ABSTRACT

Educational Outcomes During the Great Recession: Effects of Community, Homeownership, and Race

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The 2007 Great Recession had a considerable impact on the economic status of many Americans. However, this crisis did not affect all households equally, with members of disadvantaged populations often experiencing the most negative outcomes. With these considerations in mind, this study addresses how housing tenure, race/ethnicity and community belonging affected the educational progress of young people transitioning to adulthood during the recent crisis. Were young adults who lived with homeowning family members more likely to experience educational progress than young adults who lived on their own or with renting family members? How did educational progress vary by race and ethnicity? Importantly, since community has been shown to be a source of social capital and connections which can influence education, what role does sense of belonging to a community play in this relationship?

Educational Outcomes During the Great Recession: Effects of Community, Homeownership, and Race

by

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CHAPTER ONE

Introduction

The 2007 Great Recession had a considerable impact on the housing landscape of the United States. Foreclosures surged and housing prices dropped during this period, forcing many homeowning Americans to rent or make other housing arrangements (Hurd and Rohwedder 2010). Previous studies have revealed several individual and community benefits to homeownership, including higher levels of civic engagement, stronger ties to the community, higher levels of neighborhood satisfaction and increased social capital (Greif 2015; Manturuk, Lindblad, and Quercia 2010; Rotolo, Wilson, and Hughes 2010). With these findings in mind, this study seeks to address the question of how housing tenure and community belonging affected the educational trajectories of young people transitioning to adulthood during the recent crisis. Were young adults who lived with homeowning family members more likely to modify their educational trajectories than young adults who lived on their own or with renting family members? How did these educational modifications vary by race and gender? Importantly, since community has been shown to be a source of social capital and connections which can influence education (Manturuk et al. 2010), what role does sense of belonging to a community play in this relationship? In this study, I was able to show community belonging has different effects on educational outcomes for different subgroups delineated by housing status and race/ethnicity. In particular, it tends to have protective effects against deleterious outcomes for young adults from homeowning households but more mixed effects for

renters. It is also generally protective for young adults from all racial and ethnic backgrounds, but the effect size and strength varies.

Previous research has revealed many benefits of homeownership. From better mental health (Manturuk 2012) to greater civic engagement (Rotolo et al. 2010), people who own their own homes tend to have several advantages over comparable renters.

During particularly difficult times, homeownership can have a particularly positive effect. For example, young adults who own their own home experience an increased sense of personal control, an effect which is especially strong during challenging periods, such as unemployment or new parenthood. (Tyndall and Christie-Mizell 2016)

However, the positive effects of homeownership such as these are not equally available to all people. Members of disadvantaged populations, such as the poor, immigrants, racial minorities and young people, do not achieve the same rates of homeownership as their more advantaged counterparts do (Cahill and Franklin 2013). Moreover, these disparities are often mediated or moderated by location of residence and community-level factors. There are many examples of these trends in the research literature. For instance, racial differences in homeownership between Black and white women declined in rural areas during a 20-year period in the late 20th century, but rose in urban areas over that time (Allen 2002).

Similarly, the housing crisis during the Great Recession also did not affect all households equally. Research consistently shows native-born whites to have the highest rates of homeownership and lowest rates of foreclosure compared to immigrants and racial minorities (Cahill and Franklin 2013). The long-observed racial gap in homeownership actually decreased during the financial crisis, but only among households

that were the least likely to own homes. Another trend observed in this study was that "Black households with around a 50% probability of homeownership were especially vulnerable to the crisis" (Seah, Fesselmeyer, and Le 2017). Various indicators of disadvantage intersect and create unique vulnerabilities among certain populations.

Homeownership, Race and Community

However, the experience of these benefits is not guaranteed by buying a house. Here again, research has revealed different effects among disadvantaged populations. Homeownership has a negative effect on neighborhood satisfaction in disadvantaged communities while the opposite effect has been observed among homeowners in non-disadvantaged communities (Greif 2015). In both cases, homeowners are more sensitive to neighborhood conditions compared to their renting neighbors, which results in a positive effect where those conditions are good and negative effect where they seem bad. Indeed, many community factors have been shown to influence satisfaction with place of residence in conjunction with individual attributes (Fitz, Lyon, and Driskell 2016).

Further examples of this abound. Homeownership and neighborhood stability increase bonding social capital, but this effect differs by both individual- and community-level characteristics, with higher-income neighborhoods having a greater effect for women and racial minorities (Brisson and Usher 2005). Homeowners have greater access to social capital than renters, due to having more social ties to others (Manturuk et al. 2010). The rich tend to reside in neighborhoods with high homeownership rates and enjoy the benefits of the civic efforts driven by it, whereas the poor tend to live in renter communities, where poverty and violent crime rates are higher (Hoff and Sen 2005). As new homes are built and the affluent move into new developments, neighborhoods have

been becoming increasingly stratified by level of affluence, concentrating access to social capital in high-income areas (Dwyer 2007)

Despite the diminished advantages of owning a home for disadvantaged populations, the low-income population does experience some of the same benefits to homeownership, such as increased neighborhood bonding social capital (Brisson and Usher 2007). Among disadvantaged people, it is still widely viewed as a path to a "normal life" and general success, a way out of their disadvantaged life (Colic-Peisker and Johnson 2012). People are inclined toward homeownership for social reasons, even when it may not be achievable (Crawford and McKee 2018). For young people, even when owning their own home does not seem like a realistic possibility, the desire to be homeowners remains and renting is still viewed as the less desirable option (Mckee et al. 2017).

Community, Education and the Transition to Adulthood

For young adults, the possibility of buying a house is substantially smaller than it was for their parents (Mckee et al. 2017). For those who made the transition to adulthood during the Great Recession, when many of their parents lost their homes, the changing financial situation could have had particularly widespread effects. As early adulthood is a time of flux for most people when many life-altering and course-setting decisions are made, it is important to understand how housing tenure affects the paths they take. This study focuses particularly on the effect it has on their educational expectations, aspirations and outcomes. Because of the divergent effects among advantaged and disadvantaged populations observed in previous studies as detailed above, it is important to also consider demographic effects, such as race and gender.

Education is a particular point of focus because of the myriad of positive effects it has for individuals and community, such as better health (Zajacova, Hummer, and Rogers 2012). People who grew up in disadvantaged neighborhoods often live in similar neighborhoods as adults. Education, however, can break these "intergenerational neighborhood patterns of disadvantage." Young people from these backgrounds who attain a higher level of education are more likely to live in more affluent neighborhoods as adults. This pattern, however, is less prevalent among ethnic minorities. (de Vuijst, van Ham, and Kleinhans 2017).

Homeownership can also influence educational factors. Homeownership and residential stability has a positive effect on school enrollment (high school or college) for teenagers and young adults (Lien, Wu, and Lin 2008). It provides stability and increases young people's chances for academic success while residential mobility decreases it (Chen 2013). However, research has shown that children who grew up in more affluent neighborhoods have greater educational attainment. Upward mobility and residential mobility to a more affluent neighborhood may have at least small effects on long-term educational attainment, but not necessarily for all social groups (Goldsmith et al. 2017).

Community can also influence educational factors. In one study, educational attainment was found to be higher among students in white-majority schools than in minority-majority schools (Goldsmith 2009). The networks that parents establish impact educational outcomes for their kids. In low-income schools, the "closure" of these networks is associated with lower educational attainment, whereas in high-income areas, it is associated with higher (Fasang, Mangino, and Brückner 2014).

Research Questions

Young people establish educational expectations early in life, "based on family background and social influences," however recent research indicates that expectations may be modestly impacted even later in adolescence and early adulthood (Andrew and Hauser 2011). Due to this and the trends regarding homeownership, community and education observed above, the primary goal for this study is examine how housing tenure, race, gender and community belonging interact to impact educational trajectories. My research questions will be examined in three distinct papers which will together comprise this dissertation project. They are as follows:

- Are young people who transitioned to adulthood during the Great Recession more likely to see positive educational outcomes if their parents were homeowners?
 (Analysis 1)
- Are white young adults more likely to see positive educational outcomes than racial and ethnic minorities? (Analysis 2)
- Does community belonging have different effects among these subgroups? Is it
 more protective for children of homeowners and white young adults than it is for
 children of renters and non-white young adults? (Analyses 1 & 2)
- What are the long-term results of these effects? Do the differences persist even years after the Great Recession ended? (Analysis 3)

CHAPTER TWO

Literature Review

Social Capital in Studies of Community and Education

Theoretical Framework

Social capital theory has been integral in many sociological studies of both community and education over the past several decades. The very concept of social capital was likely first introduced by Lyda J. Hanifan, a state supervisor of rural schools, in a 1916 paper that emphasized the importance of community for educational success (Hanifan 1916). However, social capital's widespread use in sociological research really began with its theoretical developments by Pierre Bourdieu (1986) and James Coleman (1988). Bourdieu's piece appeared in the *Handbook of Theory and Research for the Sociology of Education* and Coleman used an analysis of high school dropouts to develop his theoretical framework. This study will seek to add to the body of literature on community and education using social capital theory to examine differences in the effects of community belonging on educational outcomes by race/ethnicity and homeownership status.

