statistics, see table A.5).

Regional Variation and Community Demographics

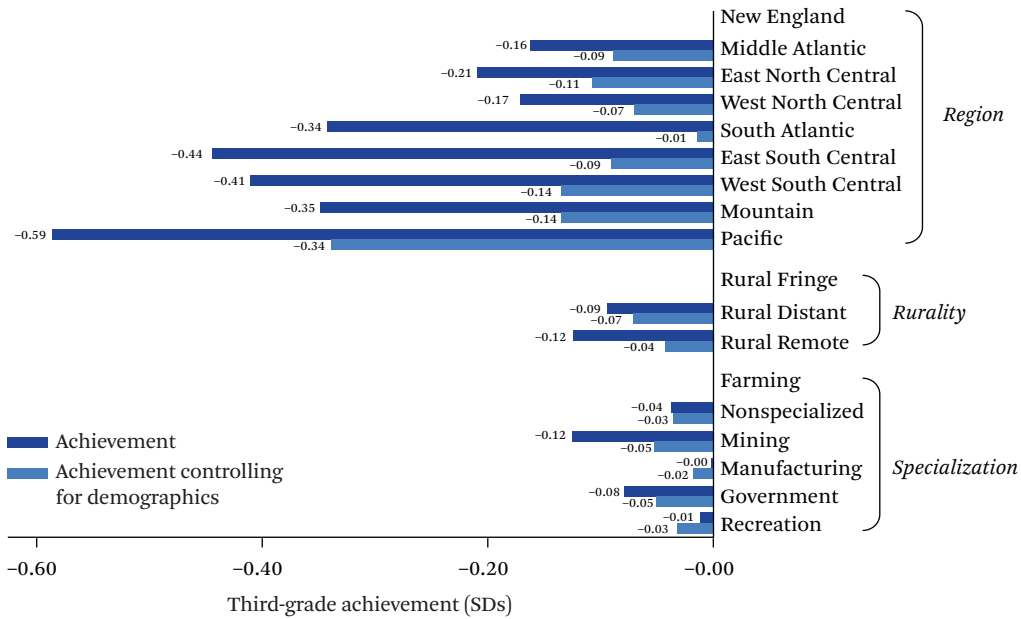
Our second research question asks whether regional differences in rural district achievement and learning rates are systemic. Figures 4 and 5 present this variation over three community classifications: division, rurality, and type of local economy.

We first examine differences in average achievement and learning rates among the nine U.S. Census divisions. Average achievement is higher in rural New England school districts (the reference category) than in any of the other divisions, and is lowest in the Pacific and the East and West South Central divisions (which include much of the South, from Kentucky, Tennessee, and Alabama west to Texas and Oklahoma). These divisional differences are large relative to the total between-district differences, accounting for 23 percent of

between-district variance. Many of the differences between the regions are associated with demographics—as indicated by the smaller effects after we control for community socioeconomic status and racial-ethnic composition—but important geographic variation remains.

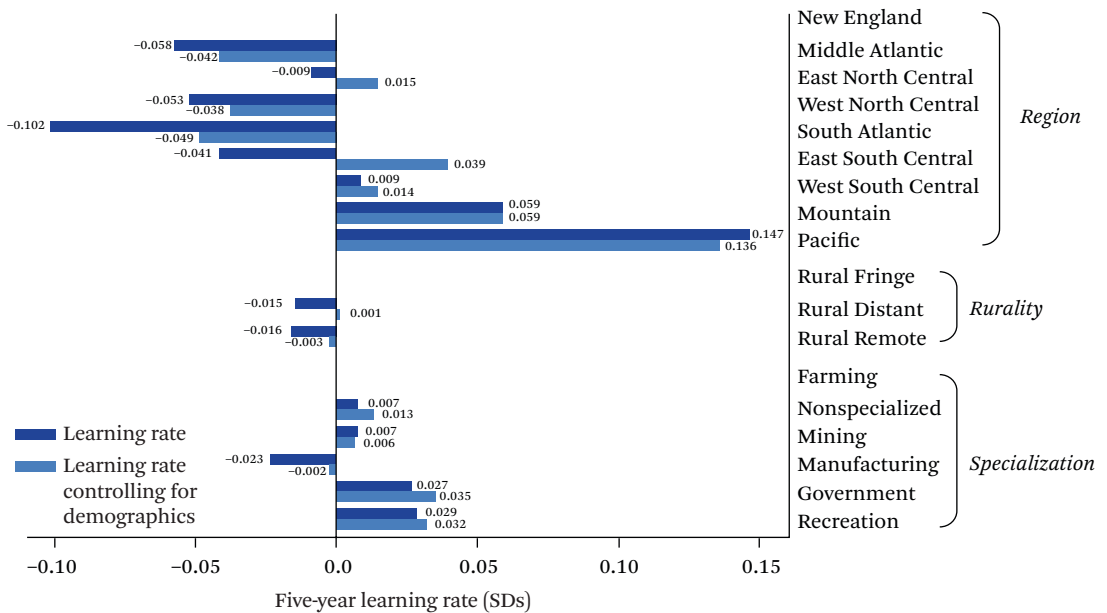
In contrast, regional differences in learning rates are not associated with community demographics. Regional patterns in student learning rates (figure 5) differ markedly from regional patterns in achievement: conditional on community socioeconomic status and racial-ethnic composition, districts in the Pacific and Mountain divisions are growing 9 percent and 4 percent faster than New England districts. This regional finding echoes earlier evidence (Reardon 2019) that districts with high levels of early childhood educational opportunity are not necessarily districts with high levels of middle childhood educational opportunity.

The regional variation among rural school districts' test score patterns is evident in figures 6 and 7. Overlaying the map with census division boundaries makes the relationship

Figure 4. Average Achievement and Community Classifications Among Rural Districts

Source: Authors' calculations based on SEDA v4.0 (Reardon et al. 2021).

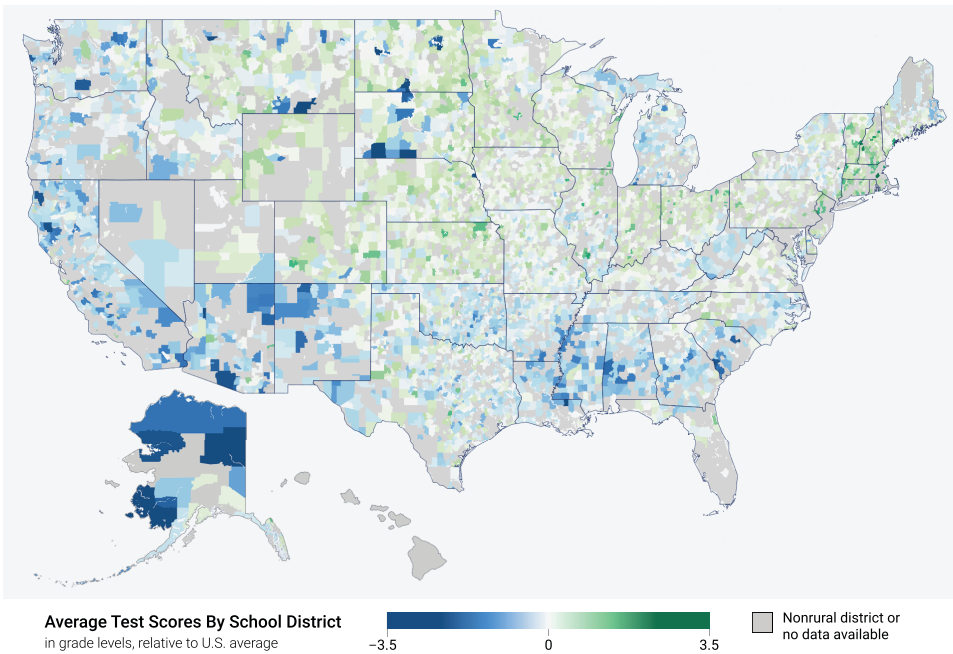
Note: New England is the reference category for divisions, rural fringe for rural urban locales, and farming for economic subtypes.

Figure 5. Average Learning Rate and Community Classifications Among Rural Districts

Source: Authors' calculations based on SEDA v4.0 (Reardon et al. 2021).

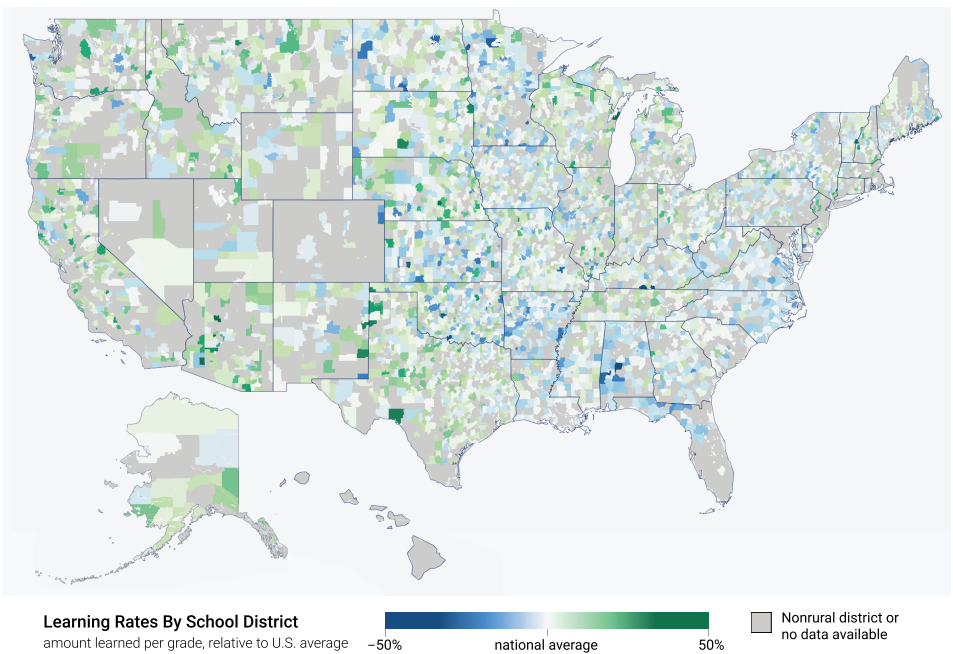
Note: New England is the reference category for divisions, rural fringe for rural urban locales, and farming for economic subtypes.

Figure 6. Educational Achievement Across Rural U.S. Districts

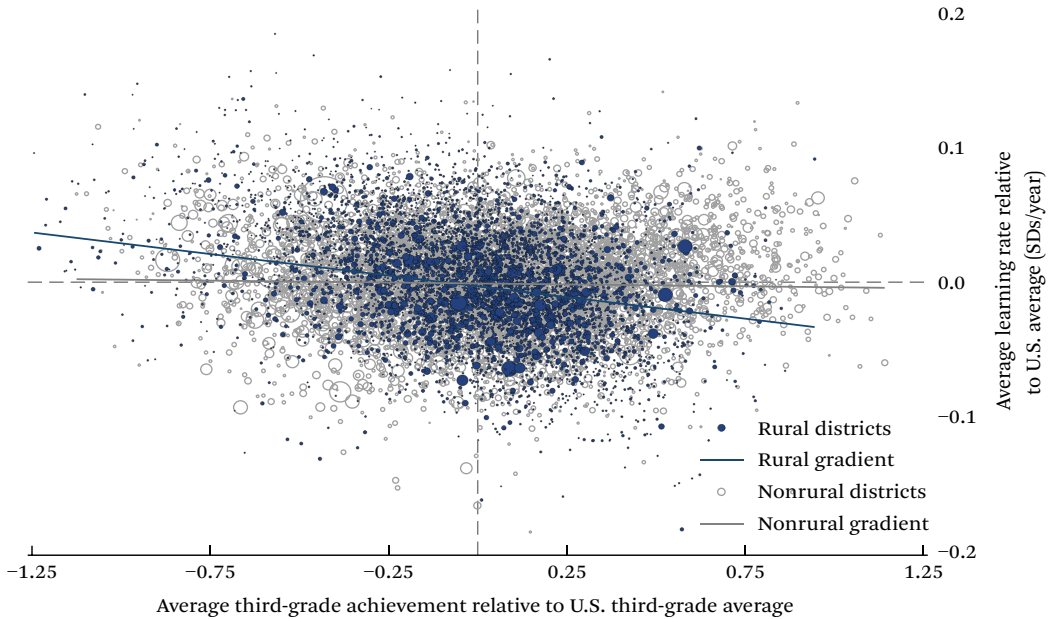


Source: Educational Opportunity Project at Stanford University (<https://www.edopportunity.org>).

Figure 7. Average Annual Learning Rates Across Rural U.S. Districts



Source: Educational Opportunity Project at Stanford University (<https://www.edopportunity.org>).

Figure 8. Third-Grade Average Achievement and Average Annual Learning Rates

Source: Authors' calculations based on SEDA v4.0 (Reardon et al. 2021).

Note: Thirty-four districts with a learning rate greater than 0.2/less than -0.2 or achievement greater than 1.25/less than -1.25 omitted to improve visual display.

clear. Although some divisions are more heterogeneous than others, one can clearly see that some divisions are more advantageous for a rural student. In New England, the average rural student is performing one grade level higher than the national average for all students; the opposite is true for the West Coast, where the average rural student is performing one grade level below the national average. Rural districts in the south and west in particular have low test scores, and some—but not all—of that disparity is accounted for by differences in community demographics.

We next examine differences in educational outcomes by rurality. We find that average achievement is lower in the more remote districts. Although the amount of variation this explains is quite small relative to that explained by demographics, we find that these differences in achievement are only partially accounted for by community demographics. In other words, geographic isolation appears to have a unique association with achievement beyond what can be attributed to differences in the population who live there. Looking at learning rates, however, we find only marginal dif-

ferences that disappear once we account for socioeconomic status, suggesting that slower learning rates in more remote areas are the result of fewer resources in these areas.

Finally, we examine variation in rural achievement and learning rates by economic specialization. We use farming-dependent economies as the reference category, given that it is one of the two most common specialized economies across rural districts. Looking at specific economic subtypes, we see that achievement is modestly lower in nonspecialized, government-dependent, and especially mining-dependent economies than in farming-dependent ones, which is partially explained by differences in community composition. Learning rates are modestly higher in nonspecialized, government-dependent, and recreation-dependent economies, but economic subtype explains virtually zero variance in learning rates. We find that the type of local economy is overshadowed by community demographics.

We conclude our analyses by exploring the extent to which average third-grade achievement and learning rates are related. Figure 8 shows that rural districts (but not nonrural

ones) with higher average third-grade achievement tend to have a lower learning rate. We explored the extent to which this is due to district size and socioeconomic context. We find that districts with smaller enrollment—both rural and nonrural—exhibited this negative relationship, but that among districts with larger enrollments, only rural districts exhibited this relationship. This suggests that though size is a factor, something is unique happening in rural districts. Although it is expected that districts with smaller enrollments would have a stronger relationship (because the larger measurement error in third grade achievement estimates in small districts will lead to greater apparent regression to the mean in later grades, which results in a negatively biased estimate of the association between third grade scores and learning rates), this alone does not account for the relationship. When exploring these relationships between rural and nonrural districts across the socioeconomic spectrum, we did not find any systemic differences (see figures A.1 and A.2).

DISCUSSION

No prior study has examined rural achievement and learning rates with the level of granularity as we have here. Thus our primary goal in this article is to establish a set of stylized facts regarding the trends, variation, and correlates of achievement in rural districts. Four particular patterns—and their implications—are worth noting.

First, average achievement and learning rates differ only trivially between rural and nonrural students, on average, but do differ somewhat for some student groups. The largest differences are for White and Native American students. For these groups, third graders attending school in rural districts are scoring about half a grade level lower than their nonrural counterparts. We also note large differences between rural and nonrural students in the Pacific division (Alaska, California, Hawaii, Oregon, and Washington), where third graders in rural districts are achieving, on average, roughly 40 percent of a grade level behind their nonrural counterparts (by 0.13 SD). Rural students in the South Atlantic, too, fall behind their nonrural peers (by 0.09 SD). In contrast,

students in the East North Central division (Illinois, Indiana, Michigan, Ohio, and Wisconsin) perform more than a quarter of a grade level ahead of their nonrural peers.

Rural-nonrural differences within economic subgroups were sizable as well: economically disadvantaged students in rural districts are scoring nearly a third of a grade level higher than their peers in nonrural districts, whereas non-disadvantaged students in rural districts are scoring a third of a grade level lower than their nonrural counterparts. These contrasting trends are worth noting because they suggest that the achievement differences at each end of the socioeconomic spectrum appear less dramatic in rural settings. This may be due to a combination of factors. A ceiling effect may be at play in rural communities, such that the wealthiest community members experience an upper limit on the types of advantages they are able to secure for their children. Similarly, a floor effect is also possible by virtue of the fact that rural communities, in general, do not have the critical mass to segregate the public education system: this puts the communities' poorest children in the same childcare centers and classrooms as the communities' wealthiest children, which may benefit children with fewer resources.

Outside these important differences, the overall lack of a major disparity in test scores between rural and nonrural students is noteworthy when considering academic achievement as a measure of educational opportunity and the role it plays in college enrollment and attainment. Rural students attend and graduate college at a lower rate than their nonrural peers, and our findings suggest that these trends cannot be explained by differences in achievement (Byun, Meece, and Irvin 2012). Indeed, research indicates that rural students face a number of hurdles to educational attainment, including financial burden, a lack of nearby jobs that require a degree, geographic isolation from higher education institutions, reduced access to rigorous curricula in high school, and family and societal expectations to not attend college (Byun, Meece, and Irvin 2012; Byun, Irvin, and Meece 2015; Roscigno and Crowley 2001; Roscigno, Tomaskovic-Devey, and Crowley 2006).

Second, socioeconomic status is less predictive of achievement in rural America than in nonrural America. In other words, the average SES for families within a district appears to matter more for student achievement in nonrural districts than it does in rural districts. This echoes our previous observation of contrasting rural-nonrural trends for economically disadvantaged versus non-economically disadvantaged students, where disadvantaged rural students are scoring higher than their nonrural counterparts and advantaged rural students are scoring lower. Despite this finding, we still find that, of all covariates examined, socioeconomic status is most strongly predictive of rural student achievement. This suggests that although poverty levels may be a weaker predictor of the early educational opportunity in rural communities than in nonrural communities, it still plays an important role in rural student outcomes.

The third pattern is that place matters for rural students, both in terms of geographic location and community demographic composition. We find that census divisions account for 23 percent of the variance in early childhood educational opportunity (third-grade test scores) and 7 percent of that in middle childhood educational opportunity (five-year learning rate between third and eighth grade). Although the extent to which census divisions accounted for variation in educational opportunity surprised us, we suspect that this may be due in part to differences in the historical development of school systems across the country. Our other community classifications explained very little of the variation in comparison, though our results suggest that achievement is slightly lower in more remote districts and in communities with mining-dependent economies. Compared to these community classifications, community demographics explain a lot more variation: census division, socioeconomic status, and racial-ethnic composition explain more than half of the variation in rural third-grade test scores and 10 percent of variation in learning rates. That community demographics overshadow these regional measures is perhaps not surprising: decades of research have highlighted differences in educational outcomes by socioeconomic status

and race-ethnicity that are often the result of policies and practices that produce structural inequalities within and across schools, districts, communities, and states. These findings point to the need to better understand the intersecting ways that racism, economic deprivation, and regional policies may be fundamentally shaping rural educational opportunity across the country.

Fourth is a somewhat surprising finding: third-grade achievement has a strong negative association with learning rates in rural areas and explains three times the variation in rural learning rates that community demographics and geographic location do. In other words, rural communities that provide more early childhood educational opportunity tend to provide less middle childhood opportunity, and those that provide less early opportunity tend to provide more. This pattern is not evident in nonrural communities or among all school districts (Reardon 2019). This negative association is evident even after controlling for regional, economic, and demographic differences among rural communities, though we find it does flatten slightly among larger districts.

One possible explanation for these trends is that both smaller districts and rural districts have fewer resources with which to support high-achieving students. One such resource is high-quality teachers: smaller schools are less likely to employ teachers with high levels of education and training and tend to require passing scores on standardized teaching assessments at a lower rate than their larger peers (Monk 2007). These trends are true for both rural and small schools, though more prevalent in the latter. Further, existing literature on gifted student programs suggests that rural schools struggle to provide differentiated learning options because of staffing and funding limitations (Weinlein 2019). Taken together, it is reasonable to expect that rural schools, especially smaller ones, are limited in their ability to provide challenging, differentiated instruction to support high-achieving students, and must prioritize their efforts on ensuring that all students meet a minimum level of proficiency. These hypotheses, however, require further study.

These analyses provide a more nuanced un-

derstanding of the variation in educational outcomes among rural districts and suggest that further attention should be paid to how differences in local policies, practices, and norms in rural communities may account for the varying educational trends we observe. This article has several limitations. One is that the patterns we describe apply only to grades three through eight, so we cannot speak to the trends in rural achievement in earlier or later grades, which may differ from what we observe. In addition, we cannot explain the mechanisms underlying the different trends we see in terms of the learning rates and achievement of rural versus nonrural students; we are merely describing associations.

We hope that future work will build on the insights from this research because more work is needed to consider policy implications for the disparities we find. Future work should consider other features of local context that might influence student achievement and learning rates, such as additional characteristics of the local educator labor market and more detailed measures of the local health and social ecosystems. More research is also needed to understand the negative association we identify between achievement and learning rates in

rural communities. Further, our later analyses focus on school districts characterized as rural, which omits many rural schools located in nonrural districts. Future analyses might benefit from using the population of rural schools rather than rural districts, though fewer contextual data are available for schools than for districts. This important analysis would allow for a more precise understanding of rural student outcomes, given that districts are often large and encompass many different types of schools. As figure 1 shows, a sample selected at the district level encompasses the outcomes of many students who do not, in fact, live in a rural environment. The differences in these samples are not inconsequential: analyzing rural districts instead of rural schools disproportionately drops rural southern schools. Finally, it is worth exploring trends in rural achievement over time, particularly because all of the data in our analysis was gathered from years directly following the 2008 recession, which had a varying impact on rural and nonrural communities nationwide (Hertz et al. 2014). These types of additional analyses will be critical for continuing to shed a light on the state of education as well as the conditions that best support students in rural America.

Table A.1. Urban-Centric Locale Code Definitions

Locale Name	Definition
City, large	Territory inside an urbanized area and inside a principal city with population of 250,000 or more.
City, midsize	Territory inside an urbanized area and inside a principal city with population less than 250,000 and greater than or equal to 100,000.
City, small	Territory inside an urbanized area and inside a principal city with population less than 100,000.
Suburb, large	Territory outside a principal city and inside an urbanized area with population of 250,000 or more.
Suburb, midsize	Territory outside a principal city and inside an urbanized area with population less than 250,000 and greater than or equal to 100,000.
Suburb, small	Territory outside a principal city and inside an urbanized area with population less than 100,000.
Town, fringe	Territory inside an urban cluster less than or equal to ten miles from an urbanized area.
Town, distant	Territory inside an urban cluster more than ten miles and less than or equal to thirty-five miles from an urbanized area.
Town, remote	Territory inside an urban cluster more than thirty-five miles of an urbanized area.
Rural, fringe	Census-defined rural territory less than or equal to five miles from an urbanized area, as well as rural territory less than or equal to 2.5 miles from an urban cluster.
Rural, distant	Census-defined rural territory more than five miles but less than or equal to twenty-five miles from an urbanized area, as well as rural territory more than 2.5 miles but less than or equal to ten miles from an urban cluster.
Rural, remote	Census-defined rural territory more than twenty-five miles from an urbanized area and more than ten miles from an urban cluster.

Source: Authors' tabulation based on NCES 2006.

Table A.2. Geographic Distribution and Definitions of Districts

	States	Rural	Nonrural
Region 1, Northeast			
Division 1, New England	CT, ME, MA, NH, RI, VT	542	476
Division 2, Middle Atlantic	NJ, NY, PA	555	1,119
Region 2, Midwest			
Division 3, East North Central	IL, IN, MI, OH, WI	1,248	1,375
Division 4, West North Central	IA, KS, MN, MO, NE, ND, SD	1,467	577
Region 3, South			
Division 5, South Atlantic	DE, FL, GA, MD, NC, SC, VA, DC, WV	345	333
Division 6, East South Central	AL, KY, MI, TN	293	292
Division 7, West South Central	AR, LA, OK, TX	1,190	659
Region 4, West			
Division 8, Mountain	AZ, CO, ID, MT, NV, NM, UT, WY	576	342
Division 9, Pacific	AL, CA, HI, OR, WA	597	837
Total		6,813	6,010

Source: Authors' calculations based on SEDA v4.0 (Reardon et al. 2021) and U.S. Census Bureau Region and Division Codes (U.S. Census Bureau 2018).

Table A.3. Distribution of Districts by Economic Subtype

Economic Subtype	Rural	Nonrural
Nonspecialized	2,797	3,840
Farm-dependent	961	122
Mining-dependent	410	205
Manufacturing-dependent	961	696
Federal or state government-dependent	783	615
Recreation-dependent	901	532
Total	6,813	6,010

Source: Authors' calculations based on SEDA v4.0 (Reardon et al. 2021) and U.S. Department of Agriculture Economic Research Service County Typology Codes (Parker 2017).

Table A.4. Availability of District Subgroup Observations

Subgroup	Rural	Nonrural
All	6,813	6,010
Asian	673	3,896
Black	1,505	4,605
Economically disadvantaged	6,604	5,888
Female	6,691	5,979
Hispanic	3,295	5,401
Male	6,695	5,991
Native American	1,050	2,046
Non-economically disadvantaged	6,523	5,936
White	6,652	5,941

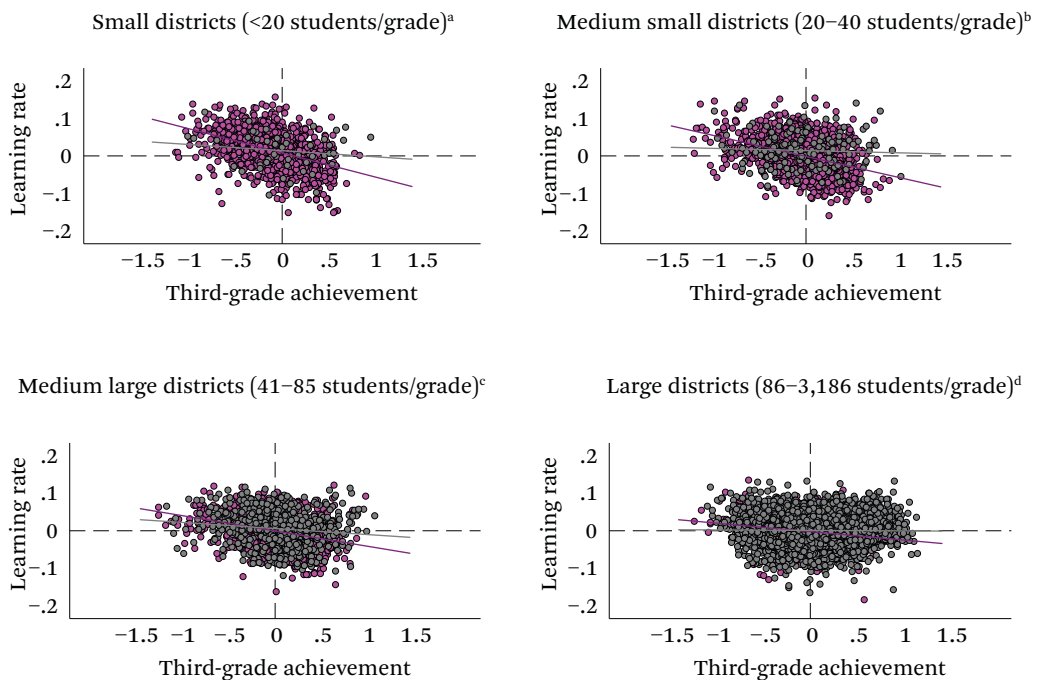
Source: Authors' calculations based on SEDA v4.0 (Reardon et al. 2021).

Table A.5. Unweighted Descriptive Statistics, Rural Districts

Variable	Mean	S.D.
Socioeconomic status	0.30	0.71
Percent Native American	4.48	14.53
Percent Asian	0.65	1.34
Percent Hispanic	10.13	17.24
Percent Black	4.12	12.02
Percent White	80.62	23.82
N	6,530	

Source: Authors' calculations based on SEDA v4.0 (Reardon et al. 2021).

Note: The socioeconomic status composite variable is not available at the school level. We instead use the percentage of students who are eligible for free and reduced-price lunch.