It is important to begin any discussion and application of social capital theory with a clear understanding of its definition, as it has been conceptualized slightly differently by various theorists and researchers:

"That in life which tends to make these tangible substances count for most in the daily lives of people, namely good will, fellowship, sympathy, and social intercourse among the individuals and families who make up a social unit." (Hanifan 1916:130)

"Social capital is the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition – or in other words, to membership in a group – which provides each of its members with the backing of the collectivity-owned capital, a 'credential' which entitles them to credit, in the various senses of the word." (Bourdieu 1986:248)

"Social capital is defined by its function. It is not a single entity but a variety of different entities, with two elements in common: they all consist of some aspect of social structures, and they facilitate certain actions of actors—whether persons or corporate actors—within the structure." (Coleman 1988:S98)

"The definition I will use in this paper is: social capital is an instantiated informal norm that promotes co-operation between two or more individuals." (Fukuyama 2001:7)

"In this approach, capital is seen as a social asset by virtue of actors' connections and access to resources in the network or group of which they are members." (Lin 2002:19)

The similar strand running through these definitions seem to indicate that social capital refers to the advantages available to an individual on account of his or her affiliation with a group. In his review of the works of Bordieu, Coleman and others on social capital theory, Portes (1998:6) similarly summed up his view of the general agreement of the definition as "the ability of actors to secure benefits by virtue of membership in social networks or other social structures." This description of the term's meaning makes it easy to see why previous research has found community belonging to be associated with social capital measures (Carpiano and Hystad 2011; Schellenberg et al. 2018). A sense of belonging to one's community indicates some kind of group affiliation or membership. However, before exploring the validity of using community

¹ Note that in a later paper, Portes (2000) also discussed a different conceptualization of social capital that was gaining popularity in social science literature, which defines it as a group-level attribute rather than an individual-level one. This usage of the term is most well-known in the works of Robert Putnam (1995, 2001). Because social capital theory was originally developed to refer to individual-level resources and because this version of the theory is most relevant to the current study, I focus here exclusively on research using that definition.

belonging as a measure of social capital, it is first important to understand how such a group membership may bestow benefits upon individuals who acquire it. Indeed, does such membership automatically result in such benefits? Much of the literature on social capital theory assumes as much, but this assumption is not without its critics.

Perhaps this assumption naturally follows from the place from which social capital was first imagined. Coleman (1988) sought to use this theoretical concept to better explain the relationship between human action and social structure. He noted two strands of thought in this intellectual area. The first viewed individuals as wholly controlled by their socialization. The second viewed the individual as a completely autonomous rational actor. Coleman quite reasonably found both of these views to be overly simplistic and employed his theoretical framework of social capital to explain how an individual can be internally motivated to rational action without disregarding the social context. Lin (2002) took a similar approach, arguing that social capital mediates the interaction between structure and individual action. Individuals' self-interest or rational desire for a certain outcome motivates their actions, but at the same time, their choice of actions is determined by their social situations. In any given situation, the range of choices available or perceived to be available is filtered through their group resources, norms, networks and other forms of their social capital.

This begs another question. Having now examined the definitions and functions of social capital, what then are the *forms* of social capital? In practice, how do socially-derived resources shape the choices of individual actors? Coleman (1988) identified several such forms: obligations, information channels and norms. In a social relationship, there is a certain obligation to help to some degree (depending, of course, on the strength

of the social tie), but with that comes the expectation of receiving help in return as needed. Social relationships can also be sources of information. Finally, group membership comes with an expectation of adherence to group norms. To the extent that these norms direct individuals to act in ways that benefit themselves, this is yet another resource provided by social capital.

This is also the point where some of the limits of the assumption that social capital is unequivocally positive become more apparent. When norms direct individuals to beneficial actions, such as completing their high school education or pursuing college studies, social capital is a resource. When one's social network provides useful information, social capital is a resource. When one's group membership results in receiving help from other group members due to socially-imposed obligations, social capital is a resource. What are we to conclude, then, when one's social capital does not produce these kinds of goods? Just as some groups have norms encouraging education, others have norms failing to encourage it or even discouraging it. Some social networks are richer in information than others. Sometimes, the obligations one owes far outweigh those that they receive.

Coleman mentions this potential negative side of social capital, explaining that "norms in an area can reduce innovativeness in an area, not only deviant actions that harm others but also deviant actions that can benefit everyone" (Coleman 1988:S105). This mention, however, was notably brief. Indeed, the view that social capital may have negative implications is rather underexplored in the literature, both theoretically and empirically. There is some notable pushback to this view though.

The benefits attributed to social capital usually stem from the resources provided (or potentially provided) by it. Much of social capital research relies on a belief rather uncontroversial and perhaps even foundational in sociology, namely social networks and community have profound effects on individuals and the lack thereof or weakening of these structures is detrimental to well-being. Like other forms of capital, social connections can provide people with power and tangible resources (Portes 1998). But this observation leads to an obvious, yet underexplored, question: if social connections can provide these kinds of benefits, can they not also deprive people of such things? Thus, as Portes pointed out, "it is important to distinguish the resources themselves from the ability to obtain them" through one's social ties (1998:5). An individual with a wealth of social capital, as measured by their social connections, could experience little to no benefit from them and may potentially even experience some harm from them.

Portes identified four ways in which social capital can result in negative consequences: "exclusion of outsiders, excess claims on group members, restrictions on individual freedoms, and downward leveling norms" (1998:15). The insular nature of many communities means that members of advantaged communities will benefit while members of disadvantaged communities will be excluded from those benefits. Thus two hypothetical communities could have equal levels of social ties, connections and networking opportunities, yet confer different levels of benefits on their members.

Furthermore, some communities may demand more from their members (especially those who experience social success) in terms of resources than they provide. Portes also argues that individuals from disadvantaged but tight-knit communities can also experience barriers to social success through their socialization in a resource-deprived

environment, specifically referencing the restrictions often experienced in small towns (Portes 1998, 2014; Portes and Landolt 1996).

Portes has provided the most unambiguous, theoretically grounded pushback to social capital as unequivocally positive and introduced the concept of negative social capital. However, other sociological theorists have also provided some support to this idea that all social capital is not created equally. Making several points similar to Portes' four points described above, Hoff and Sen (2006) examined how kin systems can serve as poverty traps for individuals seeking success in developed economies, while also acknowledging the ways in which they can help. Mark S. Granovetter (1973) argued that there were different kinds of social ties and the weak ties (social connections with people not embedded in one's social network) were actually more beneficial than strong ones for an individual's job prospects. Putnam (2001) also distinguished between bridging (extracommunity ties) and bonding (intra-community ties) as types of social capital which had different effects. Like Granovetter's concept of weak ties, Putnam argued that bridging capital was beneficial for external networking and acquiring opportunities outside of the community. Bonding capital was better for support within the community.

Furthermore, other researchers have acknowledged the disparate impacts of social capital measures while also pushing back on the (sometimes explicit, sometimes implicit) claim that the observed disadvantage is due to deficiencies from within communities experiencing disadvantage. Indeed, this claim can feel uncomfortably close to the "culture of poverty" thesis. This thesis argues that detrimental outcomes for individuals are the direct effects of the culture they come from (Lewis 1966), a view which has been criticized by sociologists for its lack of accounting for the effect of social structure on

culture (Wilson 2012). However, even much of this criticism has essentially agreed that the social and cultural capital imparted by disadvantaged communities is, in fact, deficient, even if the blame for that deficiency does not fall on the communities or individuals themselves. More recently, social science researchers have posed challenges to this view as well. This line of research is essential to interpreting any observations of what Portes calls "negative social capital."

Portes pointed to potential factors such as community resource deprivation or restrictive norms for reasons why individuals from some communities do not appear to benefit from their social connections. However, others point out that the larger society is structured around white, middle- and upper-class norms that may not reward the unique contributions of communities and individuals falling outside of those classifications.

Yosso (2005) examined this through the lens of critical race theory, arguing persuasively that non-white communities impart just as much capital (social and cultural, as well as several other kinds) to their members as white middle-class communities do for theirs. The disparity in outcomes, therefore, was not due to insufficiencies within communities but instead to the fact that the larger society did not value what they bring to the table.

In sum, social capital theory provides a framework for understanding the positive, negative and supposedly negative consequences of social connections. It can provide individuals with social and economic support and advantageous resources. But unlike other forms of capital (e.g. human capital or financial capital), social capital comes with an expectation of reciprocity. Individuals give as well as take from their social connections. In disadvantaged communities, there are less resources available to their members and more of a need for resources from their members. While these communities

may still provide important benefits (such as psychological support), this can contribute to the economic disadvantages experienced by some individuals compared to others from better-off communities. Furthermore, the resources provided by some communities to their members may be unequally valued in the larger society, which may limit what they are able to achieve in the larger society. Understanding these dynamics are crucial to recognizing the community effects on and of social inequality as well as to developing any policies or programs targeted at disadvantaged populations. To that end, I will now review the current literature examining the effects of social capital on educational outcomes, especially with regard to differences in various community contexts.

Empirical Studies

Education holds an important place in social science research due to its broad range of beneficial effects. Higher educational attainment has been associated with a range of positive outcomes, including better health (Zajacova et al. 2012), improved mental health (Reynolds and Baird 2010), and upward intergenerational social mobility (de Vuijst et al. 2017). With effects such as these in mind, researchers have strong reason to study the causes and consequences of educational inequality. In general, people tend to form their expectations when they are relatively young, being heavily influenced by their family and other social connections (Andrew and Hauser 2011). Once these expectations are in place, they do not change much (Andrew and Hauser 2011), indicating the importance of social factors during childhood and adolescence for long-term educational progress.

Previous research reveals a wealth of relationships between community contextual factors and educational outcomes. To start with, communities have widely

varying levels of resources available to their students. Educational investments are lower on average in inner cities and rural areas (Roscigno, Tomaskovic-Devey, and Crowley 2006). In coethnic communities, higher average education at the community level has been found to be positively associated with educational attainment at the individual level (Lee 2018). Another study that followed the children of mostly African American teenage mothers found that even with controlling for a range of human capital and family support variables, those with stronger community support were more likely to graduate high school and enroll in college (Furstenberg and Hughes 1995).

Not all community effects are positive, however. Goldsmith (2009) found that racial segregation in schools was associated with educational attainment, such that students in majority Black and Latino schools had lower odds of graduating high school. This was true even for white students in majority non-white schools. Another study found that first-generation students were more likely to attain a four-year degree if they attended a college *farther* from their home (Garza and Fullerton 2018).

Previous research also reveals the complexity of this area of study, as results can vary based on a variety of different factors (Brooks-Gunn, Duncan, and Aber 1997). In a review of studies looking at the neighborhood-level characteristics effects on indicators of well-being for children and teenagers, Leventhal and Brooks-Gunn (2000) unsurprisingly found that kids from affluent neighborhoods tended to have higher levels of school readiness and achievement. This relationship, however, was strongest for boys and white children. Girls and children of color from affluent neighborhoods did not experience the same degree of benefits for their schooling. Several other studies have also found racial disparities in these effects. Moving to a higher-income neighborhood was

found to have a stronger positive effect on educational progress for whites and Latinos than it did for African Americans (Goldsmith et al. 2017).

While much of the observed relationships between community context and educational outcomes may be attributed to resources available in white and higher income areas, it is important to note that financial resources do not tell the whole story. Some research has actually noted no relationship between increased educational spending and better outcomes for students, arguing for more focus and resources directed at familial support and non-school programs (Batty 2013). Other community attributes are also important. One study found that parental network closure increased educational attainment (Fasang et al. 2014). Although this effect was only seen in high-income schools, it was a distinct effect, not mediating or mediated through income.

The studies discussed above all use aspects and attributes of community to better understand educational outcomes. While community is certainly not synonymous with social capital, there is definitely some overlap between the two concepts. Furthermore, community belonging has been used as an indicator of social capital in numerous studies (Hystad and Carpiano 2012; Kitchen, Williams, and Chowhan 2012; Sengupta et al. 2013). It has been described as a "core component of social capital" (Sengupta et al. 2013:36) and defined as a "psychological construct based on a person's attachment to and social comfort with their community, friends, family, workplace or personal interests" (Kitchen et al. 2012:104).

A few studies have actually directly measured the association of community belonging with various other indicators of social capital and found strong relationships. In particular, this sense of belonging was found to be associated with neighborhood

variables (knowing and trusting one's neighbors, for example) as well as other network-based measures of social capital such as proximity of family and friends and organizational participation (Schellenberg et al. 2018). Similarly, Carpiano and Hystad (2011) found positive relationships between neighborhood network measures of social capital and community belonging. Taken together, these studies indicate that community belonging is a good, single-item measure of many aspects of social capital.

Thus far, I have discussed research on social capital theory demonstrating how it can have different impacts in various social contexts and looked specifically at effects on educational outcomes. With the following studies, I seek to add to the literature by examining how community belonging (a single-item but wide-ranging measure of social capital) affected educational outcomes for young adults over the period of the Great Recession, and specifically how those effects differed among subgroups in two areas: housing tenure and race/ethnicity. The next two sections discuss these factors and how community and education may vary among them in more detail.

Homeownership

Housing tenure is an important factor in community studies and the findings from previous studies indicate there may be good reason to expect that the effect of community belonging might be different for homeowners and renters. Being a homeowner means having a certain level of wealth that puts one at a higher place in the "hierarchical order" of society (Allen 2002:603). Communities also tend to be segregated by tenure status. Neighborhoods are often made up of either majority homeowners or majority renters. Renter communities have higher levels of poverty and violent crime and residents tend to suffer from poorer outcomes in several areas such as health and education (Hoff and Sen

2005). New housing being built is increasingly larger and marketed toward the more affluent, a trend that is contributing to tenure segregation and increasing inequality in educational access (Dwyer 2007).

Homeownership has been found to be associated with a range of positive outcomes, such as children's educational attainment (Haurin 2013), charitable giving to community foundations (Graddy and Wang 2009), volunteer work (Rotolo et al. 2010), some forms of civic engagement (McCabe 2013), neighborhood group participation (Manturuk, Lindblad, and Quercia 2012), neighborhood trust (Brisson and Usher 2007; McCabe 2012) and sense of mastery and control leading to better mental health (Manturuk 2012; Tyndall and Christie-Mizell 2016). Because of tenure segregation, homeowners tend to live among other homeowners, indicating that the observed associations could emanate the actual act of buying a home or from the community in which they live or both (or from other confounding socioeconomic factors, as discussed further below). Indeed, some research has indicated that some of the benefits of homeownership, particularly certain social capital resources, may even extend to renters who live in neighborhoods with a high proportion of homeowners (Brisson and Usher 2005).

Unfortunately, relatively few renters actually live in such neighborhoods (Hoff and Sen 2005). Thus, the benefits of homeownership are largely concentrated among those with the means to buy a home, an option not available to large segments of the population. The action of buying a home required the right combination of attitudes, subjective norms and perceptions of control (Cohen et al. 2009). For many, subprime loans are the only option for becoming a homeowner but these options come with

substantial risks that may not be worth it (Tyuse and Birkenmaier 2006). The Great Recession also impacted the housing landscape. Not all homeowners were affected equally. Those with lower incomes were particularly vulnerable to foreclosure during the housing crisis (Webb and Brown 2017). In the years since, researchers have noted that homeownership is becoming increasingly out of reach for younger generations (Crawford and McKee 2018). Some predictions indicate the homeownership rate will continue to fall in future years due to a range of factors, such as stricter mortgage requirements, stagnating income and increased student debt (Nelson 2016). Therefore, while homeownership is highly desirable, it is out of reach for many people and this is not likely to change any time soon.

Furthermore, even if it were feasible to try to overcome certain disadvantages by encouraging or enabling more renters to buy a home, this may not actually solve the problems associated with homeowner/renter disparities. Despite the range of positive benefits found in the literature, it is important to note that some researchers have challenged straightforward interpretations of these results. There is great difficulty in determining what is an effect of homeownership and what is an effect of other attributes common to homeowners (Shlay 2006). Several studies that have used research methods and statistical models designed to account for the selection effect have found no association between homeownership and many of the previously noted benefits (Engelhardt et al. 2010; Newman and Holupka 2013).

While acknowledging the importance of not overstating homeownership as a solution to all community issues, it is also important not to understate the usefulness of understanding homeowner/renter disparities. The observed benefits may be a direct result

of owning a home or they may be spuriously affected by other attributes common to homeowners. Regardless, it is undeniable based on previous findings that these disparities do exist and are problematic. In some studies, then, it may be appropriate to conceptualize homeownership as a proxy for socioeconomic status. Results would then need to be carefully interpreted so as not to encourage homeownership as a solution per se, but the findings could nevertheless be useful in identifying areas for improvement. Even more salient to this study in particular, previous homeownership research indicates that benefits are derived not just from individual-level factors, but from neighborhoodand community-level factors as well and homeowners tend to live in more advantaged areas.

These findings also indicate a number of ways that community belonging could have different effects for homeowners and renters. As noted above, homeowners and homeowning communities enjoy many advantages over renters and renting communities. While some of these advantages, like greater neighborhood trust and participation, are likely associated with community bonding, it would be a stretch to say that renters cannot also experience high levels of attachment to their communities. Some research has actually found no differences by tenure status in certain kinds of group participation. For instance, McCabe (2013) found that while homeowners were more active in political, civic and neighborhood groups, they were no more or less likely to engage in sports or religious groups. For those who might consider their "community" to be outside of the strict geographical bounds of their neighborhood, sense of community belonging might be just as strong. This then raises the question of whether community belonging based in these kinds of groups provides the same benefits a neighborhood belonging.

Furthermore, even with the disadvantage associated with high-renter neighborhoods, it would be overstating the case to claim that this results in no renters feeling a sense of belonging to neighborhood communities. This then raises the question of how a strong sense of belonging for renters affects their outcomes. Do these renters receive the same benefits from this measure of social capital that homeowners do? If so, community belonging could be seen as a way to mitigate some of the detrimental effects associated with renting. It may even be a path to some kinds of upward social mobility, if, for example, their community belonging results in receiving support that helps them achieve a higher income or more education. However, this all hinges on the assumption that renters' community belonging provides the same resources homeowners' community belonging does.