Figure A.1. Third-Grade Achievement to Learning Rate Gradient by District Enrollment, All Districts

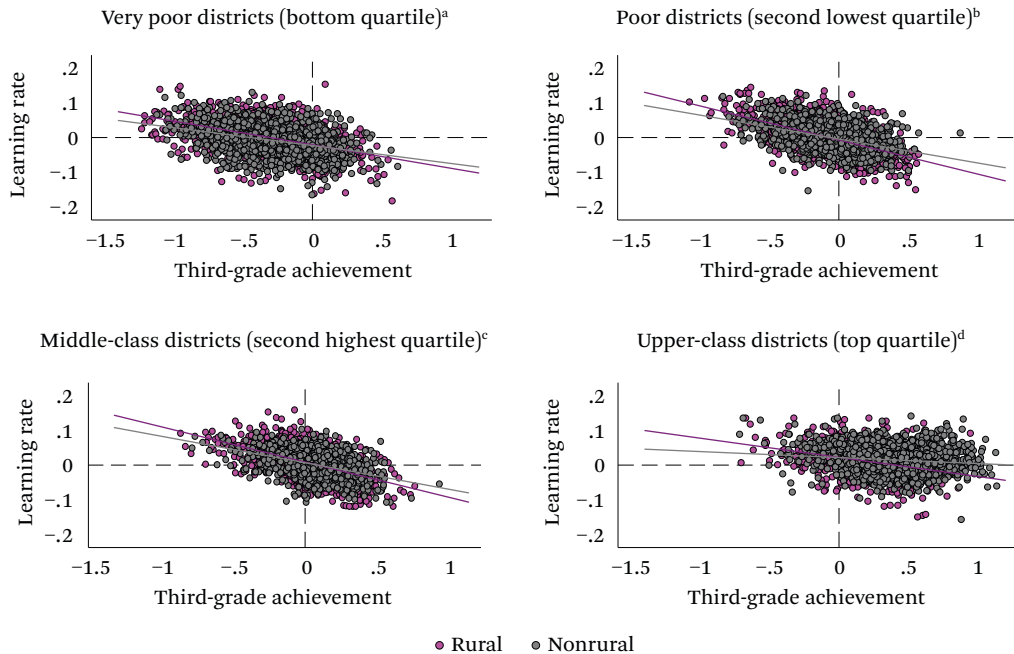
Source: Authors' calculations based on SEDA v4.0 (Reardon et al. 2021).

^a96 percent of these districts are rural ($n = 1,626$) and 4 percent are nonrural ($n = 71$).

^b91 percent of these districts are rural ($n = 1,625$) and 9 percent are nonrural ($n = 170$).

^c69 percent of these districts are rural ($n = 1,627$) and 31 percent are nonrural ($n = 740$).

^d25 percent of these districts are rural ($n = 1,625$) and 75 percent are nonrural ($n = 4,803$).

Figure A.2. Achievement/Learning Rate Gradient by District SES, Rural & Nonrural Districts

Source: Authors' calculations based on SEDA v4.0 (Reardon et al. 2021)

^a47 percent of very poor districts are rural.

^b59 percent of poor districts are rural.

^c63 percent of middle class districts are rural.

^d40 percent of upper class districts are rural.

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“Turning Their Back on Kids”: Inclusions, Exclusions, and the Contradictions of Schooling in Gentrifying Rural Communities



JENNIFER SHERMAN AND KAI A. SCHAFFT

In this ethnographic case study of amenity-driven rural development, we illustrate how the school as a local institution can provide social, cultural, and educational privilege to some students while systematically withholding it from others. Rural gentrification, although representing new resources to historically struggling places, can exacerbate existing inequalities or create new ones, or both. This study not only challenges more communitarian visions of the rural school-community relationship, but also underscores the complexities and contradictions of rural development that can often inadvertently create, reproduce, or deepen social, cultural, and economic divides. These issues assume a particular saliency at a time of pronounced spatial, social, and economic division in the United States given that local institutions like public schools play vital roles in either bridging or widening these divides.

Keywords: rural development, gentrification, social class reproduction, social inequality

This article explores the impacts of contextual influences on children's schooling and educational experiences through a case study of amenity-driven rural development, immigration, and gentrification in the rural West. Rural schools are frequently described as local institutions that provide communities with coherent shared and intergenerational identities, functioning as centers of local civic life, and contributing to social and economic well-being (Tieken 2014; Schafft and Harmon 2010; Lyson

2002). Others have argued that smaller rural school environments have socially and academically protective factors that can have particularly positive outcomes for low-income youth (Coladarci 2006; Howley 1996). These imaginations of rural schooling are broadly consistent with understandings of rural places as bucolic, communitarian spaces, perhaps isolated from the wider world but with unique stocks of social capital (Flora and Flora 2013; Yarwood 2005; Halfacree 1995; Howarth 1995).

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However, other research has challenged these representations, pointing to a variety of ways in which rural schools may create or reproduce existing inequalities and exclusions (Miller and Edin 2022; McHenry-Sorber and Schafft 2015; Corbett 2010, 2014; Sherman and Sage 2011; Groenke and Nespoor 2010; Budge 2006). Furthermore, idealized imaginaries of rural communities mask significant variability in their socioeconomic, demographic, historical, and cultural characteristics (Hamilton et al. 2008), rural development pathways, and indeed patterns of social inclusion and exclusion more generally (Miller, Votruba-Drzal, and Coley 2019).

Within rural scholarship, and especially within the context of longer-term patterns of urbanization, rural decline, and out-migration (Johnson and Lichter 2019; Carr and Kefalas 2009; Fitchen 1981), the influx of human, social, and financial capital into rural areas is typically understood as a net positive as well as an encouraging development trajectory with often positive outcomes for local economic activity and the capacity of institutions, including schools (Glasgow and Brown 2012; Brown and Glasgow 2008; Kim, Marcouiller, and Deller 2005). Don Albrecht (2010, 16), for example, suggests that high-amenity rural areas are those with the best chances for bucking trends of rural depopulation, and "the presence or absence of natural amenities has become the best predictor of nonmetro population change in recent decades."

However, outcomes of this type of development may be uneven for communities, resulting in unequal distribution of and access to social, institutional, and economic benefits (Krannich and Petrzela 2003), in the process importing urban and national inequalities into what were once more homogenous communities (Sherman 2018; Ulrich-Schad 2018; Brown-Saracino 2017; Lichter and Ziliak 2017; Golding 2016; Winkler 2013; Gosnell and Abrams 2011; Lichter and Brown 2011). Dwight Hines (2010, 288), for example, describes rural gentrification as "a form of colonization of formerly predominantly working-class domains by ex-urban middle-class Americans." Most analyses of the uneven outcomes of rural gentrification have focused on housing markets and affordability

(see, for example, Sherman 2021b; Gkartzios and Ziebarth 2016; Golding 2016), in which housing demands created by amenity-driven in-migration create cost inflations, resulting in increased economic and housing insecurity for lower-resourced residents. Other work examines rural labor-market shifts and bifurcation with the creation of lower-wage and often seasonal service-sector work (Slack 2014), labor-market polarizations that reflect national-level changes long in the making (VanHeuvelen and Copas 2019).

However, amenity-driven gentrification can exacerbate existing inequalities and create new ones beyond bifurcated housing and labor markets. While increasing social inequality, rural gentrification and in-migration also tend to decrease social ties and sense of community for local residents (Thompson, Johnson, and Hanes 2016; Nelson, Oberg, and Nelson 2010; Salamon 2003). Residential displacement of long-time residents can result in diminished social interaction with long-time neighbors and community, creating and exacerbating social isolation for the most disadvantaged residents (Thompson, Johnson, and Hanes 2016; Ooi, Laing, and Mair 2015; Winkler 2013; Larsen and Hutton 2012). These processes of social and residential displacement are particular characteristics of rural gentrification and can undermine the protective factors commonly ascribed to rural communities, such as social cohesion and informal support (Stockdale 2010).

In regard to local educational systems, gentrification can contribute to the process by which schools as local institutions provide numerous forms of social, cultural, and educational privilege to some students while systematically withholding it from others. As shown by Emily Miller and Kathryn Edin (2022), because of the ways in which social ties are historically embedded within rural communities, negative school interactions and experiences can be passed down across generations and within families and social networks, reinforcing privilege and deepening disadvantage (see also Butler and Muir 2017; Shucksmith 2012). Further, findings by Jessica Drescher and her colleagues (2022) in this issue suggest that community socioeconomic status is less likely to predict school achievement in rural than urban areas,

and that rural communities with higher socioeconomic status experience fewer benefits of rurality in terms of achievement. These findings raise further doubts about the degree to which the benefits of rural gentrification are spread evenly among students.

Scholarship exploring these contradictory processes not only challenges communitarian visions of the rural school-community relationship, but also underscores rural development's complexities and contradictions that often inadvertently create or reproduce social, cultural, and economic divides (Schafft et al. 2018; Sherman 2009; Schafft and Greenwood 2003; Bourdieu 1986). Given the resurgence of urban-to-rural migration spurred by the coronavirus pandemic (Banse 2020; Berliner 2020), these resource inequalities may well become even more pronounced and problematic in the future (Mueller et al. 2021), underscoring the need to better understand the role of local institutions such as schools in creating or ameliorating social divisions and inequalities. This article examines these processes and contextualizes them through ethnographic data collected in a remote rural area covering more than one hundred square miles and four distinct communities. Research participants included many with current and past ties to the local schools.

We describe the social class inequality in the community, including the divide between well-resourced in-migrants and mostly low-income and working-class locals. We then focus on the numerous mechanisms by which local schools fail to equally distribute the resources and services that gentrification and economic development bring. Instead, we show that even better-resourced rural schools continue to privilege children of the wealthy and well educated while creating additional roadblocks for those whose parents lack income and wealth to pay for access to sports and other extracurricular activities; human capital to navigate difficult and complex homework and curricula; and cultural capital to forge and maintain social network connections with elites. We also illustrate how social class-related differences in educational

attainment and aspirations influence the ability of both parents and students to navigate the pathway to higher education and out-migration that are understood as necessary for more lucrative careers and leadership opportunities even within the community. Through in-depth interviews with parents on both ends of the social class and rural-urban spectrum, as well as numerous adults who are themselves alumni of the local public schools, we illustrate how improved economic and educational conditions driven by amenity-related rural development may result not in better chances for all, but rather a continuing reinforcing and reproduction of social inequalities between the most and the least advantaged residents.

METHODS AND FIELD SITE

This research was conducted in Paradise Valley, a mostly white mountainous region in Washington State that transitioned from logging to a mainly tourism and service-based economy over the past several decades.¹ More than a half a million visitors annually come to the area to enjoy outdoor recreation, including hunting, fishing, hiking, biking, skiing, rock climbing, and water sports.² The recreation and tourism industry now dwarfs extractive industries in their share of the local labor market and economy (Census Bureau 2016a), although the historical legacies of resource extraction continue to be important to the local culture.

The Paradise Valley region has a population of roughly five thousand year-round residents (Census Bureau 2015) across the four communities, only two of which are incorporated, and all of which are served by a single regional school district that includes a public grade school and high school on adjoining campuses. All of the communities depend on amenity tourism, vacationers, retirees, and second-home owners for their economic base to some degree, and all have experienced significant in-migration of wealthy ex-urbanites in recent decades as well, including both retirement-aged adults and much younger adults with school-aged children, often moving for quality-of-life

1. All names of people and places (except the state itself) in this paper are pseudonyms. The region is more than 95 percent white (Census Bureau 2015, 2016a).

2. Sources of local information are omitted in order to protect confidentiality of participants and community.

Table 1. Employment by Selected Industry for Paradise Valley’s Two Largest Incorporated Towns (Percent)

Industry	1980	1990	2000	2010–2014
Agriculture, forest, fisheries, and mining	10.9	6.4	7.2	6.4
Construction	6.5	11.6	7.4	7.5
Manufacturing	20.7	10.3	2.7	6.4
Retail	17.2	25.3	13.0	10.5
Entertainment and recreation	9.5	1.4	24.7	30.8
Unemployment rate (all working age)	24.2	11.9	8.8	13.1

Source: U.S. Census Data source for 1980, 1990, 2000 (Minnesota Population Center 2016); American Community Survey source for 2010–2014: (U.S. Census Bureau 2016a).

reasons.³ Although in-migrants historically preferred the towns closest to the mountains, over time all of the communities have received substantial in-migration.

As shown in table 1, employment in natural resource-based industries fell between 1980 and 1990 in Paradise Valley’s two most populous towns, then stabilized with a smaller share of local employment. Manufacturing, which has historically consisted mostly of forest-product businesses such as lumber mills in Paradise Valley (for classification information, see Census Bureau 2016b), fell significantly between 1980 and 2000, eventually rebounding slightly between 2010 and 2014, but still well below 1980 to 1990 levels. Construction and retail both grew between 1980 and 1990, before falling significantly again in 2000. Construction, reflecting the steady demand for new homes, was the only one of these four industrial sectors to employ a (slightly) larger proportion of local workers in 2010 than it did in 1980. Employment in the arts, entertainment, recreation accommodation, and food-services sector has followed a very different trajectory, falling from 9.5 percent in 1980 to a low of 1.4 percent of employment in 1990, and then rising to nearly 25 percent in 2000, and close to 31 percent by 2010 (Minnesota Population Center 2016; Census Bureau 2016a).⁴ By 2010, this tourism-associated sector employed as many workers as did the other four categories combined.

At the same time, between 2000 and 2010 Paradise Valley’s unemployment rate rose considerably after falling in the previous decades, reflecting both the impacts of the Great Recession and the economic instability inherent in heavy reliance on the tourism sector for local employment. Although many of the tourism-based jobs tend to be seasonal, low-wage, or part-time, the growth of tourism and in-migration by wealthy newcomers has contributed to expanding tax bases and rising housing values and allowed for improvements in local educational infrastructure. In 2019, the community’s high school was ranked by a national publication as being within the top twenty of the state’s more than five hundred schools, which many locals eagerly pointed to as evidence of the area’s rising level of resources and the school as an important local amenity.

For this study, the first author collected data during ten months of intensive qualitative field research in Paradise Valley from 2014 to 2015, which included eighty-four open-ended in-depth interviews and ten months of ethnographic observation and participation. Interviews lasted from one to four hours, the average being about two hours. The majority of interviews took place in participants’ homes, ranging from large, airy, artisan-crafted modern houses showcasing picture windows with extensive views, to rental homes, subsidized apartments, and cramped singlewide and

3. According to local estimates, more than 50 percent of homes in the region are owned by people who do not live there full time.

4. This dip in 1990 reflects a local crash in this industry due to speculation in a tourism-related venture that fell through in the late 1980s.

travel trailers in various states of disrepair. Some participants chose not to meet in their homes; these interviews took place instead in settings including public parks, coffee shops, pubs and bars, work offices, the community center, and the local grocery store.

Interviews were digitally recorded (with participants' consent), and transcribed verbatim. Each transcript also included detailed field notes and memos written generally within twenty-four hours of the interview in order to provide additional insight and observation. The final sample was 43 percent male and 57 percent female ($n = 36$ and 48). The average age of participants was about fifty (ranging from eighteen to eighty), and the average number of years spent in the region was twenty-three (ranging from less than a year to eighty years). Based on self-reported income and the federal poverty guidelines, about 24 percent ($n = 20$) of the sample were classified as poor; 30 percent were low-income (above the poverty line but less than 200 percent of it; $n = 25$); and 46 percent ($n = 39$) were middle-income or above (greater than 200 percent of the poverty line and including some very wealthy individuals).

In addition to local resident interviews, the ethnographic research involved taking part in numerous activities and immersion into the community. This included approximately twelve hours of regular volunteer work every week between three locations: a public library, a food bank, and a family support center. It also entailed volunteering for numerous special events, including benefits for local nonprofit organizations, holiday celebrations for the public, and charity events. Beyond these structured activities, the ethnographic work also included involvement in the daily life of the community and getting to know as many people as possible from different social strata. This meant shopping at local stores and frequenting local services; regularly attending yoga classes and line dancing; cross-country skiing and hiking with community members; attending parties, church services, plays, films, lectures, concerts, and gallery openings; and investing as much

time and energy as possible into building relationships with residents across the class spectrum. It also meant being open with everyone about the research agenda. Ethnographic observations were recorded in hundreds of pages of field notes typed over the course of the year, generally within twenty-four hours of the original observations.

Interview participants were recruited in various ways, including ads placed periodically on the local electronic bulletin board, face-to-face recruiting during the volunteer work, the efforts of several key informants with extensive social ties, and snowball sampling. Interviewing continued until a saturation point was reached and additional interviews neither produced new analytical themes nor represented new populations or perspectives. Transcripts and field notes were later analyzed and coded for both anticipated and new themes using NVivo software, which allows for the creation of multiple levels of coding, and thus identification of themes in the data, and variations within those themes. As data were analyzed through multiple stages of coding, Jennifer Sherman continued to check our understandings against those of locals in the field, through both comparison with their interview narratives and discussion with participants and key informants. The final sample of interview and ethnographic participants included multiple adults who worked presently or had worked in the local school district, as well the school superintendent, many alumni of the local schools, and numerous parents of school-age children.

The participants in this research are separated into two ideal-typical groups, newcomers and old-timers, characterized as such based on a five-point index that includes their time in the community (less than versus more than or equal to twenty years); income (middle income or higher versus low income or poor); education (bachelor's degree or higher versus less than a bachelor's degree); political stance (liberal versus conservative); and cultural orientation.⁵ Not all short-term residents are categorized as newcomers and not all long-term

5. The cultural orientation measure was constructed to address the cultural divide often referred to as Lycra-denim or spandex-Carhartts by community locals. Newcomer culture is measured as preferences for fine arts, music, and theater, as well as specific outdoor and leisure activities, including hiking, biking, cross-country

residents are considered old-timers because social class status makes up a significant component of the index and can override length of residency in the final classification. Although time in the valley often predicts (or is predicted by) social class, political leaning, and cultural orientation, it is not an exact match for all individuals.⁶ Nor are all individuals perfect fits for their final classification, although for most it is consistent with the ways in which they and others in the community view them. The sample includes close to equal numbers of each group, forty-three newcomers and forty old-timers, distributed similarly across the region.⁷

Taken as groups, newcomers and old-timers look different in a number of ways. In terms of the components that make up the classifications, the trends are clear: although the average age of the two groups is similar in the interview sample (forty-nine years for newcomers, fifty-one for old-timers), newcomers, on average, had lived less than fifteen years in the valley; old-timers spent an average of more than thirty years. Most newcomers (70 percent; $n = 29$) had moved from or spent a large portion of their lives in urban areas; less than a third of old-timers (30 percent; $n = 12$) had. Close to three-quarters (74 percent; $n = 31$) of newcomers were classified as middle-income; only 18 per-

cent of old-timers ($n = 7$) were. Just 7 percent of newcomers ($n = 3$) were low-income, relative to 54 percent of old-timers ($n = 21$). Another 28 percent of old-timers ($n = 11$) were below the poverty line, versus 19 percent of newcomers ($n = 8$).⁸ Newcomers mostly had a bachelor's degree or higher (74 percent), but just 8 percent of old-timers did.⁹ Newcomers tended to have more-educated parents as well: 64 percent of newcomers had college-educated parents, whereas just 26 percent of old-timers did. Old-timers had also often experienced harder living. More than 38 percent of old-timers discussed having past or current drug or alcohol problems, relative to 7 percent of newcomers.¹⁰ Fifty-six percent of old-timers reported having experienced some form of abuse as children or adults; 34 percent of newcomers did.

Other differences between the two groups are noticeable as well. Newcomers were more likely to be employed at the time of interview (60 percent versus 41 percent of old-timers). They were also slightly more likely to be married (67 percent versus 59 percent of old-timers), but old-timers had an average of 2.1 children, while newcomers averaged 1.4. Old-timers were more than twice as likely to attend church regularly (29 percent versus 14 percent of newcomers). Both groups were mostly white,

skiing, trail running, triathlons, and rock climbing. Old-timer culture is measured as preferences for television, video games, or more traditionally rural outdoor and leisure activities, including hunting and fishing, snowmobiling, and horse packing.

6. For example, six individuals classified as old-timers have lived in the valley for less than twenty years, and nine classified as newcomers lived there for more than twenty.

7. One participant remains unclassified, as he split the measure and was not classifiable. Sample distribution is similar across the towns in the region, with the exceptions of Eagle Flat, its largest town (population greater than one thousand), and Pinedale, its smallest town, with a population of less than 150. The interviewees from this tiny remote community included only newcomers, reflecting the town's makeup and appeal to those most heavily invested in outdoor recreation. Distribution is listed here by pseudonym, from largest to smallest town. Old-Timers: 61 percent Eagle Flat; 21 percent Reliance; 18 percent Outpost; 0 percent Pinedale. Newcomers: 44 percent Eagle Flat; 23 percent Reliance; 16 percent Outpost; 16 percent Pinedale.

8. Half of poor newcomers practiced *primitive survivalism*, a popular subculture based on subsistence techniques that did not generate income. A number of these individuals did have significant wealth despite lacking income.

9. In Washington State, 32.9 percent of residents have a bachelor's degree or higher (Census Bureau 2015).

10. Five of those old-timers (13 percent) had issues with methamphetamine use in particular; no newcomer discussed current or past methamphetamine usage. However, though rarely discussed openly in interviews, use of marijuana was known to be relatively common among both groups. By 2014, marijuana was legal in Washington State for recreational use.

but newcomers in the sample were slightly more so (95 percent), with just one participant of Asian race and another of Latinx ethnicity. Old-timers were 85 percent white, with one Asian participant, and five reporting some Native American heritage.¹¹

RESULTS: EDUCATION AND INEQUALITY IN PARADISE VALLEY

Inequalities in both symbolic and real resources (Bourdieu 1986) not only deepened social divides within the community, but also created systematic exclusions, both formal and informal. Experiences with (and resultant attitudes toward) schooling represented a primary mechanism of this dynamic. Parents' levels of education and experiences in school influence their goals and attitudes toward education for their children, a phenomenon that may be particularly pronounced in rural areas (Fitchen 1981). Mara Tieken (2016), for example, notes the long-time lag in college-going rates between rural and urban students. Part of this lag is due to structural barriers, including financial constraints, proximity to higher education institutions, and rural labor markets that do not provide the economic rewards of college going that other places do. But the gap is also a consequence of differential aspirations, in which rural youth are less likely to have parents with college degrees and more likely to come from areas that at least historically have been defined by industries that did not require post-secondary credentialing (but see Brown and Schafft 2019; Petrin, Schafft, and Meece 2014).

Different Expectations, Different Experiences: Human Capital and Parental Aspirations for their Children

Both old-timers and newcomers discussed the importance of education, although to differing degrees and often with different goals (see, for example, Byun, Meece, and Aggar 2017; Schmidt-Wilson 2013). A higher proportion of newcomers who were parents, 55 percent ($n = 16$) versus 40 percent of old-timer parents ($n = 14$), listed education as a top parenting goal.

The differing reasons for education as a goal reflected both divergent cultural norms and parents' levels of human capital. Differing aspirations for children are a key part of social class-based differences in parenting styles and resources that provide middle-class children with advantages over working-class and poor children within educational systems and institutions (Lareau and Calarco 2012; Lareau 2003; Kohn 1959). Within rural areas, educational attainment and aspirations may be further depressed because of the extent to which educational attainment is associated with leaving the (rural) home community, creating particular conflict for youth with strong rural identities and community attachments (Corbett 2020; Petrin, Schafft, and Meece 2014). Whereas newcomers often described education as an important end in and of itself, old-timers more often discussed it vaguely as a way of securing local work and achieving upward mobility.

This was the case for old-timer Chad Lloyd, a twenty-eight-year-old low-income sawmill worker who had four children. Chad had not finished high school, and later pursued his GED. For him, education was a tool that would allow his children to increase their employment options:

I want 'em to go to college. I want 'em to get a good job where they don't have to work so many hours that they don't get to see their kids. My biggest thing is, "You're goin' to college. I'm not goin' through all this so you can do what I did!" [laughs] Yeah. All I want is them to be happy and do better than I did. I think that's every parent's wish. "Do better than me, dang it!" [laughs]¹²

Tilda Conner, a thirty-six-year-old low-income careworker with a high school education, had a similar goal for her teenage daughter: "I hope that she goes to college. She's got so many great ideas. And I want her to be—every parent wants their kid to be better than they were, and I do."

In contrast, newcomers' educational aspira-

11. Most of these participants were not enrolled members of federally recognized tribes.

12. This quote and several others originally appear in the book, *Dividing Paradise: Rural Inequality and the Diminishing American Dream* (University of California Press, 2021).

tions were often more ambitious and less focused on employment outcomes (but see Schmidt-Wilson 2013). Newcomers also tended to have much clearer understandings of what was needed to achieve educational goals. They spoke specifically about the costs of different types of colleges, the potential for different types of scholarships, and the importance of grades and extracurricular activities to securing admission into more competitive and prestigious colleges and universities:

I think in this family there is an expectation that they go to college. I think we are in a little bit of denial. I am not sure exactly how we are going to make that work financially, but we just kind of hope things work out. . . . So I have been reminding him, you know, every Ivy League school has a soccer team. He could do worse. (William Turner, sixty-two-year-old middle-income retiree)

We certainly hope that they are bright, and we hope that they push it, and we hope that they—you know, partly one of the incentives is if they do well, there will be help with college. If they don't do well, we are paying for all their college and money isn't going to be that easy. . . . I am hoping that they push it—you know, [their mom] went to Berkeley. Well, right away our son wants to go Berkeley. OK, well, then you need to do the bonus work. You know? That's a pretty good school. (Andrew Bowden, forty-six-year-old middle-income carpenter)

Newcomers not only encouraged their children to think in these sorts of terms, but often implicitly and explicitly judged children who were not similarly oriented. Frank Brooks, a fifty-three-year-old middle-income entrepreneur, explained this distinction as he saw it: "My daughter had a few more friends who had similar goals and were able not just to get through high school, but to get straight As and go to a good school and those sorts of things. There's definitely—that's where the chasm is, just going to school to get through or trying to achieve something. So it's definitely, in my mind, that's an us and them thing."

Although both groups described sincere de-

sires for their children to go to college, their abilities to guide their children were influenced by their different orientations and understandings of how to navigate the process, starting with K–12 education. Different levels of parental cultural and human capital often translated into much more proactive involvement and direction for the educational experiences of newcomers' children. Newcomers were much more likely to send their children to private schools prior to high school and to actively manage their children's participation in different courses and extracurricular activities. They were also more likely to feel that they had efficacy within the school system in ensuring that their children's needs were met, also commonly associated with higher social class and education (Calarco 2014; Lareau 2003; Fan and Chen 2001). Their sense of comfort in advocating for children's needs was often amplified by the small-town setting and close social ties to teachers and school administrators, many of whom were also newcomers. High school senior Jason Hill explained: "At this point [Paradise Valley High School] is mostly all just new teachers that don't really, that aren't really connected to the old-timers at all." Old-timers were much more likely to complain of problems in the local schools—their own as well as their children's, and to feel like they lacked agency in addressing them. Many described feelings of abandonment and bias in the school system that ultimately undermined their support for their children's education and their abilities to advocate for them.

ADVOCACY AND EFFICACY IN PARADISE VALLEY SCHOOL DISTRICT

We talk about these kids that don't really eat enough and whose parents aren't there, or they're in jail, or they're on meth. We have—not a very big population like them, but it's there. And I wish we could get that taken care of. . . . 'Cause you see those kids that are always absent and never have their homework in, and always losing every library book. Well, that's because your mom's high all the time. (Emily Hill, forty-seven-year-old middle-income Paradise Valley elementary school teacher)

For old-timers, the sense of bias in the local schools was pervasive and dates to the beginning of the tourism industry's growth in the late 1980s. Both parents and more recent alumni told stories of unfair treatment. It was common for old-timers, including many with low educational attainment, to homeschool their children after repeated frustrations with local schools. Their complaints ranged from children's not receiving enough help with special needs, to feeling that children were unjustly targeted by teachers and school officials, to the extra costs for participation in certain activities, including sports. Asa Hobson, who had lived most of his thirty-eight years in the valley, had experienced problems with the local schools as a student, though he went on to eventually get an AA degree. He described feeling abandoned at Paradise Valley High School, where he received no guidance about how to pursue college:

It just was like this mentality back then that they could get away with because it was a small town, that there were good kids and bad kids. And I was a bad kid. And that was it. It was just as simple as that. If you weren't from a Christian household, if you just misbehaved, or if your family didn't have money—you know, if you weren't in school sports—all of those things. And I was none of those things. And I graduated with, like, a D average from high school, and graduated college with a 3.8. So it is like, you know, where was the problem? You know? I just—yeah. Still to this day I haven't gotten to a point where I have gotten old enough to say, yeah, I was the problem. I mean, yeah, I was a tough kid to deal with, but they just had a way of turning their back on kids.