Yet there are good theoretical and empirical reasons to doubt that this is the case. In one study, researchers found that homeowners have access to more resources via their social capital networks, from within as well as outside of their neighborhoods (Manturuk et al. 2010). Also, to reference McCabe's study again, homeowners and renters participate in different groups with varying level of engagement (2013). Findings such as these support what sociological theorists have pointed out: not all social capital is created equally. Putnam (2001) discussed the difference between bridging and bonding social capital and Granovetter (1973) made important observations about the difference in resources provided by strong and weak social ties. Manturuk et al.'s (2010) findings reveal that homeowners' networks are distinctly different from those of renters in terms of the resources they can provide. They specifically note that homeowners are also more able to acquire resources from their networks beyond their neighborhoods, perhaps

because of having greater "bridging" capital or "weaker" ties that connect them to a broader array of resources.

Portes' exploration of the "downsides" of social capital also apply here (Portes 1998, 2014; Portes and Landolt 1996). Compared to homeowners, renters who feel a strong sense of belonging to their communities may have less access to resources due to the lower average socioeconomic status of other community members. Because of the expectation of reciprocity inherent in social capital relations, some may be hindered from fully pursuing economic success due to an obligation or desire to stay in their communities or help out others at their own expense. Finally, it is also possible that the resources and skills renters acquire from their communities, while valuable, are not rewarded with success in the outside world. This could serve as an additional barrier to economic success.

Race/Ethnicity

Race and ethnicity are important factors to consider in community and education research. To start with, racial gaps in homeownership status have persisted throughout U.S. history and thus the disadvantages associated with renter communities discussed above disproportionately affect racial and ethnic minorities. Native-born non-Hispanic whites have been found to have higher rates of homeownership than Hispanic immigrants (Cahill and Franklin 2013). In the last few decades of the twentieth century, racial gaps in homeownership have grown in many places and even where they have declined substantially (mostly rural areas) over a period of time, they do not close completely (Allen 2002). Then in the early twenty-first century, the Great Recession hit and exacerbated some aspects of these racial disparities.

The Black/white gap in homeownership actually decreased among those least likely to own a home (due to factors such as income, marital status, age, household size) (Seah et al. 2017). This may have been driven by the fact that low-income homeowners overall were hit the hardest with foreclosures (Webb and Brown 2017), which perhaps created some kind of leveling effect among the poorest Black and white homeowners. However, the racial gap actually increased among other segments of the population (Seah et al. 2017). Racial segregation also had an independent effect on foreclosure rates in predominantly Black neighborhoods, an effect which was linked directly to subprime lending (Rugh, Albright, and Massey 2015; Rugh and Massey 2010).

The effects of race/ethnicity are not limited to housing tenure disparities, however. Community attributes have been shown to affect some measures of social capital for racial minorities. In high-income neighborhoods, racial minorities were found to have higher levels of bonding social capital. The findings were opposite among residents of low-income neighborhoods, where whites had higher levels (Brisson and Usher 2005). Another study showed African Americans had higher odds of neighborhood group participation, yet lower odds of talking with their neighbors frequently (Manturuk et al. 2012).

The intersection of race/ethnicity and community-level factors has been shown to affect outcomes for non-white children and young adults in many ways. This is especially apparent for educational outcomes. Racial segregation in schools has been found to have detrimental effects on completing either high school or college for students in majority Black and Latino schools (Goldsmith 2009). Among coethnic communities, individuals who live in areas with higher average educational attainment are more likely to

successfully pursue a four-year college degree (Lee 2018). Another study found that for first-generation students (who tend to be disproportionately non-white), their likelihood of finishing their college degree was greater the farther from home their school was (Garza and Fullerton 2018).

Prior to adulthood, residential mobility has different effects on educational attainment for different racial/ethnic subgroups. Black teenagers who moved to a better neighborhood experienced a negative effect on their likelihood of completing high school. For whites, Latinos and Asians, however, such a move had a positive effect on high school completion (Goldsmith et al. 2017).

In adulthood, educational attainment does not necessarily lead to an improvement in their living conditions as it generally does for whites. In one study of neighborhood intergenerational mobility, researchers found that while higher educated white individuals who grew up in poor neighborhoods were less likely to live in similar places as adults, no such education effect was found for ethnic minorities (de Vuijst et al. 2017). Higher educated minorities were just as likely as those with less education to live in poverty-stricken neighborhoods as adults.

Education also comes at a higher cost for many racial minorities. African

Americans are more likely to have student loan debt compared to whites (Houle 2014).

The financial crisis has had an especially long-term effect on student loan debt and Black households seem to have been hit the hardest. In the years since the Great Recession,

Black educational debt has risen steeply compared to white educational debt (Seamster and Charron-Chénier 2017). Moreover, this disparity has been found to be directly linked

to predatory lending and not at all related to increasing educational attainment among African Americans (Seamster and Charron-Chénier 2017).

These findings show the importance of considering race and ethnicity as well as community context when examining educational effects. Moreover, with an understanding of social capital theory, they reveal potential ways that community belonging could have different effects for racial and ethnic minorities than it does for whites. In particular, African Americans and Latinos are more likely to reside in economically disadvantaged communities. They are more likely to rent instead of own their home (Cahill and Franklin 2013; Seah et al. 2017) and tend to live in highly segregated neighborhoods which facilitates the ease of financial exploitation in their communities (Rugh et al. 2015; Rugh and Massey 2010).

The resource deprivation that is unfortunately common in minority communities may serve as an example of Portes' concept of "negative social capital" (Portes 1998).

Minorities, especially Blacks and Latinos, who have a strong sense of belonging to their community may not be able to obtain the same resources from it as whites who also have a strong sense of belonging. The expectation to give back to the community may also come at a higher cost for these individuals. This may be why de Vuijst (2017) found that higher educated Black adults were far more likely to remain in poorer neighborhoods than white adults who attained a similar level of education.

It is also important to consider at this point Yosso's (2005) pushback to the tendency to see minority communities as simply deprived. She argued that is essential to consider that what these communities do offer to their members is often simply not valued by a society structured around white, middle- and upper-class norms. Ciabattari

(2010) made similar points, showing how children from lower-class backgrounds end up suffering in school due in part to teachers' and school officials' misperceptions about their parents' commitment to their education. While middle class parents have the socialization needed to be heavily involved in their children's learning process, working class parents tend to defer to educators, which is often misconstrued as apathy toward their child's progress. They contribute just as much in other ways (getting involved in "non-academic interventions" such as school safety issues), but their contributions were not seen or rewarded the same way (Ciabattari 2010:120). This then is another pathway through which a stronger sense of belonging to one's community may not impart the benefits to racial minorities as it does for whites.

Hypotheses

With these reasonings and previous research findings in mind, my hypotheses are as follows:

H1: During the period from 2007 to 2011, young adults who live in a rented dwelling and report a stronger sense of community belonging will be more likely to experience a decrease in educational expectations. (Chapter 4)

H2: During the period from 2007 to 2011, young adults who live in a rented dwelling and report a stronger sense of community belonging will be more likely to report lower educational expectations than educational aspirations. (Chapter 4)

H3: During the period from 2007 to 2011, young adults who live in a rented and report a stronger sense of community belonging dwelling will be less likely to attain a higher level of education. (Chapter 4)

H4: During the period from 2007 to 2011, young adults who live in a rented dwelling and report a stronger sense of community belonging will be more likely to drop out or postpone schooling due to the Great Recession. (Chapter 4)

H5: During the period from 2007 to 2011, Black and Hispanic young adults who report a stronger sense of community belonging will be more likely to experience a decrease in educational expectations. (Chapter 5)

H6: During the period from 2007 to 2011, Black and Hispanic young adults who report a stronger sense of community belonging will be more likely to report lower educational expectations than educational aspirations. (Chapter 5)

H7: During the period from 2007 to 2011, Black and Hispanic young adults who report a stronger sense of community belonging will be less likely to attain a higher level of education. (Chapter 5)

H8: During the period from 2007 to 2011, Black and Hispanic young adults who report a stronger sense of community belonging will be more likely to drop out or postpone schooling due to the Great Recession. (Chapter 5)

H9: Among those who were young adults in 2007, those who lived in a rented dwelling and reported a stronger sense of community belonging will report worse economic outcomes in 2017, including lower educational attainment, lower likelihood of homeownership and lower income. (Chapter 6)

H10: For 2017 homeownership and income, current education level will mediate some, but not all, of this relationship. (Chapter 6)

H11: Among those who were young adults in 2007, Black and Hispanic respondents who reported a stronger sense of community belonging will report worse

economic outcomes in 2017, including lower educational attainment, lower likelihood of homeownership and lower income. (Chapter 6)

H12: For 2017 homeownership and income, current education level will mediate some, but not all, of this relationship. (Chapter 6)

CHAPTER THREE

Data and Methodology

This study will utilize the 2007, 2009 and 2011 waves of the Transition into Adulthood (TIA) Supplement to the Panel Study of Income Dynamics (PSID) as well as the 2007, 2011 and 2017 wave of the PSID main survey. The PSID main survey is a nationally representative longitudinal survey of U.S. households, currently administered every two years (Institute for Social Research, University of Michigan 2017). Over the years, several supplements to the main PSID survey have been developed based off special interests. One of these was the Transition to Adulthood supplement, which began in 2005. This sample consists of young people who came from a PSID family unit and focuses on issues specific to young adulthood and can be linked to the data from the main household survey. Sample weights were used to adjust for demographic sample/population differences. Table 3.2 lists descriptive statistics for the variables of interest.