Although he strongly hoped that his children would have better experiences and greatly valued education, Asa voiced multiple complaints and frustrations focused on his daughter's needs not being met in the public schools, and commented, "Some of those limitations are still there. And I think you get them with small towns and communities."

Old-timers repeatedly complained of unfair treatment, and both social and economic barriers to their children's success. Tilda Conner's complaints had to do with a combination of poor communication with school officials and the feeling that they treated her daughter unfairly:

The principal and I, we didn't get along. . . we did not like each other, almost to the point where I was gonna pull her out of public school. . . . She was getting bullied by a boy who is at least a hundred pounds bigger than her. . . . He would pick her up out of her seat and throw her. And when I would call and complain, [the principal] would go, "She shouldn't instigate. She shouldn't say things to him." I was like, "No, because verbal things are way more different than physical, and if it happens again, I'll call the police." And when I threatened that, he put [the kid] on a different bus, but [the principal] was out to get her.

Like Asa Hobson, Wendy Harris, a thirty-seven-year-old, poor, stay-at-home mother, had struggled in Paradise Valley's schools, and felt that she was targeted for being from a troubled family:

Well, I was a straight-A student up until high school, and then from there, that's when—I don't know, things changed. I don't know why. . . . And I would get in trouble for the stupidest things at times. It got to the point where—and this was because my cousins were ahead of me. And I'm the spittin' image of my cousin. So [the principal] figured I'd be just as much trouble. So the slightest thing I did, I got in trouble. And that's when I gave up. I gave up trying to pull the straight A's and stuff like that. I gave up. If I'm gonna be in trouble for stupid things, you know, forget it.

Wendy had hoped that her son might succeed where she had failed but found that her family's financial constraints held him back from full participation, particularly the pay-to-play fees attached to afterschool sports,¹³ which were a more recent imposition that disproport-

13. Parents were also charged separate fees to attend children's games. Although limited support for these fees was available to those who applied for help through the local Booster Club, as one of its members explained, "I

tionately impacted lower-income families: "The pay-to-play is ridiculous, I think that's what's stopping him [from playing sports]. It'll cost \$150 just for one sport right now. I'm sorry. I think that's ridiculous. We didn't have to pay when I was in school. I don't understand why it'd be \$150 just for one sport. . . . I'm like, 'Are you kidding me? It would cost me almost \$150 [for him] to play a stupid sport. You people are rippin' me off.' He's not gonna do a sport. I'll go out and play with him instead [laughs]."

Problems like those Asa and Wendy encountered often left old-timers with lower levels of human capital, as well as disadvantages that ranged from lacking information about how to pursue higher education to lacking money for school fees. As mentioned, old-timers in the sample were less likely to be college educated than their parents were, unlike their newcomer neighbors. Their lack of confidence and sense of frustration in navigating educational institutions further impeded many in their interactions with school officials, lowering their abilities to negotiate to get their children's needs met.¹⁴ These barriers undermined the supposed protective qualities of rural schools, and helped ensure that their children also faced numerous struggles in their educational trajectories in Paradise Valley and beyond.

Newcomers, on the other hand, tended to have few complaints about the local schools, and when they did express frustration, it focused more on lack of opportunities for their children to excel, such as competitive sports teams and advanced curricula. Instead, they often discussed satisfaction and a sense of gratitude for the high quality of local schools. Thirty-eight-year-old Brooke Gilbert, who had moved to the valley two years earlier, explained: "We moved here for the school." Shawn Murphy, whose children were in grade school, commented, "Our school is an incredible school that has provided a great opportunity for support as a parent." William Turner, whose children were in high school, also expressed con-

tentment with local offerings: "Paradise Valley High actually shows up on the—within the top ten or fifteen of state high schools, so I think—because there is enough people here—people who have moved here from—you know, there is a few other Microsoft retiree types, and people who come over here from the West Side generally came from strong academic backgrounds. So I think there is reasonable expectations at school. And our kids get mostly As and are active in things. . . . So I think they are going to have reasonably good opportunities."

Although fewer newcomers had attended Paradise Valley schools, those who had often described positive experiences as well, further suggesting that social class had helped shape school trajectories during the decades since the growth of amenity-based development. The adult children of earlier generations of better-resourced in-migrants tended to speak of special treatment they had received in school there, particularly when their parents were well known or well connected to the schools. Nadine Gough, whose mother was a teacher herself, recalled, "I definitely got accused of being the teacher's pet a little bit. But my parents never did that. Like my mom was harder on me than the other kids, probably. Again, I sort of teetered between, I knew how to get good grades and check all the boxes academically to stay relatively on top. But also was partying and skipping—you know, shucking and jiving—but I didn't really get in trouble because I was one of the good kids. You know?"

Toby Cook, a thirty-two-year-old middle-income carpenter and Paradise Valley native, described a similar experience when asked whether he thought that his parents' teaching in the school system made any difference for him: "Yeah, plenty. I think it made um, a big difference in how teachers thought of me. . . . It got me a lot of tickets to act bad and still have a good reputation. . . . I had a lot of freedoms that other kids didn't because I uh, I could get away with stuff that other kids couldn't."

don't think it's been as effective as we want it to be, because there's still kids in the community that need to be active in school athletics and activities that aren't, because of the perception of the economics or their parents are too proud to ask for it, for whatever reason."

14. For more on these issues, see Calarco 2014; Cooper 2014; Kohn 1959; Lareau 2003; and Lareau and Calarco 2012.

In general, newcomers expressed fewer problems of their own in Paradise Valley's schools, and fewer problems for their children. None complained of the fees attached to extra-curricular activities or other barriers to their participation. Rather than concerning themselves with individual issues, they were more likely to focus on improving the overall educational or extracurricular offerings in Paradise Valley's schools to ensure that their children were not missing out on opportunities by growing up there versus a larger city. These educational agendas, which old-timers often strongly resisted, generally prevailed.

Thus it was common for old-timers to feel as if they had little agency or power to get their children's needs met in the local schools, and newcomers described feeling confident that the schools were providing adequate opportunities for their children and empowered to enact any changes necessary to enhance their chances and outcomes. Ten-year valley resident Andrew Bowden, a forty-six-year-old middle-income carpenter, said of the community's changing makeup, "I think it has been very positive for the schools. You know, there is a lot of us putting energy in the schools. The school board has switched 180 degrees in terms of their, you know, orientation of what was valued at the school." He described newcomers as having strong positive influences on the direction the school board took over his time there, many of which were not supported by the community's old-timers.

Particularly emblematic of this divide during the fieldwork was the controversy over the school board's decision to pursue the international baccalaureate (IB) program for kindergarten through tenth grades. The debate around the program was virulent at times, newcomer parents generally supporting the initiative and old-timers—as well as many retirees without children in the schools—harshly opposing it. Complaints revolved around its cost for the community, its rigorousness being too much for kids who already struggled in school and for less educated parents to help with

homework, and its international focus and ties to the United Nations, which irked political conservatives. A number of old-timers, including several who did not have high school diplomas, chose to remove their children from the public schools over this issue and homeschool them instead. The debate was particularly lively on the community's electronic forum, where some explanations for the program's importance were posted, but mainly the anonymous comments represented the rage felt by long-time locals:¹⁵

Our kids come home from school loaded with various homework and projects and after-school programs and sports and dance, and now they want to add more intense study. I am worried that they are going to be overloaded and a lot of kids will suffer academically. It also bothers me that this program is foreign based. This is the USA and I am not ok with another country setting the standards in our schools. (February 21, 2015)

I have been reading up on this program and if it is voted in by the school board I will have no problem taking my four children out of this school and enroll them in the k12 online school. . . . People, these are your children. Be their voice and stand up for them. Do not allow the superintendent or the school board to get away with "fixing" something that isn't broken. Our school is ranked in the top ten schools in the state and top fifty of the United States.¹⁶ (February 21, 2015)

There should have to be overwhelming support in the whole district, not just from a few people that included [school] staff at a meeting. . . . [The superintendent] has been here for two years and wants to completely change the way our school operates. Our school is one of the best in the state—a huge achievement. Why change it? Why try to do it so quickly? What is the true agenda? (February 22, 2015)

15. Posts have been edited slightly for readability.

16. These numbers are those expressed by the quoted commenter and do not necessarily represent any reliable or published ranking.

There are people in this valley having difficulty making ends meet as it is. For those that say. . . "What's the big deal?," I truly am glad you are in a position to be able to take the hit on your property tax. What about those that just may be pushed over the edge by yet another tax increase? Should they be forced to sell ground that they may have already worked their lives to pay for and own outright, taxed off of their property? What about the family struggling to buy their first house? Tough s***t? (March 17, 2015)

Despite numerous protests of these sorts, the school board went on to apply for authorization for the IB program, which it received in 2017. It was implemented at both the elementary and high schools soon afterward.

On the other hand, although school administration was aware of problems with course and extracurricular fees that primarily affected low-income families, movement on these issues was slow. In our 2014 interview, the school superintendent, himself a newcomer, explained: "When I first arrived I heard numerous stories about families who are challenged by the fees associated with public education, [including] pay-to-play, enrichment fees, course fees, supply fees—you know for a family of four that begins to add up really quickly. In fact, we started to look at what does it cost to send a child to—or to support a family that attends a public school in Paradise Valley, and the numbers are significant. And we know we have families that can't afford that."

Yet despite expressed commitment to addressing this concern, efforts to remove the fees were incremental, and for years these initiatives were the purview of separate entities such as the local Booster Club, which focused efforts on subsidizing the fees for individual low-income children who applied for the specific scholarships. The school board initially focused on addressing course fees versus pay-to-play fees, and all fees were not fully eliminated until the fall of 2019. As with other issues, whereas newcomers triumphed quickly in their desires to improve their children's access to ed-

ucational and curricular excellence, old-timers were left feeling frustrated and powerless to get their children's very different needs met. They lacked confidence in their abilities to affect local educational decisions, social networks that included people in positions of power to make substantive changes, and human and cultural capital that might inform them about either processes or channels for pursuing change.

STAYERS AND LEAVERS: SELECTIVE MIGRATION REPRODUCES THE SOCIAL DIVIDE

These processes had predictable results: newcomers' children tended to excel in school and generally went on to pursue college education outside the valley, gaining access to more human and cultural capital. A handful returned as adults who were often absorbed into the next generation of more privileged newcomers. Old-timers' children, on the other hand, generally did not perform as well in school, did not participate in as many extracurricular activities, and were less likely to either pursue or earn college degrees, particularly from more prestigious colleges or universities. They were more likely to remain in or return to Paradise Valley as adults, but also more likely to struggle to find meaningful and lucrative work there.

As in many rural communities, education in Paradise Valley was both a vehicle for upward mobility and a mechanism that perpetuated selective migration whereby young adults,¹⁷ often the community's most advantaged and economically promising, out-migrate to pursue educational and work opportunities elsewhere (Corbett 2020; Petrin, Schafft, and Meece 2014; Sherman and Sage 2011; Carr and Kefalas 2009; Budge 2006). Many newcomers were extremely clear regarding the importance of children leaving Paradise Valley for higher education; old-timers were often more ambivalent. Out-migration was an explicit parenting goal for 35 percent of newcomers ($n = 10$), but only 11 percent of old-timers with children ($n = 4$). Old-timers often focused on the positive reasons for staying there, including family ties, natural beauty, and the rural lifestyle:

17. Often referred to colloquially as *brain drain*, we opt here to avoid the more pejorative connotations of its usage.

I would like them to [stay]. I think it's one of the nicest places in the country. I mean, there's wonderful places. . . . You hike around, do stuff, you live there, you get involved in the community. And all of a sudden you just come across like, "Wow, that's really cool!" (Greg Rossi, fifty-seven-year-old middle-income retired U.S. Forest Service employee)

I hope [my kids stay]. I mean, I hope that they, you know, like me, just—I want to take them out and show them everything, and I would hope that they see the reason in living in such a life as this, for sure, yeah. Because I just don't understand, you know—metropolitan life just seems really shallow to me. It doesn't seem very rewarding. (Asa Hobson, thirty-eight-year-old low-income field scientist)

Yet at the same time, they were not unaware of the potential risks of staying in the valley, which they often weighed thoughtfully in their interviews. Such was the case for Barbara Phillips, a seventy-year-old rancher whose husband's family had lived in the valley for generations. She struggled with wanting her adult children to return and take over the ranch, versus knowing the potential struggles they might face:

You hope that they will be happy, and you hope they might want to come back, but most of all you hope they are happy, healthy, and doing—able to earn a living without—that was so important. . . . We would like things to be different for them. We don't want to have them have to go through some of the things we went through. So I think even if they took [the ranch] over, they would have to have—they would have to have their career and maybe work it a little differently.

These discussions differed substantially from most newcomers' understandings, which generally focused on the importance of leaving the valley. Although several newcomer parents suggested that they might like their children to return after seeking education and training elsewhere, most did not think this outcome was very likely. Shawn Murphy, a forty-three-year-old father of two, was one who

was very clear that "I want them to leave Paradise Valley when they graduate from high school. I'll tell them this before they graduate from high school." On considering the question further, he explained in regard to his older child,

I want her to go out into the world, to have that experience, rather than be one of those kids who don't leave here and gets stuck in the underclass here. If she would choose to come back here, after having gone out into the world, hey, great. I don't think it would be a bad place to be, but I think leaving is necessary for context, for choice. And so I'm gonna do everything I can to make sure she goes off into whatever adventure. Maybe it's not college, but go travel, go—you know, go work somewhere. Whatever it might be. I feel like you need to broaden your horizons beyond this place.

The importance of leaving to gain more educational, occupational, and life experiences was echoed by newcomer parents across the valley:

I think it's important that they leave. I don't think just staying in the valley is good. I think going out, going to college, whatever, working someplace else just to have a different perspective for a little while is good for them. (Maria Setzer, forty-year-old, low-income substitute teacher)

I think we are realistic enough to know that—somebody once said there is a reason why small towns are small. There is not an economic base here to support a lot of people. And I think frankly we would probably rather they—even if they chose to come back here, we would rather they go out in the world and sort of experience a few things and sample the bigger life. And if you want to come back here someday, that would be great. (William Turner, sixty-two-year-old middle-income retiree)

No, I don't [want them to stay]. I don't think I do. Which is weird. And it is funny, even my—even when I think about being here, it kind of ends when they graduate. . . . I would love

that—definitely would love for them to go. I feel like at some point you go. (Nadine Gough, thirty-six-year-old middle-income teacher)

Beyond just hoping that their children would leave the valley, many residents, both old-timers and newcomers, worried about what could go wrong if they stayed. Adults across the social class spectrum, but especially newcomers, expressed concern and judgment about the fortunes of young adults who did not leave the valley to pursue higher education, often suggesting that those who remained were both intellectually and morally flawed:

It seems to me that the ones who are born and raised here and stayed here and never left are pretty ignorant—not in an academic way necessarily—but they just don't have that broader perspective of humanity and what's out there. (Claire Woods, forty-two-year-old, middle-income, nonprofit consultant)

Most of the kids that stay around here, that's the ones that end up using [drugs] and falling, you know? You can only go so far in this town. . . . I just know that if you stay here, you are either going to be flipping burgers for the rest of your life or waiting tables. (Megan Wicker, twenty-eight-year-old, poor, stay-at-home mother)

Nothing good happens to kids who stay here without going somewhere else. It's a very small community [and] there are a lot of small—"small-minded" is too harsh—conservative values. There's nothing a kid can do here work-wise after high school that's at all challenging or rewarding. . . . You know, there are people here who were born and raised here and didn't ever leave, and I don't want my kids to become that. And then there are other people who were born and raised here and left and worked somewhere else for thirty years or ten years and then came back, and that's great. They've seen something else and they've chosen this. (Hannah Lowry, forty-five-year-old middle-income consultant)

Our friends call them "Valley Rocks." It is like they go to high school here, they are on the

football team, super popular, blah, blah, blah. . . . And [after high school] they get down, and like—you know, like I feel like it has to do with suicides here. . . . "And now I am, like, feeling kind of down about myself and I'll get into drugs." And then they never, like, pursue something to the next level, or they, like, don't feel successful and supported. (Sabena Griffin, thirty-three-year-old middle-income nurse)

These judgments of young adults who did not out-migrate meant that those who stayed faced additional barriers to adult success beyond a lack of higher educational attainment. In addition to their education and skills deficits, they were repeatedly judged as bad workers and bad citizens and passed over by local employers in favor of in-migrants with higher human capital, regardless of the skills requirements of the jobs.

Thus, whereas newcomers' children mostly went on to pursue higher education and better-paid careers outside the valley, old-timers' children often grew up to lack human capital and job opportunities. Caleb Daniels, who had lived all of his twenty-six years in the valley, described this cycle. He struggled in school, in part because his learning disabilities went unnoticed and untreated, and in part because, as he explained, "I was having some bad family problems, home life was—a living hell would be the best way to put it." Caleb began acting out in high school, including cutting classes, not turning in homework, and giving substitute teachers a hard time. In response he was sent to the principal regularly:

CALEB: It got too hard to read, and I figured, it's hard, why do it?

INTERVIEWER: So you would get in trouble for not doing your homework? What did they do about it?

CALEB: They had what they called the cubby, which was a closet they painted pure white and left neon lights on. They'd put you in it.

INTERVIEWER: For how long?

CALEB: All day.

Although Caleb was able to graduate, he felt that the administration just wanted him gone.

He still lacked basic skills. He also lacked both the grades and resources to pursue higher education outside of the valley. He expressed regrets regarding the ways in which this held him back in the labor market: “There’s still stuff I don’t really understand, but I kinda really need to know in today’s work force. I got doomed to be low-level employment. . . . There’s been a lot of job opportunities that if I would’ve known just a little bit more back then, I would have better luck now.”

Caleb described a history of short-term, insecure work in Paradise Valley, as well as employers questioning his behaviors, including battling rumors that he was a drug user:

CALEB: I [mostly] worked under the table. So it’s like, I’d work for however long they needed me and then I’d go someplace else. They either wouldn’t want to hire me or the only way I’d get paid is if I worked under the table.

INTERVIEWER: Why would that be—?

CALEB: Mostly I don’t know, but it’s also because apparently I’ve gotten a reputation around the valley, I’m not sure how, as a drug dealer, a troublemaker. I look at ‘em and I’m like, “Really? I’ll take a drug test right now. I don’t do drugs.”

For Caleb, a childhood full of missed educational opportunities translated into an adulthood of unemployment, underemployment, and poverty. When he was interviewed, he was living in a precarious and substandard situation and had recently been homeless. Although his experience was at the extreme end, it was not significantly different from that of many young adults whose families’ lack of social, cultural, and human capital contributed to their struggles in the local schools and beyond. Differences in these symbolic (and real) forms of capital structured educational experiences before children even entered the local schools and impacted them for the rest of their lives either within or far beyond Paradise Valley.

CONCLUSIONS

The growth of the amenity-based economy meant economic expansion in Paradise Valley, and it also brought the in-migration of new res-

idents, many of whom had significantly more wealth and social, human, and cultural capital (Bourdieu 1986) than long-time residents. These resources allowed them to outcompete locals for its best jobs and positions of power, and to navigate its structural lacks in ways that its less-resourced locals could not. Gentrification and the resultant social and economic divides within Paradise Valley were driven not simply by housing and labor markets, but also by how these inequities were expressed within rural schooling (Sherman and Sage 2011). The divide in real and symbolic resources (Lamont and Fournier 1992; Bourdieu 1986) affected old-timers in multiple ways, including systematically marginalizing them from power within the community and its schools (for more on this issue, see Sherman 2018, 2021a). In the case of education, the considerable difference in human capital between old-timers and newcomers increased the inequalities in other resources and contributed to reproducing them into the next generation. In Paradise Valley, education and the local schools served not only to prepare children for their adult futures, but also to provide social and cultural opportunities to some while systematically withholding them from others.

By most old-timers’ accounts, social class had long mattered in Paradise Valley’s schools, which had for decades disenfranchised the community’s most disadvantaged residents through both the structures of school programs and the ways teachers and administrators treated children. Parents, schoolchildren, and local alumni described experiences with the local schools that both reinforced dividing lines and prepared some children for brighter futures than others. As in many communities both urban and rural, in Paradise Valley schools acted to sort and divide children more than to even the playing field (McHenry-Sorber and Schafft 2015; Calarco 2014; Sherman and Sage 2011; Lareau 2003). The results of these multiple structural barriers and social processes included very different experiences with schooling, and very different levels of adult human capital acquisition for newcomers versus old-timers.

While these processes might be expected in communities with limited resources and op-

portunities and longstanding social class divides (Miller and Edin 2022; Corbett 2020; Sherman and Sage 2011; Duncan 1999), sociologists have argued that amenity-driven in-migration of educated young adults should result in improved school resources and outcomes (Carr and Kefalas 2009; Hamilton et al. 2008). To the contrary, in Paradise Valley the in-movement of wealthier outsiders reinforced preexisting informal processes of sorting and exclusion, and created opportunities for new ones, such as sports-related fees that are nominal to the economically well-off but prohibitive to the economically marginal. As newcomers demanded ever expanding services and advanced curricula to meet their children's educational goals and aspirations, old-timers continued to be disadvantaged and unable to access even basic educational and extracurricular opportunities and success.

This research thus finds that not only can rural schools often serve to create barriers to some children's achievement while continually prioritizing others', but also that improved school resources and curricula will not have an equal impact on all students when inequality is deep or persistent. In Paradise Valley, human capital was just one of multiple resources unevenly distributed between newcomers and old-timers. These resources included the important roles of parental aspirations, cultural orientations, and knowledge about how to achieve educational goals (Calarco 2014; Sherman and Harris 2012; Lareau 2003; Kohn 1959). But in Paradise Valley, as in many other rural school settings, other social class factors and community divides also played important roles in encouraging or limiting student achievement (Corbett 2020; Mette et al. 2016; Petrin, Schafft, and Meece 2014; Sherman and Sage 2011; Cobb, McIntire, and Pratt 1989).

Like many rural school districts, Paradise Valley struggled to fund education and passed some of these costs onto students. Thus low-income and poor families faced multiple economic challenges to their children's full participation in Paradise Valley schools. At the same time, newcomers who possessed high levels of human capital, as well as social connections, income, and wealth, were in strong posi-

tions to advocate for their children's needs within the local school district. They regularly pushed for diverting school resources toward elite programs and extracurricular activities that were unequally accessible to all children, either due to their extra costs or due to the invisible resources such as cultural and (parents') human capital required to utilize them. Regardless of the impacts of these agendas on less advantaged children, newcomers easily implemented them in relatively short time frames. Old-timers' educational needs tended to be both more basic and more serious—including equal access and participation, and support for learning and behavioral challenges and disabilities—yet were seldom so quickly or efficiently addressed.

Given the importance of parents' educational attainment to children's adult attainment (Gerarld and Haycock 2006; Lareau 2003; Parcel and Dufur 2001; Jencks et al. 1979; Sewell and Hauser 1975), it is unsurprising that children of more-educated newcomers would have multiple advantages in the attainment of human capital. These advantages were exacerbated by the structures of the local schools and then further exacerbated by the labor market in Paradise Valley. As expectations of college education and out-migration became the norm, particularly for the children of elite community members, those young adults who failed to follow this trajectory faced judgment and stigma. Beyond just having less human capital, they were often branded as lazy, ignorant, and drug-addicted, and faced systematic exclusion in the local labor market. This in turn perpetuated the cycle, leaving them with even fewer resources to pass along to the next generation of local children, and further widening the gap between privilege and disadvantage in Paradise Valley. Although the study's methodology did not allow for directly studying either longitudinal patterns or educational outcomes for current students, narrative evidence from adults suggests continuing and worsening inequality in terms of both perceptions of power and efficacy and educational attainment between the two groups.

This study illustrates the grave importance of rural schools as central community institutions that can but often fail to provide mecha-

nisms for minimizing social class differences, improving social mobility for all residents, and functioning as a mechanism for local community development and vitality. These dynamics are not especially unusual or surprising, as they reflect broader understandings of the origins of poverty and inequality as cultural (rather than structural) in nature and a consequence of individual decision-making and “values” rather than behavior bounded and shaped by specific social and institutional contexts (Shucksmith and Schafft 2012; Sherman and Sage 2011; Prins and Schafft 2009). Nonetheless, within rural settings these exclusions can have especially pronounced effects for low-resource residents because of the particularly strong institutional and social roles assumed by rural schools (Corbett 2020; McHenry-Sorber and Schafft 2015; Budge 2006).

As processes of urban-to-rural migration and gentrification have been accelerated and exacerbated by the coronavirus pandemic throughout the rural United States (Bowlin 2021; Sherman 2021a; Banse 2020; Berliner 2020), we can only expect that rural schools will become increasingly important as sites and institutions that either challenge or reproduce these inequalities. Although some of these processes may be unique to the current setting, it is likely that they apply to multiple other types of rural communities facing rapid change or social inequality, including those facing conditions such as falling local wages (Thiede and Slack 2017) and boom-town demands (Schafft et al. 2018), as well as communities in which inequality is deep or persistent (Hamilton et al. 2008; Schafft 2006; Duncan 1999; Fitchen 1991). The mechanisms of inclusion and exclusion described in this article may also structure distribution and access of multiple other resources in rural communities, calling for future investigation into the outcomes of inequality with regard to other types of needs, resources, and rural settings. In the case of Paradise Valley the importation of resources vis-à-vis amenity-driven development did not help improve all life chances, but instead raised a bar that had been and continued to be out of reach for children and families with the fewest resources at the outset.

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PART III

Aspiring to Leave: The Pursuit of Higher Education

Contexts of Educational Aspirations and School Grades of Rural Students



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Youth development researchers have focused on persistent challenges facing youth in diverse urban settings; thus, we know less about youth in rural communities. Using multilevel modeling, we explored contextual factors associated with school grades and educational aspirations. We find that, on average relative to students from urban schools, students from rural schools had slightly lower school grades and substantially lower college aspirations. Latino and American Indian students from urban and rural school districts had lower school grades and educational aspirations than non-Latino and non-American Indian students. Last, developmental social and emotional skills, such as commitment to learning and positive identity, were associated with higher school grades and educational aspirations, suggesting that social and emotional learning is relevant to both urban and rural students.

Keywords: rural education, positive youth development, social and emotional learning, multilevel modeling

Over the past few decades, economic and educational indicators such as poverty level and educational attainment have improved in the United States; nevertheless, this improvement has not been equal across the population and disparities remain an issue for certain groups and communities. Although the body of evidence on the importance of education and its benefits to individuals and societies is immense, researchers have focused on urban or national populations, paying less attention to underserved groups with unique contexts, such

as rural communities. Nationally since 1976, the rural population has grown by as much as 1.5 percent annually, but in 2010 began to decline slightly; however, by 2016–2017 it again increased, largely in response to migration (Cromartie 2018). In Minnesota, the location of our work, the rural population has increased slightly since the 2010 census (less than 1 percent), whereas the urban population has increased by more than 7 percent (Economic Research Service 2020). Further, although rural communities have been typically characterized

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by their lack of racial diversity, averaging 80 percent white (Cromartie 2018), immigration has been increasing, especially in Latino communities, which have been the fastest-growing in rural America relative to those of other racial-ethnic groups (Johnson 2006). Educational attainment has also varied across racial and ethnic groups, Latinos having the lowest rate of adults with bachelor's degrees relative to American Indian, black, and white rural populations (Marré 2017). The contexts of rural areas continue to change and differences across ethnic and racial groups persist. The goal of this study was to use the Minnesota Student Survey to explore educational outcomes, such as grades and educational aspirations, of students in rural and urban schools, and to examine the role of school and community contexts for the two main racial and ethnic minorities in rural Minnesota.

PERSISTENT CHALLENGES IN RURAL COMMUNITIES AND SCHOOLS

Rural communities have higher poverty rates that affect not only students and their education, but also adults and families more likely to live in multigenerational poverty (Thiede et al. 2018; Lichter and Schafft 2016). Even when educational attainment has increased in rural areas, the differences between rural and urban communities remain; for example, 33 percent of the U.S. urban population have a bachelor's degree, but only 19 percent do in rural areas (Marré 2017). We see similar patterns regarding earnings. There is a gap between urban and rural regions where workers with similar education are offered higher earnings and more employment opportunities in urban areas (Marré 2017). Living in concentrated poverty is associated with poor housing, poor health conditions, higher school dropout rates, and employment dislocations (Economic Research Service 2020). Disparities persist between rural and urban communities in educational, economic, and social conditions.

The distribution of income and race is also a topic of recent interest because it provides an important lens for creating greater equity in opportunities for youth and families. Through a joint-distribution analysis of race and income, Sean Reardon, Joseph Townsend,

and Lindsay Fox (2017) identify a number of trends based on data from the American Community Survey. For example, black and Latino individuals and families of any income level tend to live in neighborhoods that are substantially poorer than those of white or Asian residents. They find that many low-income white households are in rural areas, and because of this, most poor white residents live in majority white neighborhoods. Much of this work addresses the trends and conditions underneath a larger trend toward segregation.

Evidence indicates that urban-rural and poverty indicators are not sufficient to understand the role of location and poverty in child and youth development. Portia Miller, Elizabeth Votruba-Drzal, and Rebekah Levine Coley (2019) argued that place, poverty, and community resources and stressors provide a richer perspective. They used data from the Early Childhood Longitudinal Study, Kindergarten class of 2010, which contained data from children's experiences and contexts while in kindergarten through second grade. Generally, they described the complex nature of ecosystems that interact. The positive role of rich cultural assets in urban communities was diminished by greater violence and disadvantage. Location had limited associations with parenting style and child achievement; nurturing supportive parenting had small positive associations with achievement. The core of their model suggested that urbanicity (location) had direct effects on cultural and community resources as well as community violence and disadvantage, which directly affected achievement and indirectly affected achievement through cognitive stimulation and parental nurturing. The associations between urbanicity and community contexts and conditions were substantial, but their effects on achievement, both direct and indirect, were small.

This complex interaction of place, poverty, and community resources and stressors also was relevant to the experiences and opportunities of individuals in different racial and ethnic communities. With respect to youth achievement, community and cultural capital have been core components of the ecology of youth development, and these characteristics have

differed across ethnic groups (see, for example, Rodriguez and Morrobel 2006, who built a case for the consideration of unique family and community characteristics relevant to Latino youth development).

SCHOOL GRADES AND EDUCATIONAL ASPIRATIONS

Educational aspirations and achievement are associated with short-term outcomes such as access to higher education, and long-term outcomes such as better occupational attainment, employment, and health status (Bohon, Johnson, and Gorman 2006). Further, aspirations are also associated with positive transition into adulthood, given that youth with clear goals and healthy behaviors tend to adapt better to transitions (Bandura et al. 2001; Eccles, Brown, and Templeton 2008).

For students from rural schools, Macarena Hernández and Dagmar Raczynski (2016) find in Chile that students want to achieve higher education levels and obtain good jobs. At the same time, they also identify major obstacles, including limited economic resources, school supports, and information. On a similar note, parents say that their main concern about their children's education was not having the economic resources to help them (Guerrero 2014). It is possible that developing college aspirations in rural communities might be more challenging because of the high rates of poverty relative to urban areas.

Although promoting college aspirations is important for students, it must be accompanied by social and emotional support and access to information, especially for disadvantaged students such as those from rural schools, given that they are more likely to struggle with stress, financial limitations, and the uncertainties of moving away from their communities (Cottom 2017; Hektner 1995; Silva and Snellman 2018). In one of the most comprehensive studies of rural student achievement and aspirations, based on a 2007 national sample of more than six thousand students from sixty-four rural high schools, Matthew Irvin and his colleagues (2011) explore elements of school contexts and their associations with educational achievement and aspirations among rural youth.

The focus of this effort (Irvin et al. 2011) was on the student experience in high-poverty rural schools ($n = 21$) relative to low-poverty rural schools ($n = 43$). Although high- and low-poverty communities did not differ regarding educational attainment, as expected, some student characteristics (such as disability status, grade retention, parent expectations) were associated with lower educational attainment as well as school characteristics (such as the presence of a college preparation program and postsecondary activities, as well as school-level academic self-concept). Regarding academic achievement, no reliable differences were found between high and low-poverty communities, but again student-level and school-level characteristics were associated with school grades (achievement).

In 2016, based on a national sample of rural high schools, Matthew Irvin and his colleagues explored school characteristics and their associations with aspirations among African American, Latino, and American Indian rural youth. They find that educational aspirations across racial-ethnic groups were similar, and that school experiences such as school valuing, academic self-concept, and teachers' educational expectations shaped students' educational aspirations. In addition, Latino and American Indian students attended rural schools with more race segregation and less access to resources than white rural students did. Unfortunately, the 2016 and 2011 studies had similar limitations: the authors did not properly account for the nested nature of the data, leading to misestimated standard errors, potentially affecting inferences.

POSITIVE YOUTH DEVELOPMENT

Youth development researchers have focused on risk factors such as violence, poverty, substance use, and dropouts, namely, deficit-oriented models. As a consequence, research, policy, and practice have been misguided when the target population has been vulnerable adolescents. In contrast, the positive youth development approach addresses social and psychological factors that improve child and youth outcomes, focusing on developmental assets and positive qualities of youth (Lerner 2003; Benson 2003). These not only promote positive

outcomes and thriving, but also reduce risky behaviors. Therefore, with a purpose of taking a different perspective and creating a basis for building youth and community assets, as a way to counteract or mediate the persistent challenges facing urban and rural communities, we rely on principles of positive youth development (Damon 2004). Doing so allows us to take a positive orientation in thinking about possible futures, rather than the typical deficit-oriented medical-model approach to youth development.

At least six propositions underlie positive youth development approaches with broad consensus (Benson 2006):

youth have the inherent capacity for positive development;

positive development is enabled when youth are embedded in relationships, contexts, and environments that nurture development;

positive development is further enhanced when youth participate in multiple meaningful relationships, contexts, and environments;

all youth benefit from these opportunities, the benefits of which generalize across gender, race, ethnicity, and family income;

community is a critical delivery system for positive youth development; and

youth themselves are major actors in their own development, serving as a central resource for creating the kinds of relationships, contexts, environments (ecologies), and communities that facilitate optimal development.

The ecologies and developmental contexts where youth are located interact with the inherent capacity of youth to grow and thrive; their developmental strengths, skills, competencies, values, and dispositions (Bronfenbrenner 1979); and two related aspects of

developmental success, the reduction of high-risk behaviors and the promotion of healthy well-being or thriving (Benson 2006). Researchers are increasingly exploring many aspects of context that might influence positive youth development, including success in school and beyond—providing useful information for strong program and policy development.

SOCIAL AND EMOTIONAL LEARNING

A body of evidence and consensus (Eccles and Gootman 2002; Jones and Kahn 2017) also exists among youth development researchers and experts about the integral role of social and emotional learning. Two related definitions for social and emotional learning come from the Aspen Institute and CASEL. Aspen's definition is that "Social and emotional development comprises specific skills and competencies that people need in order to set goals, manage behavior, build relationships, and process and remember information." CASEL's is that "Social and emotional learning (SEL) is an integral part of education and human development. SEL is the process through which all young people and adults acquire and apply the knowledge, skills, and attitudes to develop healthy identities, manage emotions and achieve personal and collective goals, feel and show empathy for others, establish and maintain supportive relationships, and make responsible and caring decisions."¹

The Aspen Institute (2018, 2) argues that social, emotional, and academic development can be integrated in ways to reinforce educational equity, which it defines as a system in which "every student has access to the resources and educational rigor they need at the right moment in their education, irrespective of race, ethnicity, gender, sexual orientation, language, disability, family background, family income, citizenship, or tribal status." This suggests that SEL may play an important role in students' development, both in urban and rural settings.

1. Aspen Institute, "Pursuing Social and Emotional Development Through a Racial Equity Lens: a Call to Action," May 8, 2018, 2, <https://www.aspeninstitute.org/publications/pursuing-social-and-emotional-development-through-a-racial-equity-lens-a-call-to-action> (accessed November 5, 2021); CASEL, "Fundamentals of SEL," n.d., <https://casel.org/fundamentals-of-sel> (accessed November 5, 2021).

RESEARCH QUESTIONS

Our goal was to investigate the educational experiences and contexts of rural youth, their school grades, and educational aspirations. Using the Minnesota Student Survey from 2013, 2016, and 2019, we addressed three research questions:

Are school grades and educational aspirations different between students from rural and urban school districts?

Are developmental skills, supports, and challenges associated with school grades and educational aspirations for rural and urban students?

Do school grades and educational aspirations differ for American Indian and Latino students in rural and urban communities (as these are the two larger nonwhite communities in rural Minnesota)?

First, we sought to provide insights about educational outcomes in underserved youth groups in the United States, including rural, American Indian, and Latino communities. Second, we investigated the potential role of SEL skills and supports and developmental challenges that could be addressed by school personnel to promote rural students' educational aspirations and potentially improve school grades. Finally, we examined risk factors that could undermine educational outcomes of these students.

METHODS

The data were from the Minnesota Student Survey (MSS), administered triennially and anonymously to students in grades five, eight, nine, and eleven statewide. Designed by the Minnesota Departments of Education, Health, Human Services, and Public Safety, the survey has been used to monitor trends in students' behaviors and experiences regarding education, health, risky behaviors, beliefs, social and emotional skills, and more. Data from public school districts in the 2013, 2016, and 2019 administrations were used in this study. The MSS is voluntary, that is, districts, schools, parents, and students can choose to opt out. Nevertheless, in 2013, 84 percent of public school districts par-

ticipated, 85 percent in 2016, and 81 percent in 2019 (Minnesota Department of Education 2020). Additional data were taken from the Census Bureau's American Community Survey, including information about the communities in which school districts were located. The most recent data available were collected in 2018. The data, aggregated for Minnesota school districts, were obtained from the Metropolitan Council (2019), a Minnesota regional policymaking body and planning agency.

Participants

Questions about educational aspirations were asked only of secondary school students. For this reason, the participants included students in grades eight, nine, and eleven. Also, only regular public school districts were included, excluding five charter schools (where students and families self-selected attendance) and forty-eight school cooperatives (primarily providing special education services). After linking the data with the American Community Survey, 301 school districts (of 371, where charter schools were counted as independent school districts) and 369,692 students (of 374,423) remained, namely, 81 percent and 99 percent, respectively. These school districts accounted for 95 percent of the state's population (5.4 million of 5.6 million residents).

In total, 369,692 students participated from the selected 301 districts from 2013 to 2019. Of the students, 59 percent attended urban school districts and 41 percent attended rural districts. This sample included 50 percent female and 71 percent white students, which closely matched the state student population. A more complete description of student characteristics by school district location is presented in table 1.

Several interesting differences were apparent regarding the racial-ethnic diversity of urban and rural participants. Far fewer Asian (1.3 percent) and black (1.4 percent) students were in rural than in urban districts (5.5 and 7.4 percent respectively). Rural districts had higher percentages of American Indian students than urban districts (5.7 percent versus 3.3 percent) and lower percentages of Latino students (7.6 percent versus 9.3 percent), and both were more represented in rural districts than Asian and black students. Slightly more students in

Table 1. Student Characteristics by School District

	Urban	Rural	Total
American Indian	3.4	5.7	4.3
Asian	5.5	1.3	3.8
Black	7.4	1.4	4.9
White	63.6	81.2	70.8
Multiracial	4.5	1.8	3.4
Latino	9.3	7.7	8.6
Somali	2.3	0.7	1.7
Hmong	4.1	0.3	2.5
Grade eight	35.7	35.0	35.4
Grade nine	35.5	35.7	35.6
Grade eleven	28.9	29.4	29.1
Male	50.2	50.4	50.3
Female	49.8	49.6	49.7
Free or reduced-price lunch	26.9	27.7	27.2
Special education	10.0	11.4	10.6
Trauma	35.9	39.8	37.5

Source: Authors' calculations based on the Minnesota Student Survey (Minnesota Department of Education 2020).

Note: Numbers in percentages.

rural than urban districts received free or reduced-price lunch (27.8 percent versus 26.8 percent) and special education services (11.4 percent versus 10.0 percent). Also, 39.8 percent of rural participants reported having experienced at least one trauma, versus 35.9 percent of urban participants.

Based on the 2018 American Community Survey, on average for the communities involved in this study, rural communities were 81 percent white and urban were 64 percent. This difference (of 17 percent) mirrored the magnitude of difference in student participants; however, both rural and urban schools were more diverse than their community populations.

DEFINING RURAL AND URBAN SCHOOL DISTRICTS

A rural location indicator was created for school districts outside the Twin Cities metropolitan area and with community populations of less than fifty thousand. School districts within the metropolitan area were included as urban school districts. In addition, five school districts outside the metropolitan area had community populations larger than fifty thousand (from sixty-five thousand to one hundred

twenty thousand, consistent with the Census Bureau's definition of urbanized areas). We identified forty-eight urban districts (representing 63 percent of the state population) and 253 rural districts (37 percent of the state population). Rural districts had an average high school district enrollment (grades eight to twelve) of 478 students ($SD = 466$) and urban districts had an average of 3,889 ($SD = 3,355$) students.

Outcomes

Education leaders and policymakers have focused great attention on educational achievement and postsecondary aspirations of students in their schools. Measures of these two outcomes were available in the MSS. Regarding educational aspirations, students were asked about their plans after finishing high school. An indicator was created to identify students with higher education aspirations (wanting to attend a four-year college or university). Regarding school achievement, students self-reported their school grades on a 4-point grade scale. Based on previous conversations with several school districts regarding the grade distributions of students with different characteristics (race-ethnicity, free and reduced-price

lunch status, special education status), the student self-reported grades in the MSS closely reflected school reports of student GPA.

Independent Variables

In addition to student characteristics (sex, free or reduced-price lunch, special education status, and Latino and American Indian student identities, as they are the main racial/ethnic groups in rural Minnesota), we included measures associated with positive youth development, including developmental skills and supports, as well as challenges. Based on the developmental asset framework (Search Institute 2013), several measures were created from MSS items. These measures were evaluated with confirmatory factor analysis (Mplus) and scaled with the Rasch model (Winsteps). Measures had adequate fit; items fit the Rasch model well; and differential item functioning results indicated adequate measurement invariance across sex, grade, and racial-ethnic groups (Rodriguez 2021).

Two developmental skills included Commitment to Learning (caring about doing well in school, paying attention in class, going to class prepared, interested in learning, finding school learning useful, and being a student is an important part of who I am) and Positive Identity and Outlook (having a sense of control of one's life, feeling good about self and future, dealing well with disappointment and life's challenges, and thinking about one's purpose in life).

Two developmental supports included Family-Community Support (feeling cared for by parents, other adult relatives, friends, and other adults in the community) and Teacher-School Support (reporting that adults at school treat students fairly and listen to students, that school rules are fair, that teachers care about students and care about and are interested in you).

Among the developmental challenges were Bullied (student experiences as a victim of bullying, such as being harassed or bullied on social media because of race, religion, gender, gender expression, sexual orientation, disabilities, weight or physical appearance; being

pushed around or hit, threatened, lied about, the recipient of inappropriate jokes or comments, or excluded from friends and activities), and trauma, coded 0 for none and 1 for the presence of at least one adverse experience (such as being homeless, having parents in jail, living with alcohol or drug abuser, living with verbally or physically abusive parents-adults, experiencing domestic abuse from parents-adults, and experiencing sexual abuse from family or nonfamily person). All student SEL measures and Bullied were centered at 10, the middle or neutral position of the response scale in each measure. Scores below 10 suggested that students felt that the characteristic was less like them; scores above 10 suggested that students felt that the characteristic was more like them.

Two district variables included the percentage of the population in the district with income at 185 percent of the poverty threshold (the level that qualifies families for reduced-price lunch) and percentage of the population with a bachelor's degree or higher.

ANALYSES

To appropriately describe the differences in school district communities located in rural or urban settings, we provided a series of statistical summaries on a number of characteristics, including student and community characteristics. In each case, we also reported a standardized effect size to estimate the magnitude of differences in these for rural and urban school districts. For continuous data, we estimate the standardized mean difference as the difference between the two means divided by the pooled standard deviation (Cohen's d). For differences in proportions, assuming an underlying normal distribution, d_{probit} was used as an unbiased estimator of the population standardized proportion difference; this estimator behaved well under controlled simulation in comparison to six other estimators (Sánchez-Meca, Marín-Martínez, and Chacón-Moscóso 2003). The standardized proportion difference effect size (d_{probit}) was computed using the practical meta-analysis effect size calculator.²

2. David B. Wilson, "Practical Meta-Analysis Effect Size Calculator," George Mason University, <http://www.campbellcollaboration.org/escalc/html/EffectSizeCalculator-SMD10.php> (accessed November 5, 2021).

Table 2. Student Outcomes by Urban and Rural School District

Outcome	Urban		Rural		Total	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>SD</i>	<i>M</i> Difference
School grades	3.18	0.94	3.08	0.98	0.96	0.10
College goals	0.74		0.61			0.36

Source: Authors’ calculations based on the Minnesota Student Survey (Minnesota Department of Education 2020).

Note: School grades are based on the 4-point grade scale; college goals are the proportion of students with college goals. SD = standard deviation. M = mean.

We used hierarchical linear modeling (HLM) to take into account the nested structure of the data (Raudenbush and Bryk 2002), where students (level 1) were nested within school districts (level 2). The variation in grades and educational aspirations were less than 4 percent between school districts. Nevertheless, HLM models were used to correctly estimate the standard errors of the school district effects because districts were far fewer than students (this approach used the correct degrees of freedom to account for more than 150,000 students from 253 rural districts and 218,000 students from forty-eight urban districts when estimating student and districts effects). All analyses were conducted using HLM 8 (Raudenbush et al. 2019). The HLM equations were presented in appendix 1. We estimated both models for rural and urban districts separately to support clearer interpretation, but did test a combined model using the rural indicator in interaction terms to test the significance of the rural effect on each student-level characteristic in a single model, rather than a series of post hoc tests of differences in coefficients from the separate rural and urban models (appendix 2). We standardized ($M=0$, $SD=1$) the SEL and Bullied measures and all district-level continuous variables to support clearer interpretation.

RESULTS

We first examined the distribution of study variables by school district location (table 1). Summary statistics and effect sizes for grades and college goals are presented in table 2. Overall, students from rural districts had lower grades

and were less likely to have college goals than students from urban districts; however, the effect size for college goals was more than three times (0.36) the effect size for school grades (0.10), showing that the college aspiration gap was bigger. This was similar to what Jessica Drescher and her colleagues (2022, this issue) find for school grades—not a large difference in standardized test scores between students from U.S. rural and nonrural schools.

Only 61 percent of students from rural districts aspired to go to a four-year college, versus 74 percent from urban districts. Even though the effect size was small according to Cohen’s interpretation (Cohen 1988), the numbers were substantial.³ If we consider these values as good estimates of the population, then given the population of the 301 districts with 307,000 students, nearly forty-seven thousand rural and forty-eight thousand urban students did not have college goals.

The correlation between school grades and college aspirations was 0.35 in urban districts and 0.38 in rural districts. Student-level measures are presented in table 3. On average, students reported scores above 10 for developmental skills and supports (students felt the characteristics were more like them) and scores below 10 for Bullied (students felt the characteristic was less like them).

Students from rural districts had lower scores in developmental skills (0.05 to 0.09 *SD* lower) and supports (0.04 to 0.07 *SD* lower) than students from urban districts, and higher Bullied scores (0.10 *SD* higher). We find small differences on each measure; perhaps most no-

3. As a reference: small effect size ($d=0.2$), medium effect size ($d= 0.5$), and large effect size ($d=0.8$).

Table 3. Summary Statistics and Effect Sizes for Student-Level Measures by School District

Measure	Urban <i>M</i>	Rural <i>M</i>	Total <i>SD</i>	Effect Size
Commitment to learning	12.05	11.92	1.51	0.09
Positive identity and outlook	11.03	10.94	1.85	0.05
Family-community support	12.57	12.47	2.36	0.04
Teacher-school support	11.66	11.51	2.21	0.07
Bullied	6.98	7.12	1.38	-0.10

Source: Authors’ calculations based on the Minnesota Student Survey (Minnesota Department of Education 2020).

Note: Effect size is the standardized mean difference.

Table 4. Summary Statistics and Effect Sizes for School-District-Level Measures by School District

Measure	Urban <i>M</i>	Rural <i>M</i>	Effect Size
Proportion of population with income below 185 percent poverty threshold	0.18	0.25	-0.24
Proportion of population with a bachelor’s degree or higher	0.42	0.21	0.59

Source: Authors’ calculations based on the Minnesota Student Survey (Minnesota Department of Education 2020).

Note: Effect size is the standardized mean or proportion difference.

tably, rural students reported lower commitment to learning (0.09 *SD*) and higher levels of being bullied (0.10 *SD*).

Descriptive statistics for the district measures are presented in table 4. The proportion of the population with incomes below 185 percent the poverty threshold was higher in rural districts (0.25 compared to 0.18); and the proportion of adults with bachelor’s degree or higher in rural communities (0.21) was half the proportion of urban areas (0.42).

Modeling School Grades

In modeling school grades as the outcome (table 5), we find several student and school-community characteristics that explain variation in school grades. First, among students from rural districts, significantly lower school grades were reported by Latinos (-0.25) and American Indians (-0.22) than by their counterparts. Further, Latino students from rural districts who attended districts with a larger proportion of Latino students tended to have even lower grades (0.05 lower grade points for a 1 *SD* increase in proportion of Latino students); a similar context effect existed for American In-

dian students (also 0.05 lower grade points for 1 *SD* increase in proportion of American Indian students). However, these interaction effects with district composition were smaller in urban districts and not significant for American Indian students.

Regarding developmental assets, significantly higher grades were reported by students from rural districts with more Commitment to Learning (0.31 higher grade points for a 1 *SD* increase in Commitment to Learning) and Positive Identity (0.07). Lower grades were reported by students who had been the victim of bullying (-0.02). Likewise, students that had experienced trauma reported lower grades (0.20 lower grade points than students who did not experience trauma). Among students from urban districts, we found similar results, where Commitment to Learning had the highest coefficient across the developmental assets measures.

A combined model using both rural and urban data was estimated to test whether the differences between rural and urban coefficients were significant. The interaction between rural and Commitment to Learning was. With respect to the other student variables (see appen-

Table 5. Fixed-Effects Results of HLM for Grades

	Rural		Urban	
	Coefficients	SE	Coefficients	SE
Intercept	3.09**	0.01	3.21**	0.01
Latino	-0.25**	0.02	-0.22**	0.01
Latino × proportion of Latinos	-0.05*	0.01	-0.03*	0.01
American Indian	-0.22**	0.02	-0.23**	0.02
American Indian × proportion of American Indians	-0.05**	0.01	-0.01	0.02
Commitment to Learning	0.31**	0.00	0.27**	0.01
Positive Identity	0.07**	0.00	0.06**	0.00
Family-community support	-0.01**	0.00	-0.01**	0.00
Teacher-school support	0.02**	0.00	0.01	0.00
Bullied	-0.02**	0.00	-0.02**	0.00
Trauma	-0.20**	0.01	-0.19**	0.01

Source: Author's calculations using the Minnesota Student Survey (Minnesota Department of Education 2020).

Note: All fixed-effects results are in the appendix. SEL measures and Bullied are standardized.

* $p < .01$, ** $p < .001$.

dix 2), the rural and urban coefficients were significantly different for female students, and students receiving free or reduced-price lunch (based on significant interactions in the combined model).

Although the ICCs for school grades were small for urban (0.035) and rural districts (0.034), the full model was relatively successful in explaining a majority of the variance between rural (54 percent) and urban (76 percent) districts, and a fair amount of variance within rural (34 percent) and urban (33 percent) districts.

Modeling Educational Aspirations

In modeling educational aspiration as the outcome (table 6), we find for rural districts that Latino students were less likely to have college aspirations (0.85 OR) than non-Latino students. American Indian students were less likely to have college aspirations as well (0.84 OR). We also found this pattern for urban districts; however, both Latino (0.68 OR) and American Indian (0.75 OR) students were even less likely to have college aspirations in urban districts.

Students who had higher levels of developmental skills and supports were more likely to have college aspirations in both urban and rural districts. Commitment to Learning (1.67 OR

in rural and 1.66 OR in urban settings, for 1 *SD* increase in Commitment to Learning), Positive Identity and Outlook (1.05 OR in both settings), and Family and Community Support (1.06 in rural OR and 1.08 OR in urban settings) were all positively associated with college aspirations, particularly Commitment to Learning. Conversely, students from urban (0.69 OR) and rural (0.75 OR) districts who experienced trauma were less likely to have college aspirations. A combined model using both rural and urban data was estimated. We find that the Latino students in rural areas had higher educational aspirations than in urban areas, suggesting that the difference between Latinos and non-Latinos is larger in urban settings. Likewise, students who suffered trauma in urban areas had lower educational aspirations than in rural areas.

Regarding student characteristics, students were substantially less likely to have college aspirations if they were receiving special education (0.32 OR in rural districts, 0.36 OR in urban districts) and participating in free or reduced-price lunch (0.62 in rural districts, 0.58 in urban districts). Female students from rural districts were more likely to have college aspirations (2.24 OR) than males, significantly more so than females in urban districts (1.87 OR). This

Table 6. Fixed-Effects Results of HLM for Educational Aspiration

	Rural			Urban		
	Coefficients	SE	OR	Coefficients	SE	OR
Intercept	0.48**	0.01	1.62	1.36**	0.02	3.91
Latino	-0.16**	0.03	0.85	-0.38**	0.03	0.68
Latino × proportion of Latinos	-0.04	0.02	0.96	-0.06	0.03	0.94
American Indian	-0.17**	0.03	0.84	-0.28**	0.04	0.75
American Indian × proportion of American Indians	0.04	0.02	1.04	—	—	—
Commitment to Learning	0.51**	0.01	1.67	0.51**	0.01	1.66
Positive Identity	0.09**	0.01	1.10	0.10**	0.01	1.10
Family-community support	0.06**	0.01	1.06	0.08**	0.01	1.08
Teacher-school support	0.00	0.01	1.00	-0.04**	0.01	0.96
Bullied	0.01	0.01	1.01	-0.02	0.01	0.98
Trauma	-0.29**	0.02	0.75	-0.38**	0.02	0.69

Source: Authors’ calculations based on the Minnesota Student Survey (Minnesota Department of Education 2020).

Note: All fixed-effects results are in the appendix. The interaction between American Indians and proportion of American Indians could not be tested in urban settings because the model would not converge due to the small proportion of American Indians in urban districts. SEL measures and Bullied are standardized.

* $p < .01$, ** $p < .001$.

could be explained by parental encouragement, given that Ashley Niccolai, Sarah Damaske, and Jason Parker (2022) find that working-class women from rural areas reported that their parents emphasized the importance of college for girls, whereas working-class men reported that their parents emphasized that the decision was up to them. In the combined model, we also find that the rural and urban coefficients are significantly different for female students and students receiving special education.

Further, students from rural as well as from urban districts living in a district with more highly educated adults (bachelor’s degree or higher) were more likely to have college aspirations (1.13 OR in rural districts and 1.21 OR in urban districts, for a 1 *SD* increase in proportion with bachelor’s degrees). Likewise, as the district average Commitment to Learning increased, students were more likely to have college aspirations.

The ICCs for college aspirations were 0.048 for rural and 0.025 for urban districts. The final model was successful in explaining about 60 percent of the variance between rural districts and 92 percent of urban districts.

DISCUSSION AND PATHWAYS FORWARD

Rural communities tend to have troubling well-being indicators such as high poverty rates, low educational attainment, employment rates, and earnings relative to urban communities, yet researchers tend to focus on urban or national populations. In this study, we explored the educational experiences of rural youth. We used the positive youth development framework to highlight the social and emotional factors that are positively associated with youth outcomes as opposed to a deficit-oriented framework focused on risk factors. We also used an ecological approach and considered school and community supports and characteristics to more fully understand student educational outcomes, including school grades and college aspirations. This allowed us to explore some malleable factors that are available to school leaders and policymakers. We used a sample of nearly 152,000 rural and 218,000 urban secondary school students in 301 Minnesota school districts (253 rural and forty-eight urban) and used multilevel modeling to properly account for the nested structure of the data and differences in degrees of freedom for esti-

inating the effects of student and district characteristics.

The first research question addresses the difference in school grades and educational aspirations between students from rural and urban districts. We find that students from rural district schools have lower grades than urban schools; however, this difference is small, about 0.1 on a 4-point scale (table 2). In contrast, for educational aspirations, the difference between students from rural and urban district schools is not negligible, effect size of 0.36 (table 2), even after controlling for students and school districts characteristics. This could be because cultural factors beyond school characteristics shape educational aspirations of rural students. For instance, rural students typically have to move away from home to go to college and face a conflict between staying in their community or continuing their education, which is not as common for students from urban areas, who often have more choices (Hektner 1995). As Nichole Bernsen and her colleagues (2022, this issue) find, rural students who have positive views of their community reported lower educational aspirations because they feel more attached to their communities. Likewise, social mobility in rural areas is associated with emotional and social costs that are different than in urban areas, as found by Ryan Parsons (2022, this issue). Further, traditional employment opportunities in rural areas such as agriculture and farming might not require college education, unlike those found in urban areas (Rojewski 1999). These factors might result in larger educational aspiration gaps between groups.

The results also show that male students, and those receiving special education services or participating in free or reduced-price lunch, have lower school grades and educational aspirations. This is consistent with what Matthew Irvin and colleagues (2011) find: students with disabilities tend to have lower grades and educational attainment than students with no disabilities in rural districts.