Dependent Variables

This study used seven dependent variables. The first four were used in chapters four and five of this study, which are analyses of educational outcomes over the period of 2007 to 2011. The remaining three were used in the sixth chapter which is an analysis of long-term economic outcomes in 2017. These seven variables are listed in Table 3.1 and described in more depth below.

Table 3.1

Dependent Variables

Variable	Chapter(s)
Change in Educational Expectations from 2007 to 2011	4 & 5
Educational Expectations are Lower than Educational Aspirations in 2011	4 & 5
Progress in Educational Attainment Between 2007 and 2011	4 & 5
Dropped Out or Postponed Schooling Due to Great Recession by 2011	4 & 5
Educational Attainment in 2017	6
Homeownership in 2017	6
Taxable Income in 2017	6

The first dependent variable was changes in educational expectations between 2007 and 2011, based off the following question which was asked in both waves of the TIA: "Many people do not get as much education as they would like. How far do you think you will actually go in school? Do you think you will graduate from high school, graduate from a two-year community college, earn a specialized certificate from a vocational or trade school, attend a four-year college, graduate from a four-year college, get more than four years of college, or do something else?" For the purpose of assessing substantive increases and decreases in the amount of education respondents expected to attain, the categories from the original questions were reduced to four more basic categories: high school graduation, post-high school activities (including "something else"), four-year college graduation and post-college education. About 63 percent of the sample remained stable in their educational expectations over this period. About 19 percent reduced their expectations while 18 percent raised them.

The second dependent variable to be used was constructed from two variables in the 2011 TIA wave. The first was the educational expectations question described above. The second was similar but asked about educational aspirations rather than expectations. The question was: "How far would you like to go in school? Would you like to graduate

from high school, graduate from a two year community college, earn a specialized certificate from a vocational or trade school, attend a four-year college, graduate from a four-year college, get more than four years of college, or do something else?" As with the first dependent variable, the original seven categories were reduced down to four more basic ones: high school graduation, post-high school activities (including "something else"), four-year college graduation and post-college education. The final variable used in this analysis consisted of two categories: respondents who expected to attain a lower educational level than they wanted (about 12 percent) and those who expected to attain the same or a higher educational level.

The third dependent variable was increases in educational level between 2007 and 2011. The TIA survey contained education items, including high school graduation, college attendance and degrees received. Respondents' changes in their answers to these items between the 2007 and 2011 waves were used to construct a dummy variable for educational attainment where those who attained a higher educational level between 2007 and 2011 were assigned a value of one. About 38 percent fell into that category.

The fourth independent variable was dropping out or postposing education due to the Recession. The survey questions used to construct this variable appeared in the 2009 and 2011 TIA waves. The question asked at both times was: "Has the current economic recession led you to change your educational plans?" with follow up questions for those who answered yes to determine what those changes were. About 11 percent said reported dropping out of school or postposing their educational plans in either 2009 or 2011.

The remaining three dependent variables were used for the third part of this study and related to economic outcomes in 2017. For the most part, these variables came from

the 2017 PSID main survey. Only about eight percent of the original 2007 sample was still participating in the Transition into Adulthood supplement survey in 2017. This was because most had established their own households and started participating in the main survey. For those who had not yet established their own households but did still respond to the TIA survey (only 20 respondents, less than two percent), their answers on comparable questions were included in the analyses for this study.

The fifth dependent variable was educational attainment. This was taken from the PSID question on years of schooling (and the education question from the TIA where applicable) and recoded into a three-category variable: less than high school, high school degree or some college, and college graduate. This variable was also used as an independent variable in the models for the other two dependent variables (described below) examined in the third part of this study. In those analyses, it was recoded into three dummy variables, each corresponding to one of the categories described above. The "college graduate" category was used as the reference group in all analyses.

The sixth dependent variable was homeownership in 2017. This was constructed as a dummy variable based on the respondent's 2017 status in the household ("head" or reference person, spouse/partner, or other family member living in their relative's house) and their 2017 housing status. Reference persons and spouses/partners who owned the house they lived in were coded as one, while those who rented or lived with relatives were coded as zero.

The seventh and final dependent variable was taxable income in 2017. For reference persons and spouses/partners, this was taken directly from a variable in the 2017 main survey that included actual and imputed values for all respondents. For other

family members who completed the TIA in 2017, their response to a survey question about their earned income was added to this variable. A logged version of income was used in the statistical models.

Independent Variables

The main independent variables in this analysis were housing status in 2007, race, sense of belonging to the community in 2007, and (in the third part only) educational attainment in 2017 as described above. Housing status was taken from the PSID Main Family Data on the following 2007 question: "Do you (or anyone else in your family living there) own the (home/apartment), pay rent, or what?" A second variable from the 2007 TIA, "head status," was also used to construct the housing tenure variable. "Head status" indicated whether the respondent was still living with family members (almost always one or both parents) or if they had moved out on their own. The final housing status variable had three categories: lived in home owned by self or family member (60 percent), lived in family member's rented home (19 percent), or lived in self-rented home (21 percent).

Three dummy race/ethnicity variables were constructed using the 2007 data. Non-Hispanic whites and respondents from other non-Hispanic and non-Black races made up about 67 percent of the sample. About sixteen percent were non-Hispanic Black and sixteen percent were Hispanic (any race). Due to the very small sample size (only 21 respondents, or less than two percent) of those who fell into the "other race" category, it was necessary to combine that group with one of the others. It was decided to combine them with the white group so that the Black and Hispanic effects could be properly examined. While this is certainly not ideal and clearly leaves a gap for future studies to

address, it was the best solution for this study as even with weights, the numbers were just too small to draw any meaningful conclusions.

Community belonging was measured by the following question asked in the 2007 wave: "In the last month, how often did you feel that you belonged to a community like a social group, your school, or your neighborhood?" There were six response categories ranging from "never" (22 percent) to "every day" (28 percent).

Control Variables

Control variables included sex, age (in 2007 for the first two parts of this study and 2017 for the third), logged family income in 2007, early adulthood marriage and parents' education level in 2007. Age and sex came from the PSID individual data, family income was taken from the main 2007 family survey and early adulthood marriage was constructed from the 2007 and 2011 TIA surveys. Parental education came from the 2007 TIA survey. Forty-nine percent of the sample was male. Ages ranged from 16 to 23 with an average of 20 (add ten years for 2017 ages). Average family income in 2007 was \$88,175. Due to the wide variation and skewed distribution of this variable (as is common with income variables), a logged version was used in the following analyses. About 79 percent were not married at any time between 2007 and 2011. Finally, the 2007 TIA wave asked how many years of schooling the respondent's mother and father had. The highest of the two was used for the final control variable of parental education.

Table 3.2

Descriptive Statistics

Variables	N	Mean/ %	Range
Change in Educational Expectations 2007-2011	919		
Reduced	175	18.90%	
Stable	571	62.70%	
Raised	173	18.40%	
Reported Lower Educational Expectations than	930	12.20%	
Aspirations in 2011	930	12.2070	
Attained a Higher Educational Degree between	1007	38.30%	
2007 to 2011 Dramad Out or Postmand School due to			
Dropped Out or Postponed School due to Recession	1069	10.80%	
Educational Attainment in 2017	863		
Less than High School	91	7.00%	
High School or Some College	418	45.60%	
College Graduate	354	47.50%	
Owned Home in 2017	980	34.30%	
Taxable Income in 2017	1001	\$58,778.13	\$0 to \$496,039
Housing Status 2007	1115	, ,	
Lived in Owned Home	672	60.30%	
Lived in Family Member's Rented Home	212	19.00%	
Lived in Self-Rented Home	231	20.70%	
Race/Ethnicity	1112		
Non-Hispanic White and Other Race	545	67.10%	
Non-Hispanic Black	465	16.40%	
Hispanic, any race	102	16.40%	
Community Belonging 2007	1112		
Never	249	21.20%	
Once or twice	149	13.70%	
About once a week	97	9.10%	
Two or three times a week	112	10.60%	
Almost every day	216	18.70%	
Every Day	289	26.80%	
Sex (male=1)	1115	49.20%	
Age in 2007	1115	19.9	16 to 23
Age in 2017	980	30	26 to 33
Family Income in 2007	1115	\$88,175.59	\$0 to \$213,350
No Early Marriage	1024	78.90%	
Parents' Highest Number of Years of Schooling	1076	13.5	0 to 17

Missing Values/Attrition

As with any dataset and especially longitudinal surveys which are subject to attrition, it is important to note potential issues with missing data. Most of the independent and control variable responses for this analysis were collected at the 2007 wave, the earliest point in time used in this study. Therefore, there were only a few missing cases resulting from non-response or refusal to answer for these items. The dependent variables, however, were calculated from items in various years of follow-up surveys.