Our second question addresses the role of developmental skills, supports, and challenges. Having experienced trauma or being a victim of bullying can have detrimental effects on educational outcomes, for rural and urban

students. Youth with higher levels of Commitment to Learning and Positive Identity and Outlook have higher grades and educational aspirations, and students with more Family and Community Support have higher educational aspirations for rural and urban students, suggesting that promoting SEL skills and supports can improve educational outcomes for all students.

Finally, our third question addresses the unique contexts of the two larger nonwhite communities in rural Minnesota. We find that Latino and American Indian students tend to have worse outcomes than their peers, and these disparities were larger for students attending districts with higher enrollments of Latino or American Indian students. These results are in rural and urban school districts, showing that these groups face more challenges in both settings. Likewise, the difference in educational aspirations between Latino students and their peers was larger in urban schools, suggesting that Latino students have less of a negative effect in rural schools.

Some limitations of the study include the fact that because the questionnaire was anonymous, we were not able to link students across years and use the MSS as a longitudinal dataset, or link survey responses to administrative data. And, as always from cross-sectional studies, we must be careful to not infer causation from these models. Last, the MSS is a self-reported anonymous survey; we therefore cannot corroborate the responses. Nevertheless, these results provide important insights about educational outcomes for underserved and more isolated groups in the United States, whereas school districts differ considerably between rural and urban locations on a number of community context characteristics. We find that student populations across settings do not differ much in developmental skills, supports, and challenges (table 3), including measures of SEL. It appears that schools in both urban and rural areas have students with relatively similar SEL skills, indicating students in both areas on average have some of the skills and supports needed to be successful in school. The conditioned associations between SEL measures and school grades and educational aspirations were remarkably

similar for rural and urban school districts: SEL is relevant in both contexts.

We recognize that promoting college aspirations in rural settings is particularly challenging because, as mentioned, college attendance often involves students moving away from their rural communities and families, which may be less of a concern in urban settings (Hektner 1995; Elder 1996). College aspirations in rural communities are also challenging given the higher rates of poverty and lower family incomes. However, promoting SEL skills and supports is one promising approach available to schools and communities that could be addressed by both rural and urban schools. This should be of particular interest to rural school districts. Last, these results illuminate the additional challenges that communities of color face, particularly Latino and American Indian youth who have lower school grades and educational aspirations in urban and rural school districts. We ascribe to the principles of targeted universalism; universal goals may be achieved by targeting services and supports to those facing unique contexts, such as Latino and American Indian youth. Indeed, addressing unique community contexts is the pathway to greater educational equity.

APPENDIX. HIERARCHICAL LINEAR MODEL EQUATIONS

Based on notation from Stephen Raudenbush and his colleagues (2002) notation, the model estimated for grades was as follows.

Level-1 model

$$\text{Grades}_{ij} = \beta_{0j} + \sum_{p=1}^{11} \beta_{pj} (X_{pij} - \bar{X}_{pj}) + r_{ij}$$

Level-2 model

$$\beta_{0j} = \gamma_{00} + \sum_{p=1}^{11} \gamma_{0p} (\text{Mean}X_{pj} - \overline{\text{Mean}X}_{p\cdot}) + \gamma_{012} (\text{pov}_j - \overline{\text{pov}}) + \gamma_{013} (\text{edu}_j - \overline{\text{edu}}) + u_{0j}$$

$$\sum_{p=1}^{11} \beta_{pj} = \gamma_{p0} + u_{pj}$$

Grades_{ij} was the typical school grades earned by student i in school district j ; β_{0j} was the intercept or mean grades of school district j when other variables were group-mean centered; β_{pj} was the slope for the X_p variables included in level 1 such as sex, Latino, American Indian,

and SEL measures. Level 1 variables were group-mean centered and r_{ij} was the within-district student-level residual, normally distributed with a mean of zero and variance of σ^2 . There was one level 2 equation for the intercept and each predictor p in the level 1 model (eleven in total); thus we had twelve level 2 equations. The intercept equation included aggregated versions of the level 1 variables (proportion of Latinos at the school district, proportion of American Indian, and so on), which were grand-mean centered, as well as the proportion of the population with incomes at 185 percent of the poverty threshold (pov) and the proportion of the population with a bachelor's degree or higher (edu) in district j . We also included an interaction between being Latino and the proportion of Latinos in the district and an interaction between being American Indian and the proportion of American Indians in the district (not seen in the model statements). Last, u_{0j} denoted the between-district district-level residuals and was normally distributed with a mean of zero and variance of τ_{00} .

The proportion of variance between districts was estimated in the form of the intraclass correlation coefficient, $\text{ICC} = \frac{\tau_{00}}{\tau_{00} + \sigma_2}$

For educational aspirations, the same predictors were used; however, because it was a dichotomous variable, a logit HLM model was estimated (for logistic regression). The logit link was specified as

$$\text{EducationalAspiration}_{ij} = \log\left(\frac{\varphi_{ij}}{1 - \varphi_{ij}}\right)$$

Level-1 model was

$$\text{EducationalAspiration}_{ij} = \beta_{0j} + \sum_{p=1}^{11} \beta_{pj} (X_{pij} - \bar{X}_{pj}) + r_{ij}$$

where $\text{EducationalAspiration}_{ij}$ was the log-odds of success and φ_{ij} was the probability that the student aspired to go to a four-year college or university. The level-2 model was the same as that for school grades. Because of the log-link function, the ICC was estimated based on the assumed level-1 variance due to a standard logistic distribution (π_3^2), $\text{ICC} = \frac{\tau_{00}}{\tau_{00} + (\pi_3^2)}$. We then estimated the variance explained at level-2 (between districts) only.

Table A.1. Fixed-Effects Results of HLM for Grades—Full Model

	Rural		Urban		Interactions from Combined Model	
	Coeffi- cients	SE	Coeffi- cients	SE	Coeffi- cients	SE
Intercept effects						
Intercept	3.09**	0.01	3.21**	0.01	-0.06*	0.02
Proportion at 185 percent poverty rate	-0.01	0.01	-0.02	0.02		
Proportion with a BA degree or greater	0.01	0.01	0.01	0.02		
Proportion American Indian in school	-0.02	0.01	0.00	0.01		
Proportion Latino in school	0.00	0.01	-0.02	0.02		
Proportion female in school	0.02	0.01	-0.01	0.02		
Proportion special education in school	-0.02*	0.01	-0.08*	0.02		
Proportion FRL in school	-0.04	0.02	-0.07	0.03		
Mean BD for school	-0.01	0.01	-0.02	0.01		
Mean trauma for school	-0.01	0.01	-0.01	0.03		
Mean CTL for school	0.00	0.01	0.03	0.02		
Mean TSS for school	0.01	0.01	0.01	0.02		
Mean FCS for school	0.02	0.01	-0.03	0.04		
Mean PI for school	0.00	0.01	-0.03	0.04		
Slopes effects (student level)						
Latino	-0.25**	0.02	-0.22**	0.01	-0.04	0.02
Latino*proportion of Latinos	-0.05*	0.01	-0.03*	0.01	-0.04**	0.01
American Indian	-0.22**	0.02	-0.23**	0.02	0.02	0.02
American Indian*proportion of American Indians	-0.05**	0.01	-0.01	0.02	-0.05**	0.01
Female	0.30**	0.01	0.24**	0.01	0.06**	0.01
Free/reduced lunch	-0.27**	0.01	-0.36**	0.01	0.10**	0.02
Special education	-0.48**	0.01	-0.44**	0.02	-0.04	0.02
Commitment to Learning	0.31**	0.00	0.27**	0.01	0.04**	0.01
Positive Identity	0.07**	0.00	0.06**	0.00	0.01	0.00
Family-community support	-0.01**	0.00	-0.01**	0.00	0.00	0.00
Teacher-school support	0.02**	0.00	0.01	0.00	0.01	0.01
Bullied	-0.02**	0.00	-0.02**	0.00	0.00	0.00
Trauma	-0.20**	0.01	-0.19**	0.01	-0.01	0.01

Source: Author's calculations using the Minnesota Student Survey (Minnesota Department of Education 2020).

Note: The coefficients from the combined model represent the interaction terms between each student variable and the rural variable that show the difference between urban and rural settings.

* $p < .01$, ** $p < .001$.

Table A2. Fixed-Effects Results of HLM for Educational Aspirations—Full Model

	Rural			Urban			Interactions from Combined Model	
	Coeffi- cients	SE	OR	Coeffi- cients	SE	OR	Coeffi- cients	SE
Intercept effects								
Intercept	0.48**	0.01	1.62	1.36**	0.02	3.91	-0.28**	0.04
Proportion at 185 percent poverty rate	-0.02	0.02	0.98	-0.10	0.04	0.91		
Proportion with a BA degree or greater	0.13**	0.02	1.13	0.19**	0.04	1.21		
Proportion American Indian in school	0.06*	0.02	1.06	-0.03	0.04	0.97		
Proportion Latino in school	0.09**	0.02	1.09	0.00	0.04	1.00		
Proportion female in school	-0.01	0.02	0.99	0.05	0.05	1.05		
Proportion special education in school	-0.06*	0.02	0.94	0.01	0.06	1.01		
Proportion FRL in school	-0.09*	0.03	0.91	0.04	0.08	1.05		
Mean BD for school	0.02	0.02	1.02	0.06	0.03	1.06		
Mean trauma for school	-0.07	0.03	0.93	-0.18*	0.06	0.83		
Mean CTL for school	0.07*	0.02	1.08	0.13*	0.04	1.14		
Mean TSS for school	-0.03	0.02	0.97	0.04	0.04	1.04		
Mean FCS for school	0.00	0.03	1.00	-0.05	0.10	0.95		
Mean PI for school	0.04	0.03	1.04	0.02	0.10	1.02		
Slopes effects (student level)								
Latino	-0.16**	0.03	0.85	-0.38**	0.03	0.68	0.20**	0.04
Latino*proportion of Latinos	-0.04	0.02	0.96	-0.06	0.03	0.94	-0.05	0.02
American Indian	-0.17**	0.03	0.84	-0.28**	0.04	0.75	0.12	0.05
American Indian*proportion of American Indian	0.04	0.02	1.04	—	—	—	—	—
Female	0.81**	0.02	2.24	0.62**	0.02	1.87	0.17**	0.03
Free or reduced lunch	-0.48**	0.02	0.62	-0.54**	0.03	0.58	0.05	0.04
Special education	-1.12**	0.03	0.32	-1.02**	0.03	0.36	-0.10*	0.04
Commitment to Learning	0.51**	0.01	1.67	0.51**	0.01	1.66	0.00	0.02
Positive Identity	0.09**	0.01	1.10	0.10**	0.01	1.10	-0.01	0.01
Family-community support	0.06**	0.01	1.06	0.08**	0.01	1.08	-0.02	0.02
Teacher-school support	0.00	0.01	1.00	-0.04**	0.01	0.96	0.04*	0.01
Bullied	0.01	0.01	1.01	-0.02	0.01	0.98	0.03*	0.01
Trauma	-0.29**	0.02	0.75	-0.38**	0.02	0.69	0.08**	0.02

Source: Author's calculations using the Minnesota Student Survey (Minnesota Department of Education 2020).

Note: The coefficients from the combined model represent the interaction terms between each student variable and the rural variable that show the difference between urban and rural settings.

* $p < .01$, ** $p < .001$.

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How Far to Go? Community Influences on Youth Educational Aspirations in Rural, Resource-Dependent Places



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Rural communities in forested regions across the United States are in the midst of a transformation driven by a complex mixture of economic, policy, and demographic dynamics. This research examines, through survey results, rural youth educational aspirations in two forest-dependent regions and the role that perceptions of the local school, perceptions of community, and views on economic trajectory play in shaping rural youths' aspirations. Although school perceptions, school and community engagement, grades, and identifying as a girl were positively related to educational aspirations, community perceptions were negatively related. These quantitative findings highlight the contradictory role that higher education may play for those who must choose between education and their families and home and reinforce similar findings from qualitative research on rural youth.

Keywords: rural youth, educational aspirations, school perceptions, community perceptions, forest-located communities

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In rural communities, schools often function as the epicenter of local activity. Although public education is mandated and funded by the state and federal governments, school boards are locally elected, and many school districts overlay the bounds of rural communities, fostering identity, purpose, and engagement (Bauch 2001; Schafft and Jackson 2010; Schafft and Biddle 2013; Schafft 2016). In the United States, 12.4 million students (24 percent) attend rural public schools; meanwhile, thirty-two thousand schools (32 percent) and 57 percent of school districts are considered rural (Aud et al. 2013). However, rural students are isolated geographically and are frequently situated in a context of limited educational and economic opportunities: scarce nearby options for post-secondary education, higher rates of poverty, and constricted local employment choices (Byun et al. 2012). Despite the substantial numbers of rural students and the limited opportunities they have, “educational research and training focused on the people and places at the spatial peripheries remains very much at the scholarly and disciplinary peripheries as well” (Schafft 2016, 138).

Many rural places in the United States are characterized by a historical, cultural, and economic reliance on natural resources such as forestry, agriculture, and mining. Despite certain similarities between resource-based economies, each industry has followed a different trajectory of boom and bust over time and over space. Forest-dependent communities have experienced declines in manufacturing employment since global competition, technological changes, and recession-induced contractions began in the 1980s and accelerated in the 1990s (Woodall et al. 2011). During these decades, a shift in private land ownership structures from vertically integrated companies to timber investment management organizations and real estate investment trusts has transformed forest production and management on the ground as well, resulting in increased land transfers and local uncertainty (Bliss et al. 2010; Jin and Sader 2006). Furthermore, changes in pulp and paper markets have led to a substantial number of mill closures in some states (Crandall, Anderson, and Rubin 2017). These economic changes have left many communities at the edge of vi-

ability for maintaining critical institutions such as schools.

As a result of these economic forces, some communities have responded to decreasing availability of jobs in traditional manufacturing industries by targeting increases in nature-based tourism, amenity migration, and second-home ownership, leading to the rise of amenity-oriented rural economies (Deller et al. 2001; Gosnell and Abrams 2011; Reeder and Brown 2005). However, the role of these efforts in sustaining viable communities is variable, and some areas with focused amenity-driven development see increases in inequality (Ohman 1999; Sherman and Schafft 2022, this issue). In communities where industrial declines have occurred and amenity development has yet to occur, local employment opportunities may be largely invisible, relegated to either dismissal as “dying” industries or as yet-to-be-realized “potential” jobs of suspect quality.

Training, retaining, and recruiting skilled workers is a challenge for many rural places. Rural parents have lower postsecondary attainment rates and lower educational expectations for their children on average than parents in suburban and urban areas, possibly leading to lower youth educational aspirations (Provasnik et al. 2007; Roscigno and Crowley 2001; Roscigno, Tomaskovic-Devey, and Crowley 2006). Rural schools eager to find and keep effective teachers and educational leaders face the same challenges that other rural employers find (Monk 2007; Provasnik et al. 2007). Compounded by the socioeconomic challenges of rural communities, producing the next generation of skilled labor by educating and training local youth remains elusive.

How does growing up in a rural, resource-rich community in economic transition affect youth today? The literature, discussed later, shows that family, community, school, and place all influence youth aspirations for their educational and occupational attainment. However, research on rural youth has primarily focused on agricultural communities, often in the nation’s “bread basket” (Carr and Kefalas 2009; Kirkpatrick Johnson, Elder, and Stern 2005), and studies of forest-dependent communities have typically explored the relationship between labor-market outcomes for adults

(Helvoigt, Adams, and Ayre 2003; Kusel et al. 2000).

Other research in the companion issue to this volume uses in-depth interviews to articulate the role of family and rural origin to explore adult migration decisions, employment outcomes, and educational aspirations (Francis 2022; Niccolai, Damaske, and Park 2022), and how high-aspiration rural youth in the South navigate barriers to college (Parsons 2022, this issue). Our research adds to that work and expands our understanding of the role that growing up rural plays for youth at this moment in time by assessing how local context influences the educational aspirations of our next generation of potential rural workers and entrepreneurs. To do this, we analyzed more than two thousand survey responses from middle and high school students about school, community, place, and their aspirations for the future in two forest-dependent study areas.

Objectives

This goal of this research was to investigate how local context influences rural youth educational aspirations in two forest-dependent regions in economic transition. Our goals were to

assess variation in rural youth educational aspirations;

evaluate community influences on rural youth aspirations, including perceptions of local schools, perceptions of their community, engagement in school and community activities, and perceived local economic trajectories;

determine barriers to rural youth engagement in school and community activities; and

determine barriers to rural youth pursuing their educational aspirations.

LITERATURE REVIEW

Pamela MacBrayne (1987, 135) characterizes a profusion of research on youth aspirations from the 1960s through the early 1970s, defining aspirations as “an individual’s desire to obtain a status object or goal such as a particular

occupation or level of education.” Consistently, aspirations commonly exceed expectations and while expectations tend to decline with age, aspirations remain high. Common influences on aspiration include socioeconomic status, race, economic class, community size, parents and their academic achievement level, peers, teachers, and counselors. Youth perceptions of support and barriers to achieving goals have also been shown to influence educational aspirations (Bajema, Miller, and Williams 2002).

Russell Quaglia and Casey Cobb (1996, 130) propose a theory of student aspirations that are composed of both inspiration and ambition. They define aspirations as “a student’s ability to identify and set goals for the future, while being inspired in the present to work towards these goals.” Conceptualizing aspirations this way takes into account the role of schools and their influence on youth aspirations. The drive to achieve is subject to influence and schools can foster a culture where achievement is celebrated. Although assimilation pressure can exist in groups that may discourage achievement beyond one’s peers, schools can counter this tendency by encouraging student risk-taking and diversity (McClelland 1961; Quaglia 1996; Quaglia and Cobb 1996).

Given the lack of postsecondary educational institutions in or near many rural areas, educational aspirations for youth are often associated with needing to leave their communities (Carr and Kefalas 2009; Corbett 2020; Turley 2009). If youth aspirations are incompatible with opportunities in their community, youth are forced to prioritize long-term goals and aspirations that may be in conflict with one another (McLaughlin, Shoff, and Demi 2014). The lower educational aspirations found in rural youth relative to their suburban and urban counterparts may be derived both from reliance on lower skilled jobs present in their communities as well as emotional attachments to family and rural life (Elder, King, and Conger 1996; Elder and Conger 2000).

Local Schools, Communities, and Economies

Schools in rural communities function as a critical locale for bringing together families of varied backgrounds, supporting civic interaction,

and fostering workforce development that influences youth educational and residential aspirations (Irvin et al. 2011; Schafft and Biddle 2014). Participation in school and community activities such as athletics or clubs, earning good grades, and planning for the future strengthen youth attachment to their community, family, and peers (Fredricks and Eccles 2006; Massoni 2011). Because of the small size of schools in rural locations, this relationship between schools and communities can be magnified (Schafft and Biddle 2014).

Local schools and economies are also deeply interconnected, and local economic activity has a large impact on the sustainability of schools themselves. As local populations decrease in response to economic decline or increase as a result of community development, schools may experience enrollment fluctuations that affect school capacity and effectiveness in meeting the needs of students (Schafft et al. 2014). Rural schools are also the largest employers in many rural communities. Beyond sustaining local jobs, they have also been shown to contribute to lower unemployment rates, increased housing values, and income equality (Brasington 2004; Lyson 2002; Sell and Leistritz 1997; Sipple, Francis, and Fiduccia 2019). A role many schools embrace as part of their core mission is to develop future workers who can operate in a globalized economy where adaptability and mobility are valued; however, the postsecondary pathways that schools typically prepare youth to follow to fulfill these roles often lead them outside their communities, thus weakening the communities in which said schools are located (Budge 2006; Carr and Kefalas 2009; Peters 2012; Petrin, Schafft, and Meece 2014).

Research has explored the complex processes in rural communities that may shape youth educational aspirations, though past rural youth studies have primarily explored comparisons with urban counterparts or examined populations in the context of farms or of oil and gas development (Bajema, Miller, and Williams 2002; Carr and Kefalas 2009; Kirkpatrick Johnson, Elder, and Stern 2005; Schafft and Biddle 2014). Victoria Schaefer and Judith Meece (2009) investigate the impact of socioeconomic status, mathematics achievement, and school

perceptions on rural youth aspirations but did not account for community perceptions. In addition, Soo-yong Byun and colleagues (2012) explore the relationship between social capital and educational aspirations, accounting for family and school variables but without including geographic or community context. Because most research focuses on one aspect influencing aspirations, the need to test a more comprehensive model of multiple factors that have been shown to matter remains. Our research thus adds to the literature on youth aspirations by allowing for the simultaneous testing of several aspects known to influence educational aspirations (engagement, school perceptions, community perceptions, and perceptions of economic opportunity). In addition, by surveying students in rural forest-dependent communities in the midst of economic transition, we are able to also highlight the unique rural context impacting these relationships where higher education means moving away, and limited local realities may influence the aspirations of youth.

METHODS

Maine and Oregon are both heavily forested states with strong economic and cultural ties to the forest products industry. As is characteristic of landownership patterns throughout the West, more than half of Oregon's forests are federally owned by the Department of Agriculture's Forest Service or Department of the Interior's Bureau of Land Management; meanwhile, Maine's forests are primarily privately owned. As the forest industry transitions, communities in both states have seen mixed socioeconomic outcomes (Chen, Lewis, and Weber 2016; Eichman et al. 2010; Lewis, Hunt, and Plantinga 2002; Vail 2010). This study focuses on Piscataquis County, Maine, and Coos County, Oregon, as representative of a wide spectrum of forest-dependent conditions and histories. As is common in rural, resource-rich areas, the populations of both counties are older, slower-growing, and poorer than the United States as whole; both are dominated by forest land (table 1).

Piscataquis is a large, landlocked rural county in northern Maine (figure 1). Recent decades have seen increased conservation ease-

Table 1. Study Area Basic Demographic Information

	Piscataquis County, Maine	Coos County, Oregon	United States
Population	16,887	63,308	322,903,030
Percent population change from 2000 to 2018	-2.0	0.8	14.7
Population density (per square mile)	4.3	39.7	91.4
Median age	51.0	48.5	37.9
Median household income	\$39,470	\$43,308	\$60,293
Median earnings	\$27,301	\$25,766	\$33,439
Percent population in poverty	19.2	17.12	14.05
Percent forested	95	85	33
Percent employment in natural resources and mining	2.6	5.3	1.6
Percent employment in manufacturing	28.8	9.8	10.2
Percent manufacturing in wood products	13.8	52.0	3.2

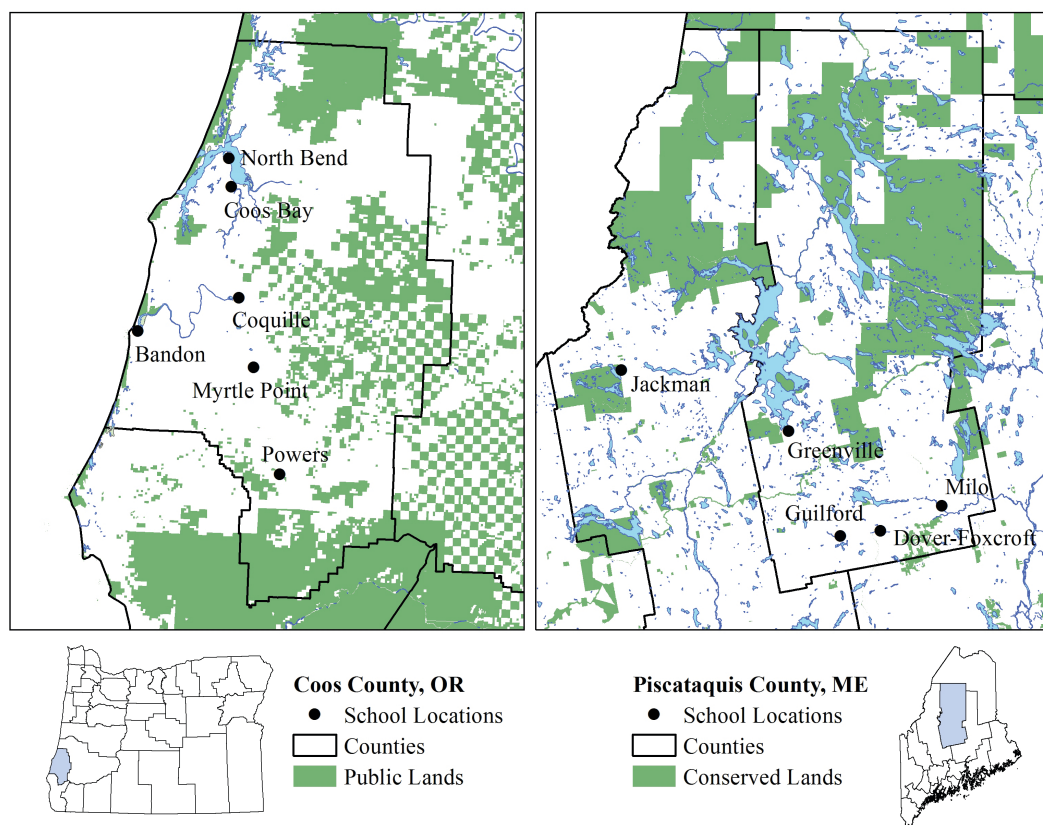
Source: Authors' tabulation based on Census Bureau (2018) and BLS (2018).

Notes: Population, age, income, earnings, and poverty data from U.S. Census Bureau ACS 5-year estimates (2014–2018). Employment data from Bureau of Labor Statistics Quarterly Census of Employment and Wages (2018).

ments on forest land and investments in recreation and amenity infrastructure in the county, building on the popularity of outdoor tourism draws such as the 100-Mile Wilderness along the Appalachian Trail, Moosehead Lake, and the 209,000-acre Baxter State Park, which includes Katahdin and the terminus of the Appalachian Trail. The county seat, Dover-Foxcroft, is the nearest service center for the majority of the county, and Piscataquis County is near the newly established (2016) Katahdin Woods and Waters National Monument. At the request of stakeholders, we included one school from the adjacent northern Somerset County, which had similar characteristics.

Coos County is located on the Pacific coast in south-central Oregon (figure 1). The northern area includes part of the Oregon Dunes National Recreation Area, while much of the remainder of the county is in public ownership under state and federal management. The deep-water port of Coos Bay has long been a significant advantage for the area, dominated by shipping logs and wood products from the extensive forest. Coos Bay remains the largest population concentration as well as main service center, although smaller towns are spread along the coast and interior river valleys, including the county seat of Coquille.

Although population and population density are higher in Coos County, both counties are isolated, with hours of drive time from major population centers. Interstate highways do not pass through either county. Despite recent investments in amenity and recreation infrastructure in both counties, neither are areas of rural gentrification (Sherman and Schafft 2022, this issue). Employment data highlights the unique nature of these counties (table 1). Piscataquis County still depends heavily on manufacturing, unlike the United States as whole. Coos County has a higher proportion of employment in the nonmanufacturing side of natural resources than the United States as well as a high concentration of manufacturing employment in wood products. Local economies in both regions have stagnated in recent decades, and both are growing slower than the nation and their respective states. For these reasons, we anticipated that the impacts on educational aspirations of factors such as school perceptions, community perceptions, and economic perceptions may be similar across locations. One key difference related to educational aspirations is the presence of a community college in Coos Bay; no similar higher education and training opportunity is readily accessible for youth in Piscataquis County.

Figure 1. Location of Study Counties and Locations of Schools

Source: Authors' map.

Sampling

Local steering committees were established in Piscataquis and Coos County Counties using Cornelia Flora, Jan Flora, and Stephen Gasteyer's (2016) Community Capitals Framework, which examines communities through a lens of assets rather than deficits and emphasizes that communities are made up of seven capitals: natural, cultural, human, social, political, financial, and built. In partnership with local organizations (University of Maine and Oregon State University Cooperative Extension, Appalachian Mountain Club in Maine, and Coos Watershed Association in Oregon), steering committee members were invited from each of the study communities within the counties and targeted to represent each of the community capitals. Survey development was guided by previ-

ous research as well as stakeholder involvement and engagement, with steering committees providing feedback about areas of concern related to youth in their communities. In addition to being anonymous, personal and sensitive information was requested sparingly; only gender, age, race, and general questions about perceived family economic status were asked. Participants were permitted to skip any question they did not wish to answer.¹

The Appalachian Mountain Club and Coos Watershed Association, which had developed relationships with local school administrators, provided outreach support. The questionnaire itself was administered electronically through public secondary schools in Piscataquis and Coos Counties during the 2018–2019 school year. Thus the sampling frame was all enrolled

1. This research was approved by the University of Maine Institutional Review Board, application #2017-07-18.

students in every school that participated: eight of fifteen potential Oregon study area schools and five of seven potential Maine study area schools elected to participate. The precise dissemination method varied slightly by school based on each school's schedule and infrastructure. We provided the electronic Qualtrics survey link to the principal or technology specialist. Eight of the thirteen participating schools had fewer than three hundred students, sometimes across six grades; these schools tended to have all students in a simultaneous designated period, such as homeroom or a multiuse period, during which the link could be sent to all students at once. This typically ensured that every student present that day completed the survey at the same time, on one day. For larger schools, survey dissemination was pushed to as many classrooms as possible. Students completed the survey on tablets, cell phones, and computers. Many schools had one-to-one technology that provided each student access to a tablet or laptop; other students used computer labs.

Thanks to the cooperation of principals, administrators, and our community partners, this method ensured a good response. Our full final sample contained 2,027 responses. Response rates varied by school, from 23 percent to 74 percent of all enrolled students participating. Response rates by students in attendance on the day the survey was disseminated were 87 percent across all schools and sometimes 100 percent. The high response rates and sample frame of all students should minimize the potential for biased responses in educational aspirations.

Measures

Educational aspirations were measured by asking students how far they wanted to go in school with response options ranging from high school to a Ph.D. or medical school. Using the method of Matthew Irvin and colleagues (2011) and Byun and colleagues (2012), we transformed the original responses into equivalent years of schooling, which allowed educational aspirations to be treated as a continuous variable.

Jennifer Fredricks and Jacquelynne Eccles

(2006) measure school and community engagement in athletics and clubs as a simple yes-no response to asking students if they participate; our measures use a more nuanced approach. Students were first asked to indicate all of their involvement activities, such as dance, band, volunteering, agricultural club, or sports. Students were then asked, "On average, how many hours per week do you spend participating in all the above activities combined?" Response categories ranged from zero hours to ten or more hours in increments of two hours. Combined, these provide measures of strength of engagement in school and community activities.

To understand youth perceptions of local economic trajectories, students were asked, "Where do you see your community in the future in terms of jobs and the economy?" Respondents had the options of more jobs and an improving economy, the same number of jobs and the same economy, less jobs and a declining economy, and don't know. Only high school students were asked about the economy.

Multiple belief statements were used in the survey to measure two concepts: school perceptions and community perceptions. Respondents were asked how much they agreed or disagreed with statements using a Likert scale based on Nina Stracuzzi's (2009). To control for other known important individual characteristics, students were asked general questions about grades and family income, along with gender and race.

Barriers

Two questions were posed relating to perceived barriers youth may experience with answers adapted from Duane Bajema, Wade Miller, and David Williams (2002) and with input from the local steering committees. Students were asked to indicate the reasons they are not involved in more school and community activities and provided options such as "It's hard to get transportation," "Activities cost too much money," and "My parents or guardians won't let me participate." Students were also asked about the barrier that could prevent them from going as far in school as they would like. Responses options here related to cost, parental support, the need to work, not being smart enough, not having

Table 2. Likert Scale Mean Responses

School Belief Statements	Mean	Community Belief Statements	Mean
Most of my teachers care about me.	0.60	I like this community.	0.65
I feel accepted at school.	0.53	This is a good place to grow up.	0.57
Teachers believe I can do well.	0.85	This community is safe	0.38
I feel safe at school.	0.51	People can be trusted.	0.06
Students get along with teachers.	0.29	People get along with one another.	0.40
Discipline and rules are fair.	0.24	I feel that I am part of my community.	0.46
I feel prepared for college or trade school.	0.15	I care about my community.	0.87
Parents are involved in school.	0.35	People are willing to help others.	0.57
I like school.	0.02	Community leaders listen to youth.	-0.01
I have a teacher who is a role model.	0.42	This is a close-knit community.	0.69
<i>N</i> = 1279		<i>N</i> = 1361	

Source: Authors’ tabulation based on Bernsen 2020.

Notes: Range from -2 strongly disagree to 2 strongly agree. Exploratory factor analysis was used to combine relevant statements into one final scale variable for each. Only belief statements used in final scale variable are shown; only respondents who answered at least three belief statements were included.

good enough grades, family responsibilities, and having to move away in order to pursue additional schooling.

Exploratory factor analysis was used to verify whether the multiple belief statements taken together accurately measured a single concept for both perceptions of school and perceptions of community. Cronbach’s Alpha was used to measure reliability of each index, or group of questions prior to creating scales; the mean Likert responses and component belief statements used to measure school and community perceptions are shown in table 2.

To assess variation of rural youth educational aspirations (objective 1), independent sample t-tests were used to compare differences between middle and high school students and differences between Maine and Oregon. Significant community factors influencing rural youth educational aspirations (objective 2) were modeled using ordinary least squares (OLS) regression consistent with Irvin and colleagues (2011) and Byun and colleagues (2012). Barriers to youth school and community engagement (objective 3) and educational aspirations (objective 4) were tabulated. Nicole Bernsen (2020) and her colleagues (in press) provide additional details on analysis.²

RESULTS

Oregon respondents were 70 percent of the sample and 30 percent were from Maine (table 3). Those identifying as girls made up 50 percent, as boys 45 percent, and as nonbinary, trans, none of these, or no response 5 percent. Middle school students (grades six through eight) constituted 31 percent of the sample and high school students (grades nine through twelve) 69 percent. Although 453 students (22 percent of the total sample) chose not to respond to the question of how far they want to go in school, we garnered responses to this question from 1,574 individuals. For educational attainment, 17 percent said that the highest level of school they wanted was high school, 16 percent indicated two-year community college or trade school, 31 percent chose four-year college or university, 19 percent selected a graduate, master’s, or law program, and 17 percent aspired to a Ph.D. or medical school. The mean level of educational aspiration was 16.41 years, or slightly higher than a bachelor’s degree. Overall, 83 percent of students planned to pursue postsecondary education, 67 percent planned to earn a bachelor’s degree or higher, and 35 percent aspired to earn at least a master’s degree.

2. Statistical analysis was conducted using IBM SPSS Statistics 25 software with a *p*-value threshold of .05.

Table 3. Descriptive Statistics for Total Sample

	<i>N</i>	Percent
State		
Maine	591	29.6
Oregon	1406	70.4
Grade		
Middle school: six through eight	478	29.4
High school: nine through twelve	1149	70.6
Gender		
Girls	778	49.7
Boys	702	44.8
Nonbinary, trans, none of these	48	3.0
Choose not to respond	38	2.4
Race or ethnicity		
Asian	22	1.4
Black–African American	25	1.6
Latino–Hispanic	102	6.6
Native American	93	6.0
White–Caucasian	1099	71.3
Two or more	201	13.0
Academic grades		
As and Bs	1229	72.0
Cs, Ds, and Fs	477	28.0
Finances (for food and bills)		
More than enough money	459	27.0
Enough money	608	35.8
Not enough money	127	7.5
Don't know	211	12.4
Choose not to respond	292	17.2
Extracurricular engagement per week		
none	281	16.5
one to two hours	307	18.0
three to four hours	309	18.1
five to six hours	240	14.1
seven to eight hours	193	11.3
nine or more hours	375	22.0
Economic perceptions (only high school)		
More jobs and an improving economy	180	26.9
Same number of jobs and economy	266	39.8
Less jobs and declining economy	222	33.2
N	2027	

Source: Authors' tabulations.

Variation of Rural Youth Educational Aspirations

We assessed variation of rural youth aspirations by school level and state (objective 1). The difference was significant in the level of educational aspiration for middle school students (mean of 16.1) and high school students (mean of 16.6), the latter indicating higher aspirations. Significant differences were also found when comparing Maine students (mean of 16.2) with Oregon students (mean of 16.5); Oregon students expressed higher educational aspirations, overall. Examining students in Maine, the difference between middle and high school youth was not significant; in Oregon, high schoolers expressed significantly higher aspirations.³

Community Influences on Rural Youth Educational Aspirations

In our first OLS model using a continuous measure of educational aspirations as the dependent variable, perceptions of school were not significant and perceptions of community had a significant negative effect on rural youth aspirations (model 1 in table 4), indicating that as perceptions of community rose, educational aspirations declined. Student engagement in school and community activities and student academic grades were both significant and positive. Of the control variables, income and race or ethnicity were not significant though gender was significant and positive; girls were more likely than boys to have higher educational aspirations (respondents who indicated trans, nonbinary, other or chose not to answer were not modeled due to small sample size; racial categories were combined into two categories of white, non-Hispanic and all others). We also tested for the effects of state by including a state dummy variable, and potential interaction terms between state and school and community perceptions, and between gender and school and community perceptions, but all were not statistically significant; thus, we

elected to keep Oregon and Maine students pooled for our models.

To test the influence of perceptions of the local economy, the sample was restricted to high school student responses. In this second model, student perceptions of the local economy were not significant (model 2 in table 4), although both perceptions of school and community had a significant effect on high school youth educational aspirations (positive and negative, respectively). Similar to the full model, student engagement, academic grades, and identifying as a girl were all significant and positive.

We also tested a dichotomous dependent variable to see whether the difference between youth aspiring to at least a bachelor's degree was significant relative to those who wanted only a high school or community and technical college degree (model 3 in table 4). In this model, school and community perceptions were significant indicators of wanting at least a bachelor's degree, and school perceptions were again positive and community perceptions negative. Engagement hours, grade, and gender (identifying as a girl) continued to be significant and positive. Using the same dichotomous dependent variable in the model of high school responses in order to include economic perceptions did not change the significance or sign of any independent variables from the continuous dependent variable measure.

Barriers to Rural Youth Engagement in School and Community Activities

The rankings of most common barriers to engagement in school and community activities perceived by students was the same in Maine and Oregon (table 5). The most common reasons youth were not engaged in activities were lack of interest and lack of time. Difficulty finding transportation, the availability of few or no activities, and prohibitive cost were the next most frequently mentioned. Parents not allowing participation was the least reported barrier.

3. The standard deviation of educational aspirations was 3.1 for middle school students and 3.2 for high school students; $t(825) = 2.67, p = .008$. The standard deviation of educational aspirations was also 3.1 for Maine students and 3.2 for Oregon students, respectively; $t(908) = 2.00, p = .046$. In Oregon, middle school student mean aspirations were 16.1 with a standard deviation of 3.1; high school student mean aspirations were 16.6 with a standard deviation of 3.2; $t(372) = 2.10, p = .036$.

Table 4. Unstandardized Coefficients from OLS Regressions Predicting Rural Youth Educational Aspirations

	Model 1		Model 2		Model 3	
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
Perceptions						
School	0.382	0.202	0.957**	0.339	0.121***	0.029
Community	-0.418*	0.182	-0.866**	0.298	-0.100***	0.026
Economy			-0.116	0.346		
Engagement						
Engagement hours	0.254***	0.056	0.249**	0.090	0.038***	0.008
Academic grades	1.280***	0.238	1.450***	0.396	0.187***	0.034
Controls						
Income	0.442	0.323	0.645	0.520	0.050	0.046
Gender	1.055***	0.197	1.130***	0.314	0.136***	0.028
Race-ethnicity	0.225	0.219	0.035	0.361	-0.009	0.031
N	949		383		949	

Source: Authors' tabulations.

Notes: All variables are positive; gender and race-ethnicity are binary. Models 1 and 2 use a continuous measure of educational aspiration. Model 1 is all students. Model 2 is high school students only. Model 3 uses all students and a dichotomous dependent variable (1 = want to achieve at least a bachelor's degree; 0 = want to achieve a high school or community or technical college degree).

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 5. Rural Youth, Stated Barriers to School and Community Activities

	All	%	Maine	%	Oregon	%
I'm not interested.	431	22.4	144	24.9	286	21.2
I don't have time.	364	18.9	101	17.5	262	19.5
It's hard to get transportation.	197	10.2	55	9.5	141	10.5
Few or no activities are available.	182	9.5	45	7.8	137	10.2
Activities cost too much money.	164	8.5	34	5.9	129	9.6
My parents or guardians won't let me participate.	60	3.1	17	2.9	42	3.1

Source: Authors' tabulations.

Note: Percentage of total respondents.

Barriers to Rural Youth Educational Aspirations

Despite slight variability in the order, youth in Maine and Oregon indicated the same top five perceived barriers to achieving their educational aspirations: cost, not having good enough grades, not being smart enough, needing to work after high school, and having to

move away (table 6). Having to take care of family members, not wanting to work hard enough, health problems, and needing to work on a farm or in the family business were ranked moderately. The perceived barriers with fewest responses were parents not being sure about students going to school and parents not wanting them to go far in school.

Table 6. Rural Youth, Stated Barriers to Achieving Educational Aspirations

	All	%	Maine	%	Oregon	%
It costs too much.	820	42.6	206	35.6	614	45.6
I don't have good enough grades.	435	22.6	97	16.8	338	25.1
I'm not smart enough.	398	20.7	114	19.7	284	21.1
I need to work after high school.	395	20.5	97	16.8	297	22.1
I would have to move away to go to school.	249	12.9	71	12.3	178	13.2
I have to take care of family members.	151	7.8	35	6.1	115	8.5
I don't want to work hard enough.	150	7.8	39	6.7	110	8.2
I have health problems.	85	4.4	22	3.8	63	4.7
I need to work on the farm/family business.	70	3.6	23	4.0	47	3.5
My parents aren't sure about me going to school.	36	1.9	6	1.0	29	2.2
My parents don't want me to go far in school.	36	1.9	10	1.7	26	1.9

Source: Authors' tabulations.

Note: Percentage of total respondents.

DISCUSSION

Our findings indicate rural youth in our sample plan to pursue postsecondary education at high rates (83 percent), consistent with previous studies. For example, Bajema, Miller, and Williams (2002) report aspiration rates for some type of postsecondary education for 96 percent of students, and Schaefer and Meece (2009) find that 90 percent of rural twelfth graders planned to continue their education. In a similar context to the Maine study area, Eleanor Jaffee and her colleagues (2019) also report very high educational aspirations.

In assessing variation of rural youth aspirations, we find significant differences when comparing students in middle and high school, Maine and Oregon, and middle and high school within Oregon. Oregon students expressed higher educational aspirational goals than Maine students for several reasons. The presence of a local educational opportunity in the form of the community college in Coos County may make higher education appear more attainable to Oregon students, given that they would not have to leave their home county. In addition, when asked where they wanted to live in thirty years, a higher proportion of Oregon students stated a desire to live in urban or nonlocal communities (Crandall et al. 2020a) than Maine students (Crandall et al. 2020b). Given that most rural students must leave their local community to pursue higher education,

these two findings are in alignment; we are, however, unable to discern cause and effect (that is, whether students in Oregon are more likely to want to live in an urban area, and thus view higher education more attainable, or whether their higher aspirations lead them to be more open to a nonrural residence). The higher willingness of Oregon students to consider a nonrural future residence may also be evidence of stronger rural-urban connections in Oregon than Maine, a possibility that our survey did not allow us to explore.

In the full model, school perceptions—the scale variable combined from multiple belief statements about school—did not have a significant relationship with educational aspirations. When restricted to high school respondents or when using a dichotomous dependent variable, school perceptions were significantly and positively related to higher educational aspirations: students who felt more positively about their current school had higher aspirations for future education. This second result is in line with previous work examining the role of school climate positively influencing development of youth aspirations (Plucker 1998), although it ran counter to work by Schaefer and Meece (2009) finding that school climate was not a significant predictor of rural youth educational expectation. However, Schaefer and Meece (2009) used measures reported by school administrators and noted the importance of so-

liciting perceptions of classroom and school environments from students, which our study did. This solicitation is particularly important for understanding the role of the school climate in shaping rural youth aspirations, given that students are the best judges of the degree to which relational trust, a key foundation for positive school climate, is present in their schools between students and teachers (Bryk and Schneider 2002; Thapa et al. 2013). We suggest that future work exploring these relationships focus on breaking down the complexities of school climate dynamics to understand the relative contribution of teacher-administrator trust and workplace satisfaction as a factor contributing to student experiences (Thapa et al. 2013). Understanding the dynamics of these complexities will better assist school and teacher leaders to target their efforts to align their practices to proactively shape youth aspirations.

Students who have positive views of their community were more likely to have lower educational aspirations, similar results to a study concluding community attachment decreases educational aspirations among rural youth (Howley 2006). This finding highlights the complicated relationship between aspiration formation and community perception for rural students. In a context where pursuing higher educational goals invariably means moving away, the short-term emotional costs of relocating versus the long-term benefit of higher education may simply be too much, factors that are articulated through other research on rural youth aspirations (Parsons 2022, this issue). Although urban youth may be similarly attached to place and family, they are more likely to be able to satisfy all their aspirations, whether educational or social, near their home community. In other analyses using this survey data, we explore the role of outdoor place attachment as an influence in desired future residence between rural and nonrural location (Bernsen et al. in press). In those models, stronger outdoor place attachment was related to a higher likelihood of desired future rural residence, and the relationship between educational aspirations and future rural residence was negative. It is clear that, whether expressed as outdoor place attachment or community

perceptions, rural youth's connections to place affect their educational aspirations and desired future residence. Because pursuing post-secondary education frequently requires leaving one's community, these connections and desires are tangled and operating at multiple levels; family and place connections may supersede educational aspirations for some students.

Contrary to our expectations, students who perceived their local economy as staying the same or improving did not have statistically significant differences in educational aspirations than those who perceive the economy as getting worse. Although economic perceptions have been shown to be an influence in other studies, it is not clear what the cause is in our findings. It could be that student expectations are not as influenced by economic trajectory in places with long-standing decline. It could also be that including community and school perceptions captures the dominant influences on educational aspirations. As other research highlights, youth expectations of staying or leaving one's community may be of particular consequence when facing decisions in times of economic uncertainty (Niccolai, Damaske, and Park 2022); the influence of growing up in long-term uncertainty may be less obvious.

The relationship of gender to aspirations is particularly interesting in the rural context. Gender was significant and positively related to educational aspirations in all our models, consistent with other research showing that girls have higher educational aspirations than boys. However, qualitative research looking at the ways in which adults navigate job loss show more tendency for women than men to downshift their expectations, focusing on remaining or returning to family rather than pursuing careers (Niccolai, Damaske, and Park 2022). These downshifts may also occur in response to crisis, such as the COVID-19 pandemic. In addition, their respondents reported higher pressure from parents for girls to pursue post-secondary education, whereas boys had "more choice" between school and work (Niccolai, Damaske, and Park 2022). More research is needed to see whether girls are more likely to report higher educational aspirations in part because of family pressure and are more will-

ing to downgrade those ambitions when faced with tough choices.

Given that rural economies in transition are also frequently faced with gendered shifts in employment (manufacturing has long been dominated by men; services typically are dominated by women), a gendered expectation may also be playing out with boys' lower educational aspirations. Research looking at the choices of rural men for work and residence note that rural men frequently sought out training that reinforced their identity as rural, working-class individuals, and put more stock into job skills and experience than paper credentials (Corbett 2020; Sherman and Sage 2011; Francis 2022). In eras and locations where manufacturing jobs were plentiful, these were logical strategies for rural men.

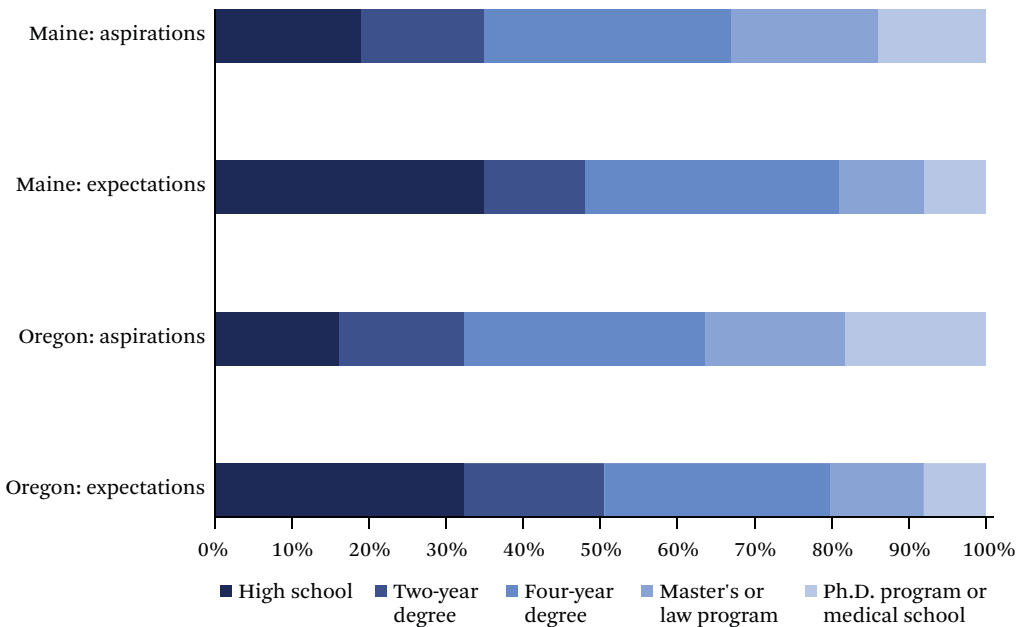
Engagement in school and community activities and grades were consistently and positively related to higher educational aspirations in our models, findings in keeping with other research (Petrin, Schafft, and Meece 2014). However, students noted barriers around transportation and cost, two things likely to be more of an issue in more remote, rural areas with lower incomes. Jennifer Sherman and Kai Schafft (2022, this issue) find just such inequalities at play in their study of educational opportunities in an amenity-rich rural area, where more affluent newcomers were better able to take advantage of extracurricular activities than lower-income families. Although some schools are able to counter the effects of these barriers with late buses and expanded van licenses for school staff, many small, rural districts with limited budgets are unable to afford to take on additional transportation costs of this kind. Transportation is a perennial issue for rural residents, whether related to access to job opportunities or enrichment ones.

Educational aspiration surveys tell us the hopes of youth at one moment in time, but clearly not all these hopes will be realized. We also asked students how far in school they thought they would go, as a measure of educational expectations (figure 2). For both states, a higher proportion of youth expected to achieve lower levels of education than they aspired to. For example, although 67 percent of our respondents aspired to complete at least a

bachelor's degree, only 42 percent of Maine students and 49 percent of Oregon students expected to complete at least that degree. The gap between aspirations and expectations, which was consistent across both regions, highlights two important factors. One, youth are realistic about the likelihood of actually obtaining their goals. This is reinforced in the barriers we tabulated (table 6). Two, even the lowered expectations of achievement may be further derailed by unforeseen life-course events, such as those detailed in qualitative work in this volume. This second impact is reflected in actual educational attainment rates. American Community Survey 5-Year Estimates for the percent of adults over twenty-five with at least a bachelor's degree were 17.8 percent for Coos County and 18.4 percent for Piscataquis County in 2019 (Census Bureau 2021). Even accounting for increases in postsecondary attainment and residential sorting over the next decade, it is unlikely that these youth expectations will be met.

Surprisingly, few students indicated that parents not wanting them to pursue postsecondary education was a significant barrier. This is contrary to both our stakeholder expectations and other research documenting the reluctance of parents to have youth relocate (Parsons 2022, this issue; Tieken 2016). Looming larger in students' minds is the issue of cost related to higher education. This is a realistic barrier for most of these youth. Our own experiences and those expressed by others can attest to the difficulties in navigating admissions processes and even the Free Application for Federal Student Aid, or FAFSA (Parsons 2022, this issue), difficulties that are compounded when parents have no experience with institutions of higher education themselves. In these cases, seeing community colleges as a stepping-stone may offer a lower bar for rural youth to get over as an initial hurdle (Wright 2012). They are more likely to be in rural areas, require less admissions criteria and preparation, and are cheaper.

Students also reported "not being smart enough" as a barrier to achieving their educational aspirations. This is likely a combination of multiple forces at play, including but not limited to a lack of college role models, imposter

Figure 2. Educational Aspirations and Expectations

Source: Authors' tabulations.

Notes: Shades of gray indicate the proportion of respondents who want and expect to have their highest schooling be (in order from darkest to lightest): high school degree; two-year degree from a community or technical college; four-year degree from a college or university; a graduate, master's, or law degree; and a Ph.D. or medical degree.

syndrome, a lack of understanding of the rigors of college, and even internalized beliefs about rural deficit. Mentors and role models can both present a living example of attainment and help with navigating unknown systems, institutions, and norms. Schools, and even youth-development-focused intermediary organizations, are well positioned to combat this specific challenge by connecting students with mentors, either in person or online (Radcliffe and Bos 2011). Natural resource-focused educational opportunities and internships may have a special dual role to play in forest-dependent places as a way to connect youth to both the outdoors and provide mentors or role models.

Although our study areas are emblematic of forest-dependent communities that have not transitioned to amenity economies, both are dominated by forest and may have potential to capitalize on that asset in the future. Each county has natural resources that are a draw for tourism: several coastal state parks in the case of Coos County and Moosehead Lake in the

case of Piscataquis County. Unlike the communities that Sherman and Schafft (2022) document in this issue experiencing rural gentrification, the remote location relative to urban centers, interstate freeways, and airports of our study areas may limit that potential. This provides an opportunity for these manufacturing-centric places to consider a slower or more intentional growth trajectory, perhaps one that can mitigate some of the inequalities that may stem from higher amenity growth.

Our research incorporates many of the known factors that influence youth education aspirations: schools, communities, engagement, grades, income, and gender. However, it is a snapshot in time of youth-stated aspirations and expectations. We do not know exactly how far these individuals will go, nor which of the perceived barriers will turn out to be limiting factors—or what new barriers may emerge for them. We do not know whether these counties will continue to be marked by slow growth or decline, or might be able to take advantage

of amenity-driven rural development. In addition, our reliance on youth self-reported family income may mask a significant difference in likelihood of college attendance by class. Although we asked about general educational aspirations, more qualitative research could better explore exactly how far rural youth want to go, both in terms of distance from home community and years of school. Would some youth be better served by deeper connections to employment opportunities locally rather than being pushed to attain a specific degree, for example? Our results build evidence for the processes and factors that differentially impact rural youth; connecting rural youth aspirations as they form them to adult outcomes over time remains a rich area of potential research to inform both educational policy and rural community development strategy.

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Moving Out to Move Up: Higher Education as a Mobility Pathway in the Rural South



RYAN PARSONS

Mobility has become more constrained, and patterns of immobility are spatially concentrated in certain parts of the United States. Drawing on three years of ethnographic fieldwork in Mississippi, this article examines the role of college as a pathway out of this entrenched poverty and the social and structural barriers that limit the potential of higher education for poor students. It argues that for rural youth, especially rural youth of color, enrolling in college and finding employment that uses that education requires a permanent transition from one opportunity structure to another, a transition that is not often expected of students from more privileged backgrounds. This transition creates social, psychological, and cultural barriers that limit students' ability to be mobile through education.

Keywords: mobility, inequality, rural poverty, race, education

How do depopulation and racial stratification shape the educational and mobility trajectories of the rural poor? This article argues that for rural youth, especially rural youth of color, enrolling in college and finding employment that draws on that education requires a permanent transition from one opportunity structure to another, a transition not often expected of students from more privileged backgrounds. This transition creates social, psychological, and cultural barriers that limit students' ability to achieve social mobility through education. Drawing on three years of ethnographic

fieldwork in rural Mississippi, including participant observation in education institutions and interviews with students and their families, this article explores the experiences of a cohort of high school students to highlight the ways in which education is not a magic bullet, even for students who have already opted into the idea of higher education as a path to a better life. Such students face significant barriers in their path to college and beyond. These barriers highlight important deficiencies in the reliance on higher education as the predominant pathway out of poverty. By opportunity

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structure, I refer to the linkages between educational opportunities and occupational hierarchies that are in turn embedded in a given spatial context. A student in New York City, for example, could complete their education in the city and find a job that rewards their educational attainment all while remaining close to their home neighborhood. Even a geographically mobile student from such a background is not required to make a permanent shift—a student from New York who studies finance in California and finds their first job in Chicago can easily imagine returning home one day. For disadvantaged rural students, the permanence of this transition incurs significant economic, social, and emotional costs on students from disadvantaged rural backgrounds, costs that inhibit upward mobility even for academically strong students with upward aspirations. Students who opt to bear these costs also face marginalization as they traverse through elite spaces.

RACE, SPACE, AND MOBILITY

Social and economic mobility in the United States are entangled with the spatial context in which people complete their education and transition to adulthood and work. Recent scholarship on mobility has confirmed that mobility has been on the decline as inequalities in American society widen. In rural America, this decline is part of a long process of economic transformation that has privileged mechanized labor, shedding countless jobs in the process. At the same time, the local institutions that structure mobility opportunities have failed to provide new avenues for employment that permit upward mobility. These conditions are particularly acute in Deep South communities like Central Delta county (as I refer to my field site), where decades of racial animus and plantation economies have been significant influences on place-based institutions at the center of this process. In their work on Central Delta county, the social psychologist John Dollard ([1937] 1988) and the cultural anthropologist Hortense Powdermaker ([1939] 1993) document rigid class systems that are further separated by race. The persistence of this class and caste system necessitates an analysis of mobility and its interaction with local institutions.