The 2007 TIA survey included 1115 respondents (The Institute for Social Research 2007). This serves as the baseline sample in this study. In total, 134 respondents did not participate in the 2011 TIA, bringing the sample down to 981, or 88 percent of the original. It should be noted that not all of these respondents actually dropped out. Some were simply no longer eligible for the Transition to Adulthood supplement by the 2011 wave but still participated in the main survey. Still, since many of the dependent variables in this study were constructed from 2011 TIA data, they are missing for all intents and purposes here. A few more respondents were lost due to non-response on one or more of the used survey items, but the majority of missing values was due to attrition.

Of the original 2007 sample, 846 (about 76 percent) participated in the 2017 main PSID family study and/or the 2017 TIA. A little more than half of the missing values was due to attrition while the other half was still involved with the PSID study, but only as a relative (usually son or daughter) living with the reference person. The data used in this study was collected only for reference persons and spouses/partners, so there was not enough information of these other respondents to include them in the survey.

To better understand how the missing respondents differed from the non-missing in ways that may be meaningful to this analysis, I ran a series of t-tests on the independent and control variables. The results are displayed in Table 3.2 below. The information below compares the averages of the two groups and lists the results of the significance test for the differences. As shown, only a few items showed significant differences between respondents missing in subsequent years and those who continued to participate in the PSID surveys. A greater proportion of the 2011 missing respondents were male, married in early adulthood and had parents with a slightly higher average years of schooling. A greater proportion of the 2017 missing respondents were also male and a smaller proportion had reported living on their own in 2007. The majority of independent variables in this analysis showed no significant differences between missing and non-missing respondents. Due to this, multiple imputation was decided to be unnecessary for this analysis.

Table 3.3

T-Tests for Variables of Interest by Missing and Non-Missing Cases

Variable	2011 Missing Average	2011 Non- missing Average	Sig	2017 Missing Average	2017 Non- missing Average	Sig
Lived in Owned Home	0.61	0.60	NS	0.65	0.59	NS
Lived in Family Member's Rented Home	0.19	0.19	NS	0.20	0.19	NS
Lived in Self-Rented Home	0.20	0.21	NS	0.14	0.23	Sig
White/Other Race	0.51	0.49	NS	0.45	0.50	NS
Black	0.42	0.42	NS	0.44	0.41	NS
Hispanic	0.07	0.10	NS	0.11	0.09	NS
Community Belonging	2.89	2.66	NS	2.76	2.67	NS
Sex (male=1)	0.58	0.46	Sig	0.58	0.44	Sig
Age	30.16	30.12	NS	30.00	30.14	NS
Income (2007)	74603.60	77710.00	NS	80301.50	76484.20	NS
No Early Marriage	0.60	0.83	Sig	0.84	0.81	NS
Parents' Highest Number of years of Schooling	13.79	13.41	Sig	13.41	13.46	NS

CHAPTER FOUR

Housing, Community Belonging and Education

A series of multinomial logistic regressions were used to estimate the effects of the 2007 independent and control variables on educational expectations. The first model used a series of dummy variables for the three housing categories, using the "lived in an owned home" as the reference group. The second model included these dummy variables plus the community belonging variable while the third added the interaction variables for the housing and community items. The fourth and final model in this series included all of the above as well as the control variables described in the preceding section. The results are listed in Table 4.1 and visually displayed in Figure 4.1 (final model with all controls).

In comparison to those who lived in an owned home, those who lived in a family member's rented home were not more likely to change their educational expectations from 2007 to 2011 in the first two models. However, when the interaction terms were included, the coefficients for this group became significant. This indicated that for those who lived with a renting family member, the relationship between community belonging and educational expectations varies compared to those who lived in an owned home. They were less likely to raise their expectations than to keep them stable over the 2007-2011 time period. At low levels of community belonging, they were also more likely to reduce than remain stable, but the negative interaction term indicated that higher community belonging lessened this effect.

Table 4.1

Changes in Educational Expectations from 2007 to 2011

Variable	Raised Stable		Reduce Stable	d vs	Raised Stable	l vs	Reduce Stable	ed vs	Raised Stable	l vs	Reduce Stable	d vs	Raised Stable	lvs	Reduced Stable	l vs
Intercept	-1.21	***	-1.17	***	-0.91	***	-1.10	***	-0.82	***	-1.33	***	2.89	***	1.34	**
Lived in Owned Home - Ref																
Lived in Parent's Rented Home	-0.01		-0.04		-0.08		-0.06		-0.43	**	1.14	***	-0.36	**	1.00	***
Lived in Self-Rented Home	-0.11	+	-0.14	**	-0.18	**	-0.16	**	-0.51	***	0.17		-0.31	**	0.30	*
2007 Community Belonging					-0.11	***	-0.02	*	-0.14	***	0.05	**	-0.10	***	0.07	***
Community*Family Renter									0.11	**	-0.39	***	0.05		-0.44	***
Community*Self Renter									0.10	**	-0.08	**	0.03		-0.15	***
Sex (male=1)													0.34	***	0.10	*
White/Other – Ref																
Black													-0.03		0.61	***
Hispanic													0.14	*	0.09	
Age													-0.12	***	-0.10	***
Family Income 2007 (Log)													-0.16	***	-0.07	**
No Early Marriage													0.28	***	0.19	**
Parental Education 2007													-0.01		-0.01	
N			919		917					917				891		
R-Square		0.	.0096		0.1098			0.2879			0.5608					
+p-value <.10 *p-value <	<.05 **p-	-value <	<.01 ***p-	value <	<.0001											

Those who lived on their own in a rented dwelling were also significantly different from those living in an owned home. The coefficients for this group were actually significant in all models, but strongest in the last two which included the interaction terms. They were less likely to raise their educational expectations and more likely to reduce, but the reduction effect varied by community belonging.

Community belonging itself was significant in all of the category comparisons. In the models with the interaction terms, these coefficients can be interpreted as the effect of community belonging for those who lived in an owned home (the reference group). Higher community belonging thus lowered the odds of raising expectations and increased the odds of reducing them. These results are all displayed visually in Figure 4.1 as the proportional odds of falling into each of the three educational expectation categories. These odds were produced by calculating the exponents from the sum of regression coefficients listed in Table 4.1.

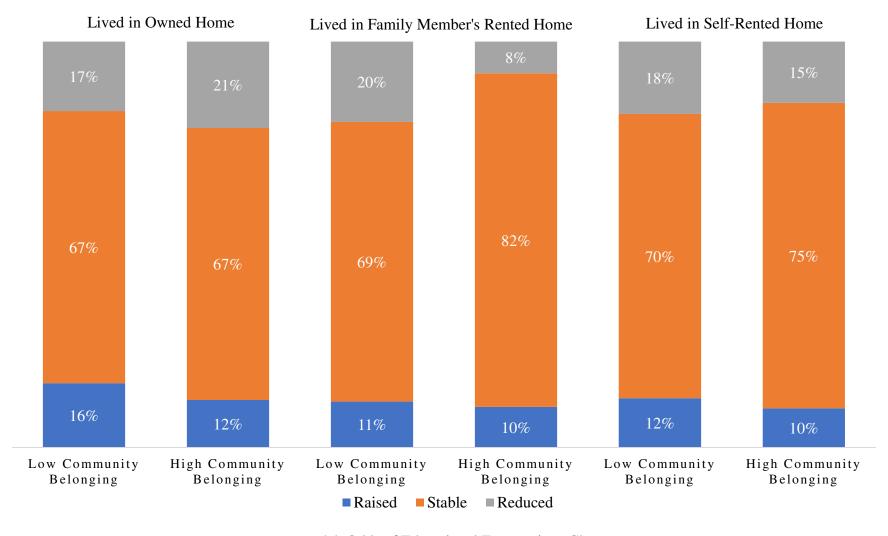


Figure 4.1. Odds of Educational Expectations Change

The results display several patterns related to housing status and community belonging and their effects on educational expectations. Feelings of belonging to community appeared to decrease the odds of raising educational expectations for all three groups. For both of the renting groups, increased community belonging was associated with higher odds of stable expectations and lower odds of reducing, though the effect was stronger for those who lived with a family member. In contrast, stability odds did not change by community belonging for those who lived in an owned home and reduction odds actually increased. This is the opposite what I hypothesized in H1, which stated, "during the period from 2007 to 2011, young adults who live in a rented dwelling and report a stronger sense of community belonging will be more likely to experience a decrease in educational expectations." Therefore, my first hypothesis is not supported.

The next series of models used binary logistic regression to assess the effects on the likelihood of having lower educational expectations than aspirations. The results of this analysis are displayed in Table 4.2. Again, the three dummy variables for housing status were used as described above, with "lived in an owned home" as the reference group. The first model included only the housing variables, the second added the community belonging variable, the third added the interaction terms while the fourth and final included all of the above plus the control variables. The results are listed in Table 4.2 and displayed visually in Figure 4.2.