The Spatial Concentration of Immobility

Inequality in the United States has increased in recent decades as rates of social and economic mobility have decreased. This rise in social immobility is spatially clustered—large sections of the Deep South, Appalachia, and other regions marked by persistent poverty have some of the lowest rates of upward mobility for children born in poverty. Analysis by Raj Chetty and Nathaniel Hendren (2018a) finds that children from a place like the Mississippi Delta, including Central Delta county, who are born into the bottom income quintile have around a 5 percent chance of reaching the top quintile. For the vast majority of children in these counties, breaking into the upper ranks of the middle class is less likely than dropping out of high school or experiencing incarceration. Chetty and Hendren (2018b) identify neighborhood and county casual effects in these processes, suggesting that endogenous properties of the neighborhood and community are major drivers of this form of inequality. Neighborhood effects are not the only mechanism at work. The authors (2018b) note that these patterns of mobility also intersect with racial and ethnic inequalities; Black Americans have lower rates of upward mobility and higher rates of downward mobility than White Americans, even among children growing up in the same neighborhood. Historically, work on poverty and mobility has concentrated on descriptions of urban poverty, largely due to the influence of William Julius Wilson's (1987) pathbreaking work on the urban underclass. Although recent literature in the social sciences and popular press has brought renewed attention to question of inequality, mobility, and poverty in rural America, much of this work has concentrated on the deindustrialized regions of the Rust Belt and the Upper Midwest (see, for example, Vance 2016; Cramer 2016). Race and inequality in the rural South remain understudied.

Broader research on mobility (measured in terms of intergenerational income growth and occupational status attainment) confirms that this social rigidity is widespread. In their classic work on stratification and the American occupation structure, Peter Blau and Otis Duncan (1967) note that the cumulative disadvantages

faced by Black Americans places additional constraints on opportunities for advancement. These effects are true even when comparing White and Black children who grow up in the same neighborhoods. These findings have been consistent for later cohorts, especially among Black Americans who live in highly segregated contexts (Hout 1984; Ruef and Grigoryeva 2018). Recent work by Chetty and Hendren (2018b) find that Black Americans have lower rates of intergenerational mobility than other racial or ethnic groups. Importantly, they also find that family and individual level factors such as family structure, education, net worth, and measured ability do not account for these racial differences, pointing to social structure and community-level factors as plausible explanations. These disadvantages have deep roots; analysis by Heather O'Connell (2012) finds that contemporary rates of inequality, poverty, and mobility are associated with the concentration of slave populations in 1860.

Automation and Depopulation

Depopulation—the persistent loss of population without obvious prospects for growth—has been a hallmark of demographic change in rural America. After postwar peaks in the 1950s, nearly half of America's counties have persistently lost population to outmigration and falling fertility rates. Accounts of this shift often focus on structural variables such as automation and natural decreases in fertility as incomes rise (Johnson and Lichter 2019). The impact of automation on rural populations and agriculture is significant; an often-quoted truism is that one tractor could perform the labor of hundreds of manual workers. The mechanization of agriculture accelerated after World War II—era metal shortages ended, resulting in the abrupt displacement of millions of agricultural workers. These structural transformations had dramatic impacts on the lives of Black Southerners. The historian Donald Holley rosily describes the mechanization of agriculture in the United States as a second emancipation: “The transition from handpicking to machine picking resulted in enormous improvements in the lives of everyone who depended on cotton for a living” (2001, xiii). This optimism ignores the extent to which the social structures in

place were ill-prepared to accommodate displaced agricultural workers.

Both Powdermaker ([1939] 1993) and John Dollard ([1937] 1988), the two social scientists who studied Central Delta in the 1930s, briefly noted the pending arrival of mechanization; both works were published at the end of American agriculture's reliance on manual labor. Dollard's predictions foreshadow the pattern of outmigration that would take place in the decades following his study. Dollard's comments on this issue are reproduced in their entirety because they capture both the scale of the problem of mechanization and the profound inability of Jim Crow-era White analysts to conceive of a future in which Black Americans could remain in the South as anything other than manual laborers:

There is question, of course, of the increased use of mechanical power which may replace both Negro and White tenant. On some plantations, tractors are being used increasingly. There is also the threat of a machine for picking cotton. This is the crucial threat since it is the picking of the cotton rather than the planting or cultivating of it which makes the masses of Negroes indispensable. If this invention should prove practicable and be wildly adopted, the South would be faced with a radically new problem as regards the Negro. We might expect then an efflorescence of fantasies of colonizing the Negroes in Africa, or of putting them in a separate state. The colonization fantasy occurred occasionally in the minds of [Central Delta residents]. Another possibility, of course, is the more even distribution of Negroes throughout the country, should they be needed again in the high-speed industrial machine of the North. While this would solve some of the problems of the South, it would certainly raise new ones in the North and make the American race problem a national instead of regional issue. ([1937] 1988, 131)

Whereas Dollard looks to structural shifts awaiting Central Delta, Powdermaker looks at the status quo's roots in slavery; her analysis highlights the durability of the plantation mode of production and hints at the social tension mechanization would bring:

“After freedom” there was still cotton to be planted, cultivated, and picked. There were still plantations. And there was a set of mores so strongly entrenched that not even a war could dislodge them. The Negro was still the worker. The White man, much poorer than before, still made the decisions. Landlords who had sufficient wealth after the Civil War to continue as planters, translated the responsibility for slaves to the responsibility for tenants. Sometimes a man’s tenants were the same Negroes who had formerly been his slaves. Many slaves merely transferred their dependence from master to landlord. Money still played only a small part in their dealings. Nevertheless, the Negro was free. He had acquired the right to move, even though he has not always been able to exercise that right. ([1939] 1993, 80)

An important implication of this study is that large-scale automation has already had profound impacts on American society and patterns of inequality. As concerns over deindustrialization and automation begin to reshape the Rust Belt and urban areas, understanding the consequences of rural automation will have important implications for inequality in the United States. In addition, the processes of automation and population decline have had dramatic impacts on both the trajectories of Black Americans who opted into urbanization and the communities they left behind.

Social and Geographic Mobility

The Great Migration, the movement of Black Americans from the South to the rest of the country that began in the 1920s, is the most significant and transformative event in the reshaping of the rural South’s population and community structure. Although the Great Migration is often framed as the movement of Black Americans to communities of greater opportunity, analysis of migrants’ outcomes yields mixed evidence. Quantitative studies in demography and sociology provide a less optimistic evaluation and do not reach a consensus that migration improved rural Black migrants’ socioeconomic outcomes. Elizabeth Eichenlaub, Stewart Tolnay, and Trent Alexander (2010) find no evidence that migrants from the

South fared better in terms of income, educational attainment, or employment than Black Americans who remained in the South or who migrated within the South. These patterns are found across a range of migration destinations. Tolnay and Eichenlaub (2006) find no advantage for migrants who move to the West rather than the industrial Northeast. Conditions for Black Americans were not improved by increased shares of Black Americans in urban populations; community size had no impact on occupational outcome (Tolnay 2001), and the earliest cohorts of migrants were relegated to the “worst” neighborhoods in destination cities (Tolnay, Adelman, and Crowder 2000). Finally, Black American migration to northern cities is associated with an increase in racial disparities in incarceration rates; Black and immigrant incarceration rates increased during the Great Migration, net of any observed increases in crime (Muller 2012).

Outcomes for the second generation of outmigrants from the South are similarly ambiguous. Despite conventional understandings of migration as a means to improve opportunities for children, Alexander and his colleagues (2017) find only modest gains for the children of migrants relative to their peers in the South. The lack of convincing evidence for positive economic outcomes associated with the Great Migration is compounded by a corresponding lack of clear analysis of social outcomes within the social sciences (Tolnay 2003). Threats of impending violence, such as those Isabel Wilkerson (2011) describes, point to a potential external driver of outmigration: the implicit desires of the rural South’s White power elite. Mechanization threatened to create a class of unemployed and underemployed agricultural workers just as frustration with Jim Crow was coming to a head and the civil rights movement was beginning to take form. The puzzle reflected in this literature suggests that the Great Migration and subsequent barriers to the South’s economic and social development can be understood as an attempt by rural White power elites to maintain control over the rural South. In short, geographic mobility has rarely been an effective solution for Black Americans in the rural South seeking to find better economic opportunities elsewhere; these trends

have persisted to the present. Black Americans, and Black men in particular, have the lowest returns from internal migration in the United States (Leibbrand 2020).

Race and Poverty in the Contemporary Rural South

Rural America is large, covering 75 percent of the country's land area, but is home to only some 14 percent of its population. Although rural regions are increasingly diversifying, they remain overwhelmingly White. Swaths of rural America, such as mineral-rich Appalachia and the auto supplier manufacturing towns of the Rust Belt, have diversified their economies, but the historic cotton belt of the Deep South remains primarily agricultural (Johnson 2017). The transition to mechanized agriculture, combined with a long history of racial exploitation and the failure of the rural South to develop to a robust industrial sector, have created patterns of persistent poverty throughout the region. Although much of rural America has been vulnerable to the periodic impact of macroeconomic shocks such as the Dust Bowl and Great Depression, the Deep South is marked by patterns of White supremacy and Black oppression that have created lasting forms of economic disadvantage. Even in bumper crop years, Black tenant farmers or underemployed people in the rural South were unlikely to enjoy the benefits of good economic times. Cynthia Duncan (2015) describes a continuity in racialized class relations that echoes the analysis of Dollard and Powdermaker. Her work charts how the plantation system's echoes are still seen in modern-day class and racial arrangements in the Deep South. A minority of wealthy White landowners control the bulk of the economy, a small and mostly White middle class provides professional services, and the region's Black majority are predominately employed on the margins of agricultural or seek low-wage employment in the region's small service sector. Although political control of local government has largely shifted to the Black majority, the White elite's continued dominance of the economy has contributed to stagnation and persistent poverty.

The poverty found in these communities can reach extreme levels. Kathryn Edin and Luke Shaefer's (2015) work on extreme, \$2-a-day

poverty highlights the challenges of the poor Mississippi Delta communities such as Central Delta. With the all but complete disappearance of cash welfare since the 1990s, the very poor living in deep poverty—who make up 20 percent of Central Delta families—resort to a broad array of strategies to make ends meet. These challenges are particularly acute for rural America, where the logic of economies of scale undermine nonprofit solutions to extreme disadvantage; the region's nonprofit infrastructure must serve a larger geographic area with fewer resources. The patterns found in the Delta reflect national trends in race and rural poverty; poverty rates for rural families of color are more than double that of White families. However, race has rarely been central to sociological analysis of rural poverty (Harvey 2017). Given the continuity between overtly racist institutions in the pre-civil rights movement era and patterns of racialized class stratification today, analysis of rural Black poverty and mobility must be attuned to the institutional structures that reproduce that poverty.

Education in an Immobile Context

Education ought to be the central institution through which mobility is facilitated—William Winter, a moderate governor of Mississippi in the 1980s, remarked that the only road out of poverty goes by the schoolhouse (Weber 2015). However, scholars of education have long noted that schools often serve other functions. They have been identified as reproducing the existing class structure of the labor market in a capitalist framework (Bowles and Gintis 1972), socializing students to inhabit their parents' class position and social norms (Willis 1977), and producing “worker-learners” who defer to authority once they enter the labor market (Gollann 2015). Despite the limiting role that schools play in social reproduction, educational attainment remains the strongest predictor of earnings and quality of life for adults. The role of educational institutions in places like Central Delta county is thus of utmost importance to addressing patterns of persistent poverty and immobility.

The schools in places like Central Delta, however, have rarely provided opportunities for upward mobility. Dollard's analysis of educa-

tion in Central Delta highlights their role in providing stratified education: a liberal arts curriculum for White residents and a vocational education for Black residents ([1937] 1988, 191). Powdermaker notes that even the few Black Southerners who were able to graduate from college felt a greater sense of alienation; their educational achievements highlighted the structural discrimination they faced without providing a way to ameliorate or sidestep those barriers ([1939] 1993, 307). Contemporary schools in Central Delta continued to face underinvestment, disinvestment, and competition from private schools founded in the wake of the *Brown v. Board of Education* decision.¹ These “segregation academies,” many of which received public funds in their first few years of operation, have led to the complete re-segregation of education in Central Delta county today (Bolton 2005; Crespino 2009; Carr 2012).

Children growing up in Central Delta county are faced with bleak prospects: the economy of the county has failed to provide adequate jobs for working- and middle-class Black residents for decades, forcing students to choose between stagnation or having to uproot themselves and seek better fortunes elsewhere.

THE CASE

This project draws on three years of ethnographic fieldwork in Central Delta county, which is located in the Mississippi Delta region. The region has long been plagued by persistent poverty, depopulation, and a lack of economic progress as the region’s dominant agricultural industry mechanized and shed the majority of jobs that it offered. Central Delta has a population of around twenty-five thousand according to 2017 ACS estimates. About ten thousand live in the largest town and county seat. The majority of the remaining population are clustered in a half dozen small towns that orbit the county seat, and an additional few thousand live in unincorporated areas. The population of Central Delta has fallen by more than half since its high in the 1930s of nearly seventy thousand. The county’s population is 70 percent Black and 25 percent non-

Hispanic White and includes a small number of Asian and Hispanic families.

A third of Central Deltans live in poverty, half of them in deep poverty (household incomes less than half of the federal poverty line). Children who grow up in poverty there have a difficult time improving their socioeconomic condition as adults; the county has some of the lowest economic mobility rates in the country (Chetty and Hendren 2018b). Historically, agriculture was the primary source of employment and the driver of the regional economy. An influential U.S. senator who served from the 1940s through the 1970s owned a ten-thousand-acre plantation in the middle of the county; at one time the plantation employed hundreds of tenant farmers, dozens of managers, and two doctors. Today, the town that includes the plantation has roughly a hundred people (the son of this senator quipped that they try to round up at least a hundred people every census to prevent the town from losing its charter). Today the county has almost no manufacturing jobs. A lawnmower plant closed in the 1990s and the largest manufacturer today is a small brick factory. Aside from hospitals, schools, and public administration, the largest employer in the county is a warehouse for a chain of dollar stores.

This article draws on a larger ethnographic study of barriers to economic mobility in communities like Central Delta. As part of my fieldwork, I embedded in several organizations around the county, including churches, civic organizations, educational institutions, and family service providers. Throughout my fieldwork, I also developed close relationships with families in the county and have been able to follow them through both daily life and significant life events. The data for this article come primarily from my work with the Leadership Institute, an afterschool and summer program that serves public school children in Central Delta county. The Leadership Institute provides daily afterschool programming in the form of literacy classes, college prep courses, and extracurricular clubs such as drama, chess, and art. During the summer, it offers a full day, five-week summer camp that offers similar op-

1. *Brown v. Board of Education*, 347 U.S. 483 (1954).

portunities for middle school students and college-credit courses for high school students. Throughout the year, the institute takes its students on college visits throughout the country. Students who are active in the program throughout the year also receive support to attend summer programs elsewhere. In past years, students have attended programs at Andover, Exeter, Yale, Harvard, and other elite institutions. Participants are recruited from nearby schools and through the personal networks of existing members; thus they are not a random sample of the local school-age population but rather a self-selected group of students with upward mobility aspirations. An ethnographic method is appropriate for a study such as this in which the goal is to elucidate and describe the life processes of a relatively unseen population rather than to produce a summary of a random sample (Katz 1997).

The pressure to get to a college—any college—is strong for students at the Leadership Institute. Their academic profiles and ACT scores are comparable to the rest of their peers. All of the students I worked with identified as Black or African American. A slight majority were female, particularly among the high school cohort. Most students have Bs and Cs in class, with a smattering of A and B students and of students struggling to pass classes. The highest ACT score in the group is a 26, but some of the sophomores and juniors in the program are working to get their scores up from 13 or 14. The national average is 20.8 and the state average is 18.6. Public universities in Mississippi will admit students with a 16 and a high grade point average, though for most students an 18 is the minimum score in practice. Many students in such an environment are statistically unlikely to attend college even if they can boost their scores over the threshold. Ironically, students who are otherwise unlikely to attend college but who do enroll disproportionately benefit from a college degree in terms of income (Brand and Xie 2010). Although the staff of the Leadership Institute strongly influence students' thinking about post-high school plans, the students in the program are encouraged to develop their own specific academic and career plans.

For the past two years, I have worked with

the institute as a college application mentor, chess coach, literacy class instructor, substitute bus driver, and general volunteer. During the summer, I taught a sociology class on site; students received credit from a nearby liberal arts college. I chaperoned visits to more than a dozen colleges and universities around the country, including small historically Black colleges and universities (HBCUs), large public universities, and small, private predominantly White institutions. As part of my involvement, I have developed close relationships with around a dozen high school students who are regular attendees. I have been able to get to know their families, help with college and summer program applications, attend church and family events, and generally pass time with them as a friend and mentor. Although the Leadership Institute is open to any student in the area, all of the students who participate are eligible for Pell Grants. These students are already committed to the idea of college as a pathway out of poverty; thus, their experiences represent the best-case scenario for students from Central Delta county who proactively want to move up the economic ladder. Although students in this group are largely similar to their classmates in terms of grades and ACT scores, they are unique in their willingness to take on additional responsibilities as part of their preparation for college: the most dedicated students spend twelve hours per week at the Leadership Institute during the school year and up to ten weeks during the summer participating in summer programs organized or funded by the institute. As a result, this cohort of students is not representative of their peer group in any statistical sense; instead, their experiences (and in particular the ethnographic analysis of those experiences) help illuminate previously undetected processes (Katz 1997), which in turn shed light on how mobility processes operate. In addition to this core group of students, I also conducted in-depth interviews with staff and alumni of the institute to provide additional insights into the experiences of high school graduates and college students from Central Delta. The data collected in this article were collected before the COVID-19 pandemic reached Mississippi; in the weeks after the first case arrived in Cen-

tral Delta county, schools closed abruptly and transitioned to online platforms for the 2020–2021 school year.

THE OPPORTUNITY STRUCTURE OF CENTRAL DELTA COUNTY

Midway through the fall semester, Jeremy hunched over a Chromebook at the Leadership Institute working on homework for his ninth-grade earth sciences class. Most of the homework assigned by the school district in Central Delta county (a recent consolidation of the county seat's city district and the county district) takes place online on a website called USA Test Prep. The name and the medium are indicative of what happens at Jeremy and his classmate's school—curricula are overwhelmingly focused on standardized testing and rely on material prepared by third parties and typically include material well below grade level standards:

Rain, hail, snow, fog. These are all examples of _____ on earth.

- A. Water
- B. Soil
- C. Air
- D. Sun

Nearby school districts face chronic teacher shortages, and some schools in the Delta have shifted to online instruction for core classes like math and English—classrooms of students follow along with a teacher on a television screen who is simultaneously lecturing to hundreds of students in similarly under-resourced schools.

Technology has not universally worked to mitigate the problems caused by funding shortages and teacher vacancies—at the table next to Jeremy, Kimberly and Brayley are talking about how much they hate spending time in the gym of their small-town high school. Whenever the school cannot find a substitute teacher for one of their classes, the class spends that period in the gym instead. Brayley spent a whole week of biology in the gym recently (public school students in Mississippi are required to pass a state test in biology to graduate). The gym is not a comfortable place, much less an

appropriate place for students to self-study. The bright lights give Kimberley migraines and Brayley was recently assaulted by other students. A coach saw the fight and suggested that Brayley hang out in the teachers' lounge instead.

Work on poverty and mobility in rural America has typically conceptualized the “opportunity structure” of a rural place to encompass the network of job opportunities, its attendant opportunities for income gain, and the ways in which these features respond to broader economic restructuring (Tickameyer and Duncan 1990, 68). Recent work by Siwei Cheng and Barum Park (2020) formalizes the concept of the opportunity structure to refer to the networked flows of people across occupational categories, that is, how easy it is for someone to move across occupations given their starting position. A more nuanced analysis of the opportunity structure in Central Delta county identifies the importance of expanding that conceptualization to not only the education and employment opportunities of a place, but the social and spatial context in which they are embedded as well. The educational system not only provides the human capital necessary to be matched with and succeed in an employment opportunity but also the cultural and social capital required to navigate changing economic conditions. The social context in which these institutions are embedded plays a key role in helping young people identify goals for themselves and articulate how those goals might be achieved.

Down the road in the county seat, the county's larger high school struggles with similar issues. The school consists of several buildings connected by covered walkways, and flooding is a common problem. During the Delta's frequent heavy rains, the walkways (and even some of the classrooms) become waterlogged and unusable. One day last spring, I sat with Amanda and Cierra, two seniors at the school, as they showed me a Snapchat that had been circulating among their friend group—someone had added a graphic of a surfboard under images of students wading through the waters to get to their next class. The school's Advanced Placement Environmental Science class, intended to offer college-level work, recently

spent a few days of class time digging a drainage ditch to combat the flooding.

The conditions of the schools in Central Delta county also struggle from competition with a pair of private schools founded in the 1960s as “segregation academies” (Carr 2012; Champagne 1973). These predominately White, exclusive schools have resulted in a net decline in funding to the public schools because of lost enrollment and a general antipathy toward public education from the county’s small but wealthy White population. The segregation academies also reflect a deeper social segregation in the county—the county was the site of some of the civil rights era’s most violent resistance by White conservatives (Asch 2011; Crespin 2009; Moye 2006). Towns in Central Delta county are still segregated at the neighborhood level, often by literal train tracks, and opportunities for cross-racial social interaction are nearly nonexistent. This history of segregation and White supremacy has resulted in forms of rural poverty and immobility markedly different from rural poverty in majority White contexts. The legacy of the plantation system created a persistent norm of rural poverty for those who did not migrate out to urban centers (Tickameyer and Duncan 1990, 72) and in which local institutions were calibrated to preserve a racial order in which Black Americans were kept subordinate to White landowners (Stein 1960, 153).

On New Year’s Eve, a balmy Tuesday with temperatures reaching the high sixties, I drove Cierra and Amanda to meet some of their friends from the Leadership Institute for lunch at a Mexican restaurant (the only restaurant in town). Cierra and Amanda are both ambitious and have an astute sense of what the world outside of Central Delta county has to offer them. When I first met Cierra and Amanda, they were sitting together at the Leadership Institute, getting settled in for the first day of a new semester. Amanda was holding a book of lectures by Michel Foucault—she had read *Discipline and Punish* while taking a college class that previous summer and the instructor had given it to her as a gift. Cierra was gushing about BTS, a K-pop group she had discovered while at a summer camp at a prestigious boarding school in New England—she had had roommates from

around the world who had turned her on to a broader range of culture and lifestyles than she had ever been exposed to in Central Delta. Both are seniors at the city high school and are actively working on college applications—Amanda hopes to attend a prestigious HBCU in Atlanta and Cierra has her eye on a regional university a few hours south. As we drove to lunch that day, I asked them what “success” might mean to them and to other students at their school.

AMANDA: We’ve got a lack of opportunities, first of all. We don’t see people being, like, socially mobile, doing big things.

CIERRA: Yeah like, being successful. There’s a mixed perception of—like, ‘What is success?’

AUTHOR: Ok, so who are the most successful adults who live here?

AMANDA: Oh, the Byalls.

CIERRA: Byalls.

The Byalls own a chain of funeral homes around the Mississippi Delta and are the wealthiest Black family in town. Like many rural areas, it has become increasingly difficult for residents of Central Delta county to find jobs that meet the basic needs of their families (Thiede, Lichter, and Slack 2018). These disadvantages are compounded by the declining quality of rural education, which works with fewer resources than suburban and urban education systems (Roscigno and Crowle 2001). Relatively few jobs in the county require a college degree—my respondents overwhelmingly indicated that the only graduates in their lives were their teachers. Only two respondents had college-educated parents; one was a teacher and the other had a job at a nearby hospital that does not require her degree. Although the economy of the Delta is primarily understood in terms of agriculture, farming offers almost no employment opportunities aside from occasional seasonal work driving trucks. Fewer than 2 percent of the county’s population is employed by farms, most of them White. Although the wealthiest people in the county are the planters, the mechanization of agriculture and the emergence of large, corporate farming operations has relegated agriculture to a source

of passive income for a handful of families who have inherited plantation estates. For most people in the county, the only interaction with farming occurs when the pesticides sprayed by crop-dusters each spring drift over the two-lane highways that bisect fields of corn, cotton, and rice. Thus, occasional success stories like a family-owned funeral empire are often the most visible signs of success for students in the region.

An analysis of the weak opportunity structure for young people in Central Delta county emerged at a recent community meeting that was organized in response to a series of murders that had occurred during the Christmas holiday. Despite the county's relatively small population, its homicide rate is comparable to Memphis, Jackson, and other nearby cities. The meeting took place in the packed community space of a local museum, and comments from the public largely centered on one topic—the lack of opportunities for young people. There's nothing for children to do after school, no opportunities for young adults once they leave high school. Young people, especially young men, are often attracted instead to cadet branches of big city gangs that have taken root in the county. The sheriff, a well-respected Black man and the county's top criminal justice official, leaned back in his chair as he took all the comments in. "There's that African proverb about taking a village to raise a child," he said in his closing comments, "and we've got to learn to be a village again."

IMAGINING MOBILITY

On Christmas Eve, a week before I had lunch with Cierra and Amanda, I dropped by the apartment where Deshawn lives with his parents, four siblings, a second cousin he calls grandma, and an uncle. The apartment is cramped—it has just two bedrooms that are occupied by Deshawn's grandma and uncle, leaving his immediate family of seven to spread out in the small living room. His mother and stepfather share an air mattress with their youngest son and Deshawn, his older brother, and two younger sisters find space on the three couches that surround the mattress. The apartment has only recently become this cramped—Deshawn's youngest sibling has a medical condi-

tion that required him to live in a children's hospital in a major city about two hours away, so he and Deshawn's parents had moved there for about a year. No one in the recently reunited family was working—Deshawn's parents had left behind decent jobs once their son was healthy enough to move back to Central Delta, and Deshawn's grandmother had recently stopped working after her job cleaning at a local hospital started causing too much back pain. The only indication that it was nearly Christmas was a small Nativity set on the bookshelf in the living room. Deshawn's youngest brother sat on the linoleum tile floor playing with the superhero action figures he'd received from nurses at the children's hospital while the rest of the children watched their father play an basketball videogame on their small television.

I took Deshawn to a Subway down the road for lunch to catch up and talk about his involvement with the Leadership Institute—like many young men in his cohort he had stopped coming in favor of sports. As an eighth grader, Deshawn is just starting to get a sense of what it will take to go to college and what comes next. As we sat in a booth by the window, he talked about what he wanted to study—music. He's a talented freestyler and drummer for his church, but when pressed about possible career goals one day he demurs, not drawing a connection between studying and working in music. I asked what sort of job he might like to have one day, and he glanced out the window to the combination gas station and KFC across the street. "Work in a store, I guess," he said as he gestured to the gas station.

One of the greatest constraints that the local opportunity structure imposes college aspirants and others who want to imagine themselves as upwardly mobile are the available reference points that inform their ambitions and make them feel possible. The students at the Leadership Institute, and in public schools in Central Delta County more generally, belong a group that Anthony Jack (2016) terms the "doubly disadvantaged"—students who suffer from both family poverty and poorly supported schools. This compounded disadvantage is an important dimension of their trajectories because it influences the intangible resources they need to transition to a new opportunity

structure. Almost none of the parents or caregivers interviewed for this study had attended college—a handful had attended a few semesters of community college or completed one or two years at a local public HBCU. Not having parents or other adult influences with college experience plays a significant part in defining the aspirations of the students at the leadership institute. For families in rural communities, the combination of parent and teacher expectations and parent discussions of college are key predictors of students' aspirations for their future (Byun et al. 2012). In Central Delta county, these expectations are inflected by the low rates of educational attainment of previous cohorts.

One of the factors that might prevent an otherwise qualified student from Central Delta county from attending college is the opaque admissions process. Early in the fall, I sat with Amanda, a strong student and astute writer, and worked through a strategy for the essay she needed to write for schools that accepted the Common Application. The application essay genre is foreign to her—the idea of having a “hook,” of crafting a compelling and empathetic narrative of her life and reflecting on her personal growth seem orthogonal to her immediate goals to double major in computer science and political science. In recent years, private consulting companies that charge thousands of dollars for application essay consulting have emerged to work with wealthy students, but students like Amanda struggle with the mechanics of a process that will have considerable influence over their life trajectory.