Table 4.2

Educational Expectations Lower than Aspirations

Variable	Coefficient		Coeffi	cient	Coeffi	cient	Coeffi	cient
Intercept	-2.01	***	-1.81	***	-1.57	***	-2.71	***
Lived in Owned Home - Ref								
Lived in Parent's Rented Home	-0.06		-0.12	+	-0.88	***	-0.90	***
Lived in Self-Rented Home	0.23	***	0.19	**	-0.70	***	-0.61	***
Community Belonging in 2007			-0.07	***	-0.16	***	-0.14	***
Community*Family Renter					0.22	***	0.20	***
Community*Self Renter					0.26	***	0.26	***
Sex (male=1)							0.02	
White/Other – Ref								
Black							0.26	**
Hispanic							0.75	***
Age							0.00	
Family Income 2007 (Log)							0.07	*
No Early Marriage							-0.28	***
Parental Education 2007							0.02	*
N	930		92	28	92	28	90	00
R-Square	0.01	.87	0.05	585	0.14	98	0.27	00
+p-value <.10 *p-value <.05 ** ₁	o-value	<.01 *	**p-val	ue <.0	001			

As with the previous analysis, the coefficient for those who lived in a family member's rented home was not significant until the interaction term was added. This indicated that the effect of community belonging on the odds of aspiring to have more education than one expects to actually get was different for this group compared to those who live in an owned home. For homeowners, community belonging decreased the likelihood of having lower expectations than aspirations. For young adults living in a family's rented home, however, a stronger sense of community belonging increased this likelihood. Interestingly though, the overall likelihood was lower for the renting group. It was only at high levels of community belonging that those from renting households were

more likely than those from homeowning households to aspire to higher education than they expected to achieve.

The effects were similar in strength and direction for the self-renting group. They were also less likely than those from homeowning households to have lower expectations than aspirations, but the community belonging effect increased this likelihood rather than decreasing it. Thus, at high levels of community belonging, self-renters were more likely than their peers living an owned home to aspire to higher education than they expected to achieve. At low levels of community belonging, they were less likely. These results are displayed visually in Figure 4.2.

My second hypothesis stated, "during the period from 2007 to 2011, young adults who live in a rented dwelling and report a stronger sense of community belonging will be more likely to report lower educational expectations than educational aspirations." This hypothesis is supported. It is particularly important to note that this greater likelihood is only seen at reports of high feelings a sense of belonging to one's community. At low feelings, those from homeowning households are significantly and substantially more likely to have lower expectations than aspirations. Community belonging appears to provide a protective effect for this group not seen in the other groups, by reducing the likelihood of wanting more education than one hopes to achieve.

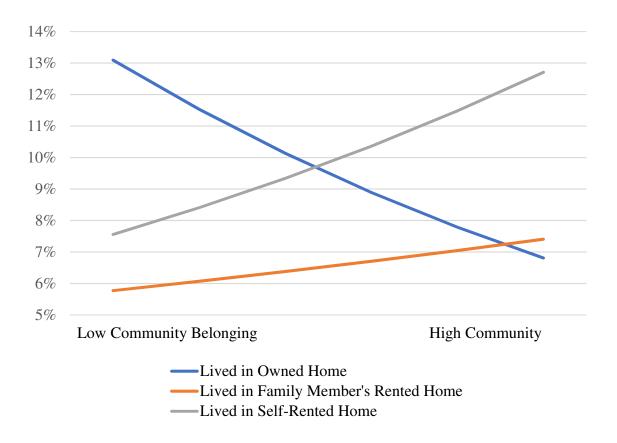


Figure 4.2. Odds of Educational Expectations being Lower than Aspirations

The third series of models used binary logistic regression to assess the effects of community belonging on the likelihood of attaining a higher educational degree between 2007 and 2011. The results of this analysis are displayed in Table 4.3. Again, the three dummy variables for housing status were used as described above, with "lived in an owned home" as the reference group. The first model included only the housing variables, the second added the community belonging variable, the third added the interaction terms while the fourth and final included all of the above plus the control variables. The results are listed in Table 4.3 and displayed visually in Figure 4.3.

Table 4.3

Progress in Educational Attainment from 2007 to 2011

Variable	Coeffi	cient	Coeffi	cient	Coeffi	cient	Coeffi	cient
Intercept	-0.24	***	-0.72	***	-0.81	***	0.94	**
Lived in Owned Home - Ref								
Lived in Parent's Rented Home	-0.34	***	-0.22	***	0.38	***	0.52	***
Lived in Self-Rented Home	-1.14	***	-1.05	***	-1.01	***	-0.82	***
Community Belonging in 2007			0.16	***	0.19	***	0.16	***
Community*Family Renter					-0.18	***	-0.17	***
Community*Self Renter					-0.01		0.02	
Sex (male=1)							-0.35	***
White/Other – Ref								
Black							0.16	**
Hispanic							-0.16	**
Age							-0.16	***
Family Income 2007 (Log)							0.08	***
No Early Marriage							-0.07	+
Parental Education 2007							0.05	***
N	10	07	100	04	100	04	97	5
R-Square	0.5109		0.6669		0.68	369	0.79	965
+p-value <.10 *p-value <.05 **j	o-value	<.01 *	**p-val	ue <.0	001			

The coefficient for those who lived in a family member's rented home was significant and negative in the first two models, indicating that this group was less likely than those from homeowning households to attain a higher educational degree. However, when the interaction terms were added in the third and fourth models, this effect became positive. At low levels of community belonging, therefore, young adults from renting households are more likely than those from homeowning ones to have attained a higher degree between 2007 and 2011. For the homeowning group, however, community belonging has a significant, positive effect on this likelihood, resulting in it being higher for this group at high levels of belonging.

At all levels of community belonging, self-renters were less likely than those from homeowning households to attain a higher degree over this period of time. Community belonging also had a significant positive effect for self-renters. Since this effect did not differ in strength or direction from the homeowning households group, it never closed the gap between the two groups. It is, however, important to note the difference between the self-renters and those who lived with a renting family member. While self-renters were less likely to attain a degree overall, community belonging increased the likelihood for them whereas it had no strong effect (either positive or negative) for those living with a renting family member. These results are displayed visually in Figure 4.3.

My third hypothesis stated, "during the period from 2007 to 2011, young adults who live in a rented dwelling and report a stronger sense of community belonging will be less likely to attain a higher level of education." This is technically supported by the analysis described above. The strong, positive effect of community belonging on educational attainment for the homeowning households group does result in them having the highest likelihood of educational progress. But this does not mean that community belonging has a negative effect for either of the other two groups. It either has no effect (for those living with a renting family member) or a positive effect that simply was not strong enough to close the gap (self-renters).

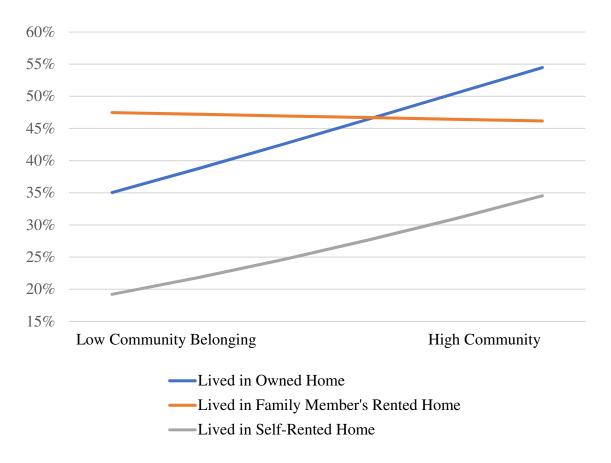


Figure 4.3. Odds of Attaining a Higher Educational Degree between 2007 and 2011

My third hypothesis stated, "during the period from 2007 to 2011, young adults who live in a rented dwelling and report a stronger sense of community belonging will be less likely to attain a higher level of education." This is technically supported by the analysis described above. The strong, positive effect of community belonging on educational attainment for the homeowning households group does result in them having the highest likelihood of educational progress. But this does not mean that community belonging has a negative effect for either of the other two groups. It either has no effect (for those living with a renting family member) or a positive effect that simply was not strong enough to close the gap (self-renters).

The fourth and final series of models for this chapter used binary logistic regression to assess the effects of community belonging on the likelihood of having dropped out of school or postponed educational plans in either 2009 or 2011. Again, the three dummy variables for housing status were used as described above, with "lived in an owned home" as the reference group. The first model included only the housing variables, the second added the community belonging variable, the third added the interaction terms while the fourth and final included all of the above plus the control variables. The results are listed in Table 4.4 and displayed visually in Figure 4.4.

Table 4.4

Dropped Out of Postponed Education Plans Due to Great Recession

Variable	Coeffic	cient	Coeffic	cient	Coeffic	cient	Coeffic	cient
Intercept	-2.18	***	-1.63	***	-1.49	***	-0.38	
Lived in Owned Home - Ref								
Lived in Parent's Rented Home	-0.34	***	-0.52	***	-1.09	***	-1.54	***
Lived in Self-Rented Home	0.49	***	0.33	***	-0.12		-0.44	***
Community Belonging in 2007			-0.20	***	-0.26	***	-0.23	***
Community*Family Renter					0.19	***	0.21	***
Community*Self Renter					0.15	***	0.10	**
Sex (male=1)							-0.05	
White/Other – Ref								
Black							0.37	***
Hispanic							-0.14	+
Age							0.08	***
Family Income 2007 (Log)							-0.20	***
No Early Marriage							0.34	***
Parental Education 2007							-0.05	***
N	106	9	106	66	106	6	979	9
R-Square	0.10	34	0.30	47	0.33	09	0.47	10
+p-value <.10 *p-value <.05 ** ₁	o-value <	<.01 *	**p-valı	ie <.00	001			

The coefficient for those who lived in a family member's rented home was significant and negative in all models, indicating that this group was less likely than those from homeowning households to have dropped out or postponed school due to the Recession. The community belonging coefficients were also significant and negative, indicating that stronger feelings of community belonging decreased the likelihood of dropping out or postponing. The interaction term for family renters, however, was significant and positive, indicating that the community belonging effect was weaker for them than for those from homeowning households.