Mundane paperwork like the Free Application for Federal Student Aid (FAFSA) is also a barrier to students unfamiliar with this process. Students are assisted as they navigate these barriers by people like Kasey, who works as a full-time college and career counselor for the Leadership Institute. A Black woman and native of the region, Kasey returned to Mississippi after college through Teach For America and started working at the Leadership Institute at the same time my fieldwork began. Kasey set aside a full afternoon in mid-October to fill out the FAFSA with the program's high school seniors. Taesha, a senior, came to the program that afternoon thinking that she had already

completed it, when in reality all she had done was create an account. The other seniors struggled to get past that point—no one's parent or legal guardians had been able to come, and no one had the numerous tax documents, Social Security numbers, and other bits of paperwork necessary to fill out the required forms to make college remotely affordable.

Students' ambitions are often influenced by other key figures in their lives. Frank, a high school senior, struggles in school after spending his sophomore year in the hospital fighting cancer. He spent much of last fall working with Kasey, the college coach at the Leadership Institute, to develop realistic goals for after graduation. In a draft application he has decided to indicate an interest in psychology, despite having no experience with the field:

KASEY: Why do you want to study psychology?

FRANK: I want to work with kids.

KASEY: Ok, so what does that have to do with psychology? You could put down that you want to be a social worker. Or what about a pediatric nurse?

Frank stares silently at the computer in front of him. He made a 14 on the ACT so his only viable options at this stage are two nearby community colleges and a private HBCU two hours away that does not require test scores. He enjoys the idea of nursing—when he was actively fighting his cancer, he liked his nurses a lot and saw them working with other children. We talk about the pathway for nurses, but the alphabet soup of credentials quickly overwhelms him—CNA, LPN, RN, NP, PA. We try to emphasize that it is a good ladder to get on and that he can get off whenever he wants but is a lot of information for him to internalize. Someone makes a joke about male nurses, so I try to redirect the conversation—what about working with the elderly? Would that appeal to him? His grandfather can no longer walk so he has nurses that help with day-to-day tasks—this provided another personal connection with someone who works in nursing.

Taesha, a senior at a different high school in the area was working on her applications with similar influences in mind. When she was in middle school a hip injury caused her to spend

a semester at home, working with tutors from the school and a physical therapist. Her experience with physical therapy turned her on to a new career option, and she was actively applying to HBCUs that have physical therapy graduate programs. For most of the students in Central Delta county, the only college graduates in their lives are their teachers. Although teaching is a stable and reliable job for many, funding shortages and the expanding role of Teach For America have diminished the image of teaching as a permanent job for locals. These challenges are compounded by Mississippi's chronically low salaries for full-time public school teachers—teachers in the three adjacent states enjoy starting salaries thousands of dollars higher than their Mississippi counterparts. Taesha, whose mother is a middle school teacher, will qualify for a Pell Grant when she starts college next fall.

Other influences are not as helpful. Deshawn, the eighth grader who imagines himself “working at a store” one day, was one of the rising stars of the chess team at the Leadership Institute as a seventh grader. Initially a shy young man with a thick country accent, Deshawn quickly caught on to the rules of the game and by the end of the year was teaching his friends how to play. He attended tournaments throughout the state and while he never won more than one or two matches, traveling and competing alongside more advanced students was transformative in terms of boosting his confidence and helping him articulate goals for himself. By the first few weeks of eighth grade, however, he had all but disappeared from the Leadership Institute because he had joined his school's basketball and football teams. School sports are a major competitor for the attention of the students (particularly the young men) at the institute, and the costs often outweigh the benefits. One of Deshawn's chess teammates, ninth grader Jackson, had quit altogether to prioritize making the varsity football team. Jackson's good friend RJ, another ninth grader, continued to show up at the Leadership Institute only because his mother makes him come.

Working with RJ can be a struggle. He attends a small, predominately White private school because he was expelled from the public

middle school close to his house. He frequently comes to the institute without homework and has decided to stop doing any assigned work because of his commitments to football. “I’m not gonna be here when y’all do stuff anyway because of football. You’ll be lucky if I’m here one day a week.” The competition between sports and academics—both of which offer nominal promises of status attainment and success—is best embodied by a tenth grader named Jerrell. Jerrell made the front page of the county's weekly paper after making a 26 on the ACT—a score that would guarantee him admission and a healthy scholarship to any of the public universities in the state. Getting a score above 30—a score that would make him competitive for most schools in the county—in the next few years would certainly be attainable. However, Jerrell is also a talented football player; the same newspaper story also highlighted his achievements as a wide receiver. His commitments to football have been a source of contention with the staff of the Leadership Institute, who see his academic promise as a more reliable source of future opportunity.

On one of the handful of afternoons that he was able to come to the institute after football season started, Kasey, the college advisor, caught him in the hallway. The other students had been abuzz with stories from the past week's game between Central Delta County's two public high schools, a fierce rivalry. Jerrell had done well in the game but had also suffered a concussion and was benched for the next two weeks. With stories about chronic traumatic encephalopathy (CTE) in the news, the long-term implications of Jerrell's commitments to school and sports were a contentious subject:

KASEY: Do you have recruiters looking out for you? Do you think you're good enough to play Division I? The NFL? What happens if that doesn't work out?

JERRELL: I can do both [football and the Leadership Institute]-

KASEY: Who's looking out for you at this point? Who's looking out for you?

Jerrell, RJ, Jackson, and Deshawn's decisions to prioritize football over academics, despite

the risk of physical injury and brain damage, are indicative of what Norbert Wiley (1967) terms the “mobility trap.” Mobility traps refer to situations in which strategies for upward mobility within a given social strata have the corollary effect of limiting upward mobility within broader society. This original formulation of the mobility trap was conceived as a feature of ethnic enclaves—prioritizing Mandarin proficiency and familiarity with traditional Chinese customs, for example, would facilitate status attainment within Chinatown, but the opportunity cost of doing so might limit opportunities to attend a university in an English-language context. For students in Central Delta county, the traps are not the result of ethnic enclaves or racial segregation *per se*, but instead the ways the local opportunity structure has become detached from the wider economy. Sports offers reliable stories of upward mobility and improved social status for students from under-resourced schools, though in practice actual opportunities for upward mobility through athletic scholarships are vanishingly rare. Students are more likely to suffer concussions or other injuries, all while forgoing the chance to develop academic skills that have a more natural alignment with conventional pathways out of poverty.

For the children of Central Delta county as they try to make their way out of a weakening opportunity structure, role models who can transmit the right cultural capital and help them navigate through the process of upward mobility are essential. Sheena, an official with the school district and member of the Leadership Institute’s advisory board, had a difficult childhood in Central Delta county. When she was in high school, she did not have adults helping her navigate the transition to adulthood. She did not take the ACT until mid-twelfth grade and did poorly because she had not been prepared. As a young single mother at the end of high school, she barely qualified for the local community college, failed college algebra twice, and forgot about an online class she was taking. “Not having a mentor, not having anyone to, you know, guide me, I gave up and dropped out.” She had her first child right out of high school and was pregnant when college started.

She talks about a teacher who used to take her home in twelfth grade. When the teacher saw the ramshackle house where she lived alone with her infant daughter, she asked in disbelief, “Do you live here?” The next day the teacher asked whether Sheena had filled out any scholarships. Sheena did not even know what that meant. The teacher applied for a \$500 PTA scholarship on Sheena’s behalf. Sheena says if she had known about that sort of thing in eleventh grade the options would have been much better—options such as a Pell Grant would have covered most of the costs of community college.

A pastor at her church helped her get out of her funk and apply for an associate degree online. Then she did AmeriCorps through a local nonprofit where she met Debbie. Debbie quickly became a major figure in her life and helped Sheena finish her bachelor’s degree online. After that, the nonprofit she worked for was able to provide support for a master’s degree. She enrolled in a local public HBCU because she wanted to be on a real campus and be a part of a historically African American institution. “I went back to my little kid self—I never got a chance to experience college life.” After finishing a master’s degree in rural public policy with a 4.0 she immediately started working on her doctorate because she knew she would not if she took a break. Her doctorate program in public policy is based at a different HBCU nearly two hours away—the drive was almost too much, but her supervisors at both her job and at her school provide flexibility to support her. They let her leave early, watch her youngest son, and are flexible about course requirements.

People like Debbie have played a transformative role in helping Sheena assert control of her life and build a middle-class life for her three children. “I know a lot about [Debbie], I keep up with her, she’s like my mom. She was my star—she was the first person that poured into my life.” Not having mentors is a common problem for the students in the school district Sheena works for. “Kids don’t have enough people to motivate them to strive and do their best. The [Leadership Institute] does that with them but they only get a very small percentage of the students in our district.” There’s a great need

for mentors like Debbie in the county. “I just needed someone to say, ‘You can do this, and this is the way to do it.’” She talks about the way that the public high school passes out scholarship information—it’s not enough to just distribute that sort of information and act like that’s enough. Her children have someone at home or at the Leadership Institute who can help her navigate that process, but someone with a rougher home life might as well not even get that information. Without knowing ways and strategies to move up and move out, poor children in Central Delta county get caught up in the reproduction of poverty that grips their community.

THE COSTS OF LEAVING HOME

Each week the students at the Leadership Institute dedicate one of their afternoon sessions to working with Kasey, the college advisor on staff. One rainy November afternoon, Kasey was running late so I kept the group occupied for a few moments by checking in with the seniors about their college application process. As Kasey walked in, I ask them how they were all feeling, to which Amanda responded, “I wish we’d talk about our feelings.” Hearing this, Kasey paused her planned agenda on filling out the Common Application to host a short, five-minute focus group on what people in the room were worried about. By far, the biggest concerns were money and convincing parents to let them consider colleges outside of the Mississippi Delta. For the most part, the seniors in the room just felt enormous pressure. Amanda, in particular, was struggling with what might happen in the next few months. She had already been accepted to a prestigious HBCU in Atlanta that was her dream school, but she was skeptical that she would qualify for their merit scholarships and her parents were adamant that Atlanta was too far away. Kasey hoped that she could convince Amanda’s parents over time:

KASEY: Do I need to go talk to them? I will.

AMANDA: Ms. Kasey, my mom said you can come talk if you want but she’s just gonna hurt your feelings.

Students who recognize the limited opportunities available to them at home and who

seek to navigate the process to get into a new opportunity structure often find themselves having to pay unexpected costs as they try to move out and up. Even the direct costs of college can feel overwhelming—Kasey is an alumna of the Atlanta HBCU that Amanda hopes to attend but had to finance her way through her undergraduate degree with student loans. Although her loan payments are manageable, she and the other staff of the Leadership Institute are adamant that none of their seniors should pay for college. The stress of paying for college is felt less acutely by White students from more privileged backgrounds; even when they have to take out loans themselves, their inherited cultural capital makes it easier for them to trust that “things will work out” (Ray 2017; McCabe and Jackson 2016). The mental labor imposed on students like Amanda represents an added cost to her upward ambitions.

Beyond the economic calculus of higher education, the largest cost for leavers is emotional—students are navigating a process that will shape the trajectory of their adult lives, and they are surrounded by the potential consequences of not making that process work: persistent poverty, limited job opportunities, and local institutions shaped by White supremacy. A few weeks after Amanda’s call to talk about feelings, I sat next to Cierra in the seniors’ lounge of the Leadership Institute to check in on an essay she was writing. She turned to me to ask, “Am I a bad student?” Caught off guard, I said, “Of course not” and asked whether she wanted me to look at a draft of her essay, the long essay she needed to write for the Common Application. As she struggled to look through her Google Drive for the most recent draft she burst into tears. Amanda immediately walked over, put her arm around Cierra, and led her into the empty classroom next door. Cierra was usually the effusive, preternaturally happy counterpart to the more serious, business-minded Amanda, but the weight of the college application process was starting to catch up with her. She had her sights set on a small Appalachian college that offered full tuition scholarships to every admitted student. The Leadership Institute had had success sending students there in the past—with a Pell Grant,

Cierra's cost of attendance would essentially be \$0. She was one point short on the ACT for a reasonable chance of admission and had just retaken it the weekend prior. In an unfortunate irony, Cierra's organization and advance preparation had unintended consequences; she received her rejection letter from the college just days before getting her ACT score back—the score that she would have needed to be admitted. Although Kasey and others encouraged her to follow up with the college, Cierra seemed ambivalent; she had heard good things about a regional university about four hours south, and it was closer to family.

Connections to family networks present another cost of pursuing upward mobility in a place like Central Delta. Many of the students I worked with during this research expressed regret at the prospect of having to leave home permanently—few jobs are available for college graduates in Central Delta County, so pursuing upward mobility via higher education carries the implication that they will be permanently relocating to more advantaged areas away from family. This aspect of the mobility pathway often influences how students conceptualize their ambitions for the future. Shaunda is a senior and a relatively recent participant at the Leadership Institute; her grades are strong, but she took the ACT only once and never had any sort of coaching or practice. Her score, a 15, means that her only options for higher education next year are the state's community colleges unless she takes the ACT again soon. Shaunda thinks she would be a good teacher one day, and Kasey wanted her to think more aggressively about her future plans. Shaunda's mother wants her to stay close to home and go to Central Delta County Community College, a small two-year school just down the road.

KASEY: What is your goal, Shaunda? What do you want to do?

[LONG PAUSE]

KASEY: You want to be a math teacher? What's your main reason for wanting to go to community college?

SHAUNDA: Well, my mom, she be telling me she wants me close to home. My sister went to [the community college down the road]

for a bit, and my other sister went there too until she got kicked out for fighting.

KASEY: So, do you think it's better for you to stay close to home? Do you think home provides, like, that positive attitude where you're gonna grow and be nurtured? It's just a real, honest conversation you need to have. Being close to home for some people, it's not good. You're still gonna be at home, stuck in your same old ways, your same environment, and you don't become successful.

SHAUNDA: I know, like I want to stay on campus but be close to home, [my mother] like, you need to be close to home and I don't have to, you know, transportation gonna be better, I ain't gotta drive that far.

KASEY: Being close to home . . . girl we're gonna have to have a long talk, me and you.

SHAUNDA: No, you gonna have to talk to my mom, that's what you're gonna have to do.

KASEY: I will talk to your parents if that's what they want. What are your grades like?

SHAUNDA: All As and one B.

KASEY: You don't have to go to community college. It's for people who need the bridge, who may not be able to survive at university right off the bat. Those two years—I'm not putting this on you, but—those two years, you could end up in a relationship. You could end up married, having children—you won't want to go back to school—or you could end up pregnant, or in an accident. Anything could happen and you could be knocked off your path. All things that could be avoided if you just started at university. All those things could happen at university but at least you'd be a person—you'd be in a place, well, it's a lot. We love our parents, we do—our parents can't live for us. They can't go to work for us. We're gonna have to figure out what you want your path to be.

Kasey ends the conversation by asking Shaunda to sketch out a six-year plan for her life—at the very least, Kasey wants Shaunda to consider a community college a little further away from home. Kasey's concerns about CDCCC, which are shared by the other staff of the Leadership Institute, do not center on issues of academic quality or prestige but its

embeddedness in Central Delta county—its strongest ties are to the social networks and opportunity structure that has already failed to uplift Shaunda’s mother or her sisters. This sort of cautionary tale is indicative of the ways in which disadvantaged students are taught about college; rather than being presented with the advantages of higher education, students are subjected to dire warnings about the failure to pursue it (Rondini 2018). Cultivating an attitude of fear with regard to higher education makes the concrete reality of life after high school difficult to imagine beyond simply “go to college.” The prospect of staying closer to home, though it comes with the aforementioned warnings, is at least easier to envision. Later in the semester, Shaunda reveals another ambition of hers—to become a nurse, at least an LPN or a CNA. She confides that she wants to be able to take of her mother as she ages and sees studying nursing as a way to do that.

Stories like Amanda’s, Cierra’s, and Shaunda’s highlight the complex social dimensions of upward mobility that students from opportunity structures like this one must grapple with. The philosopher Jennifer Morton frames these as ethical costs, insofar as they determine how people will find value and meaning in their lives (2019). The direct and economic costs of upward mobility can be reasoned away; the opportunity costs of four years of school and a moderate amount of debt are offset by higher wages down the road. However, the economic logic of upward mobility cannot as easily account for the social and emotional costs that come with migrating from one milieu to another. Families like Shaunda’s have close-knit ties that enable them to make ends meet—extended families in these contexts are often important sources of financial and emotional support (Stack 1973). These ethical costs are disproportionately borne by students from disadvantaged backgrounds—upward mobility would put them in an economic strata and cultural context that comes with social distance from the life they left behind. Although students from most rural backgrounds may experience these psychological pressures, Black students’ experiences are compounded by the feelings of marginalization that accompany

both growing up in a region marked by White supremacy and in entering elite, nominally racially progressive spaces.

THE EXPERIENCE OF RURAL BLACK ASPIRERS IN ELITE SPACES

Students like those at the Leadership Institute are in a difficult situation. They have bought into the idea of higher education and want to be upwardly mobile but recognize that the opportunity structure in which they are embedded has little to offer them. They have navigated the opaque process of making higher education work and started to grapple with the unseen costs that their more privileged peers will avoid. However, even students from places like Central Delta county who take steps to move up the social ladder often end up in spaces that do not fully welcome them because of their racial and rural identities.

These negative experiences often begin close to home. Taesha, the aspiring physical therapist, lives in a small town in Central Delta county but was able to transfer to a larger, better high school in the next county over. Her new high school is across the street from a regional university, and the student body has much more to offer than the smaller high school she’s zoned for, but the transition has not always been easy. The high school is the product of the consolidation of two high schools that were forced to merge as part of a decades-long school integration court case; prior to Taesha’s tenth-grade year, the city had one all-Black high school and one that was half White and half Black. Taesha enjoys being able to take advanced classes like Biology II and Sports Medicine, but she acknowledges that the rapid integration has created some tension. “Yeah I’ve heard some slick comments, I have,” she reports. The older teachers are “stuck in their ways” and do not like that there are so many Black kids at “their school.” For example, she feels that the librarian is overly suspicious of and strict with the Black students.

Asher, who lives down the road from Taesha and also transferred to the same high school, had a much worse experience: “I was in gym and this White boy came up to me and said, ‘What’s up my n***a’ and I said ‘Don’t call me that again,’ but he did. I said, ‘Really, stop call-

ing me that,’ and I thought I was gonna have to do something. He said it again and tried to fight me—he called me it with the ‘er.’ He knew he was being mean, he was trying to start something.”

His teachers had sort of a clumsy view of the word—they treated Black students and White students using the word as equivalent forms of cursing. He was there for the second year they were integrated and could see the tension; many of the teachers did not like the “new” students and thought they were ruining the school’s reputation. While there he made no White friends and decided by Christmas break that he wanted to transfer back to Central Delta. Even though his original high school does not have nearly as many academic opportunities, he appreciates the community feel at the smaller, all-Black school.

Students at the Leadership Institute try to make up the gap in academic preparation and cultural capital by enrolling in competitive summer programs around the country—in recent years students have spent parts of their summer at Ivy League schools and elite boarding high schools in the Northeast. These experiences present a stark contrast with the learning environment that Central Delta students are acquainted with—the Gothic architecture and cloistered campuses evoke comparisons with Harry Potter. Central Delta students carry with them both rural and Black identities, which often provoke uncomfortable reactions from their more privileged classmates. In many cases, these encounters are not motivated by explicit racial animus, but White students in elite settings often project assumptions about class onto their non-White peers (Warnock 2019). Cierra and Amanda recalled a couple moments from their past summers that reminded them how Mississippi is perceived:

CIERRA: Oh my God, at Andover—there was that dude.

AMANDA: What was his name, “Brick”?

CIERRA: Brick. He kinda looked like [one of our teachers here] He was riding his bike, and he was like, they don’t have bikes in Mississippi, do they?

AMANDA: I don’t know what his point was.

CIERRA: But people out there, they’d make

comments like “Oh, I never met somebody. . .”

AMANDA: It was like curiosity

CIERRA: Until I got to one of my first classes at Yale, there was a dude named Ethan, and he was like really political, and he liked to talk about—when I said I was from Mississippi, he went and did all this reading and, this was when the same-sex marriage thing was going on and he said, “Oh well you can discriminate against people there, you can deny people services still. That’s so backwards.” He was a talker. He was oozing confidence.

Encounters like this routinely create burdens for students of color alone. Elite college campuses routinely fail to foster cross-racial interactions that are meaningful for White students, allowing them to persist in individualistic thinking about the world and its purported meritocracies (Byrd 2017). Learning to work with students like Ethan and Brick is an added challenge of being in an elite space that comes with the added pressure of adopting a “cleft habitus” (Lee and Kramer 2013). As they struggled to adopt to a new set of norms and expectations at places like Yale and Andover, they also had to preserve the sense of identity that they derived from their lives in Central Delta county. In the long run, learning to transition to a new “context-specific habitus” (Cornelissen 2016) diminishes the ability of students like Amanda and Cierra to serve as role models and mentors

Asher, the tenth grader who tried to transfer to a larger high school, had a more negative experience at a program at a prestigious boarding school in Massachusetts: “Me and couple guys, we were celebrating somebody’s birthday and we went to a restaurant that was downtown, we had to walk there. One of the guys had a couple friends that they invited out and they kept calling me a n***r and we had to fight. I didn’t get caught.”

The summer was uncomfortable for financial reasons as well. The Leadership Institute ensured that all its students had scholarships for these programs and covered transportation costs, but students are responsible for incidental expenses. Asher brought \$120 in cash for the

summer to cover incidental meals and souvenirs, but no one told him that he was responsible for buying textbooks as well. The book required for his psychology class alone cost more than \$100, leaving him cash strapped for the six weeks he was there. Too embarrassed to tell his friends and the staff at the Leadership Institute that he was short on money, he told them instead that he had lost his wallet in the airport but had found it at the lost-and-found on his way home. A few months later, he was surprised with a bill for \$80 for the laundry service he had used at during the summer program; no one had told him it was not covered by his scholarship.

Despite not yet enrolling in college (and indeed, despite taking the steps to make that transition more likely), students like Taesha, Cierra, Amanda, and Asher have already encountered the ways in which their rural and Black identities are a source of marginalization in elite spaces.

DISCUSSION AND CONCLUSION

Education's impact on mobility is well documented, particularly through the transmission of cultural capital (Swartz 1977). Scholars note the different pathways through which education socializes students into given occupational destinations in the United Kingdom (Willis 1977) and the United States (Bowles and Gintis 1972). Education functions to entrench class and occupational positions across the socioeconomic spectrum, elite education also providing access to cultural capital to succeed in elite professional spaces (Khan 2010). The mutually reinforcing impacts of cultural capital and education attainment are produced in the home as well; Annette Lareau (2003) documents class-based parenting strategies that give children the tools they need to succeed in their present life, though not necessarily the skills they would need to successfully navigate mobility processes. Recent work by Ranita Ray (2017) shows how these same processes frustrate the types of mobility goals formed by the students in my study. By discussing mobility in the context of avoiding risk (such as gang membership, unwanted pregnancies, drug addiction), the nonprofits and teachers that work with low-income teenagers fail to properly prepare stu-

dents for the actual work of upward mobility. That is, by emphasizing the challenges that young people ought to avoid, rather than working to help them "opt in" to mobility, many education interventions put students onto difficult paths without the actual support they need. The findings of this article extend this literature by calling attention to the role of spatial mobility in these processes. Mobility aspirations entail more than navigating institutions and bureaucracies: they also require life-altering decisions about where that mobility would happen. In doing so, poor rural communities ask their young people to choose between a "better" life or a life close to family and loved ones.

The data presented here yield several implications for the sociological study of rural poverty and relevant policy practice. First, these data highlight the "vicious cycle" of rural poverty that Patrick Carr and Maria Kefalas (2009) identify. Central Delta county, like most of the rural Deep South, has persistently lost population in ways that have taken a toll on the communities people leave behind. Encouraging young people to seek their fortunes elsewhere has the paradoxical effect of improving individual outcomes while worsening structural conditions for later cohorts. Research on rural students from the Midwest identify ways in which schools can play a role in their own decline: by prioritizing students with potential to succeed elsewhere, communities export their most talented young people but neglect those who might succeed at home (Carr and Kefalas 2009). As long as upward mobility entails moving out of the region, individual mobility will deprive these regions of human capital. Students like Cierra and Amanda who attend universities outside the region are unlikely to return, contributing to both "brain drain" and general population loss. At the same time, local institutions struggle to attract professionals. Organizations like Teach For America fill gaps such as these, but not in sustainable or permanent ways.

These findings also draw attention to the spatial concentration of disadvantage in the United States. The vicious cycle described here is fundamentally embedded in space: mobility aspirants grow up in one opportunity structure

and must choose between lingering there or transition to a new geography of opportunity. The problem is rooted in the physical space of Central Delta county and the Delta region writ large: depopulation and the dominance of agriculture have created a region shaped by persistent poverty and compounded disadvantage. This study complements other work finding that forms of disadvantage follow spatial patterns. Chetty and Hendren's analysis of county-level mobility rates (2018b) demonstrates clear clusters of immobility in regions such as the historic cotton belt of the Deep South, the rural communities of Appalachia, and Native nations in Western and Plains states. These and other clusters—the rural Deep South, Appalachia, the Rust Belt, the Rio Grande Valley, and Native nations—are recognizable in most maps of social indicators. This spatial concentration is intuitive within the opportunity framework developed in this article; insofar as people's economic, social, and family lives are intertwined, factors that affect one dimension of life will affect others. By extension, this article reiterates the importance of recognizing the structural nature of the challenges that individuals face. The young people profiled in this article each grew up in poverty, and their decisions to pursue higher education are rational and are likely to improve their life chances. Solutions to these challenges must address their structural underpinnings rather than shift the burden to the individual.

In sum, this article highlights several important challenges to upward mobility processes in communities like Central Delta county. The senior students discussed here finished the school year abruptly when COVID-19 prompted the district to shutter schools during spring break. The pandemic was at its worst in the late summer of 2020 when these students started college, and none of the students had made their first-choice plans work. Frank, after initially opting for a private HBCU a few hours away, decided at the last minute to attend a regional university closer to home. Taesha and Shaunda were set to attend public universities in the Jackson, Mississippi, area, but both of their plans fell apart for financial reasons and they enrolled at the local community college. Amanda, who was admitted to her dream

school in Atlanta, eventually convinced her parents to let her attend a slightly less prestigious private school a few hours closer to home. Cierra, after having been rejected from the tuition-free school that was her first choice, enrolled in a regional public university four hours from home but withdrew after a semester. Although each of these students is still enrolled in higher education, none of them is where they had hoped to be when their senior year began.

Many of the challenges discussed in this article would be familiar to college aspirants in suburban or urban contexts—college is expensive, good jobs are often far from home, and elite environments can be difficult for students from marginalized backgrounds. What makes this case representative of a uniquely rural issues is the ways in which these challenges intersect. The opportunity structure available to students at Central Delta's public schools offers a weak network of low-wage, service sector jobs with little room for advancement. Although the nonprofit sector offers limited resources to students who decide to prioritize higher education and socioeconomic advancement, such students still have to grapple with an opaque admissions process and unsupportive schools (and often, parents who are unable to provide advice or support). Choosing to move up also means moving out—none of the students in this study could imagine being able to find a good job close to home. The emotional costs of breaking ties with friends, family, and community are concentrated in rural spaces that can only sustain limited opportunities for socioeconomic advancement.

Alternatives to the difficult process that these students faced do exist. Research on successful mobility from poverty contexts highlights the role of social structures that help students imagine a more concrete future—these “identity projects” allow students to structure the day-to-day work of human capital acquisition and upward mobility around something that resonates with their own sense of identity (DeLuca, Clampet-Lundquist, and Edin 2016). Although nonprofit organizations like the Leadership Institute can offer this sort of identity project work, larger institutions can also provide the sort of structured and detailed

pathways that ease the transition from one opportunity structure to another (Strumbos, Linderman, and Hicks 2018). The special challenge facing rural communities is the number of ways in which individual success paradoxically exacerbates the problem at a community level.

In her ethnography of Central Delta county from the 1930s, Powdermaker describes a process of acculturation for Black families in which moving up in the local status hierarchy leads to increased dissatisfaction with the inequalities around them—their tentative advancement within Central Delta revealed just how limited their opportunity structure was. In the 1930s, the limits on upward mobility were the product of explicit racist ideology and the economics of the plantation. By the 2020s, the White supremacist dynamics of Central Delta county had become more subtle and the mechanization of agriculture had eliminated the plantation as a large-scale employer, but the upwardly aspiring people of the county still have ample reason to be dissatisfied with the opportunities around them. The limitations felt by residents of Central Delta county are indicative of structural problems facing rural communities elsewhere, particularly rural communities of color, which face the compounded challenges of economic stagnation and racial discrimination. Despite the structural weaknesses of these places, they are still home for the people who live there. The presumption that, for these people, socioeconomic mobility must accompany geographic mobility comes with unspoken emotional and social costs that policymakers ought not ignore.

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