For self-renters, the coefficient was significant and positive in the first two models. Without adjusting for differing effects of community belonging, self-renters were more likely than those from homeowning households to report a Recession-induced decision to drop out or postpone schooling. In the full model with the interaction terms, however, the effect was negative, indicating that at low feelings of community belonging, they were less likely to report this type of change. The interaction term itself was positive. As with the other renting group, the community belonging effect was weaker for self-renters than for those from homeowning households. These results are displayed visually in Figure 4.4.

My fourth hypothesis stated, "during the period from 2007 to 2011, young adults who live in a rented dwelling and report a stronger sense of community belonging will be more likely to report a Recession-induced change in educational plans." This is not supported by the analysis described above. At low levels of community belonging, both of the renting groups are less likely than the homeowning group to report a negative Recession-induced impact on their educational plans. However, for the homeowning

households group, the strong effect of community belonging does result in a closure of this gap with the self-renters and a substantial narrowing of the gap with the other renting households group. Community belonging is not as strongly beneficial for self-renters and is extremely negligible for those living with a renting family member.

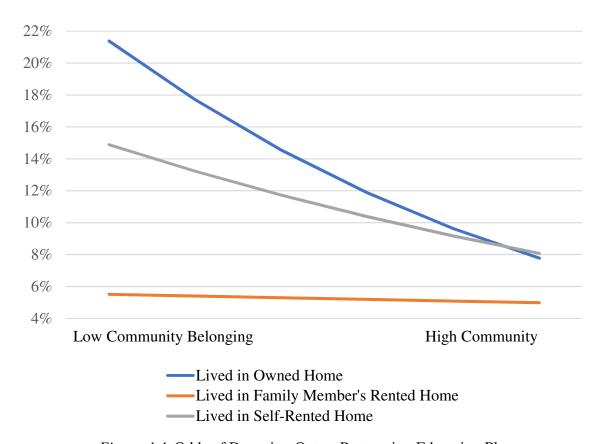


Figure 4.4. Odds of Dropping Out or Postponing Education Plans

CHAPTER FIVE

Race/Ethnicity, Community Belonging and Education

A series of multinomial logistic regressions were used to estimate the effects of the 2007 independent and control variables on educational expectations. The first model used a series of dummy variables for the three race/ethnicity categories, using "white/other" as the reference group. The second model included these dummy variables plus the community belonging variable while the third added the interaction variables for the race/ethnicity and community items. The fourth and final model in this series included all of the above as well as the control variables described in the preceding section. The results are listed in Table 5.1 and visually displayed in Figure 5.1 (final model with all controls).

Compared to whites and those of races, Blacks and Hispanics more likely to change their educational expectations from 2007 to 2011, with some of the strongest effects seen in the full model. The community belonging coefficients were negative and significant for the "raised vs. stable" category, meaning that feeling a stronger sense of community belonging decreased the odds of raising educational expectations over holding them stable. There was no community effect for the "reduced vs stable" category, but the Black-community interaction term was negative, indicating that community belonging decreased the odds of reducing. The Black-community interaction term was also significant for the "raised vs stable" category, indicating that community belonging has a stronger effect for Blacks than for the white/other group (negative for both).

Table 5.1

Changes in Educational Expectations from 2007 to 2011

Variable	Raised Stable	vs	Reduce Stable	ed vs	Increas Stable	ed vs	Reduce Stable	ed vs	Increas Stable	ed vs	Reduce Stable	ed vs	Raised Stable	VS	Reduce Stable	ed vs
Intercept	-1.30	***	-1.31	***	-1.04	***	-1.27	***	-1.16	***	-1.37	***	2.88	***	1.41	**
White/Other – Ref																
Black	0.18	**	0.52	***	0.17	**	0.52	***	0.42	***	0.88	***	0.16		0.88	***
Hispanic	0.25	***	0.09	+	0.20	**	0.08		0.47	***	0.18	*	0.38	***	0.07	
2007 Community Belong	ing				-0.09	***	-0.01		-0.05	***	0.02		-0.05	**	0.01	
Community*Black									-0.09	**	-0.13	***	-0.07	*	-0.13	***
Community*Hispanic									-0.12	***	-0.03		-0.11	***	0.00	
Sex (male=1)													0.36	***	0.03	
Lived in Owned Home - I	Ref															
Lived in Family's Rented	Home												-0.22	**	-0.35	***
Lived in Self-Rented Home													-0.21	**	-0.23	**
Age													-0.12	***	-0.10	***
Family Income 2007 (Log	g)												-0.17	***	-0.06	*
No Early Marriage													0.27	***	0.18	**
Parental Education 2007													-0.01		-0.02	+
N		ç	916			Ģ	915			Ģ	915			8	391	
R-Square=		0.	1200			0.	1951			0.	2338			0.4	4673	
+p-value <.10 *p-value <	.05 **p-	-value	<.01 ***	p-value	<.0001											

The results for Hispanic young adults were similar. Compared to whites/other, Hispanics' community belonging had a stronger negative effect on raising educational expectations over having stable expectations. However, they were not more likely to reduce than whites/other and there was no community belonging effect for either. These results are displayed visually in Figure 5.1.

The results display several patterns related to race/ethnicity and community belonging and their effects on educational expectations. Feelings of belonging to community appeared to decrease the odds of raising educational expectations for all three groups. For both Black and Hispanic young adults, increased community belonging was associated with higher odds of stable expectations and, for Blacks, lower odds of reducing. For whites/other, the effects of community belonging were substantively small, only changing the odds in each in any category by a couple points at most. For Black young adults, the overall effect of community belonging was to increase educational expectation stability while decreasing odds of either raising or reducing. Finally, for Hispanic young adults, the effect of community belonging was to increase odds of stability entirely by odds only of raising.

I hypothesized in H4 that "during the period from 2007 to 2011, Black and Hispanic young adults who report a stronger sense of community belonging will be more likely to experience a decrease in educational expectations." This hypothesis is not supported. Where there was an effect likelihood of reducing expectations, community belonging lowered that likelihood. It also lowered the likelihood of raising expectations, but in favor of stability rather than reducing.

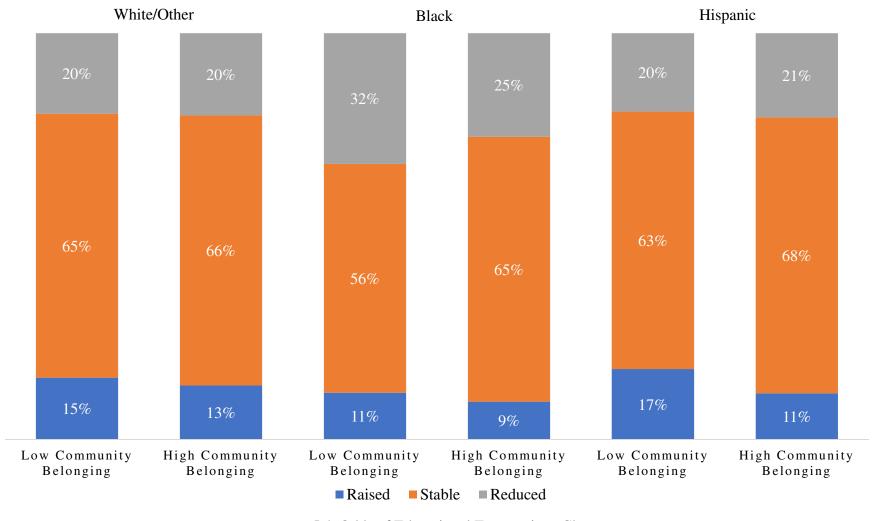


Figure 5.1. Odds of Educational Expectations Change

The next series of models used binary logistic regression to assess the effects on the likelihood of having lower educational expectations than aspirations. The results of this analysis are displayed in Table 5.2. Again, the three dummy variables for race/ethnicity were used, with "whites/other races" as the reference group. The first model included only the race/ethnicity variables, the second added the community belonging variable, the third added the interaction terms while the fourth and final included all of the above plus the control variables. The results are listed in Table 5.2 and displayed visually in Figure 5.2.

Table 5.2

Lower Educational Expectations than Aspirations

Variable	Coeffi	cient	Coeffic	cient	Coeffic	cient	Coeffi	cient
Intercept	-2.14	***	-1.98	***	-2.05	***	-2.79	***
White/Other – Ref								
Black	0.27	***	0.26	***	0.40	***	0.37	**
Hispanic	0.62	***	0.61	***	0.79	***	0.89	***
2007 Community Belonging			-0.07	***	-0.04	*	-0.04	*
Community*Black					-0.05		-0.02	
Community*Hispanic					-0.08	*	-0.06	*
Sex (male=1)							0.10	*
Lived in Owned Home - Ref								
Lived in Parent's Rented Hor	ne						-0.24	**
Lived in Self-Rented Home							0.24	**
Age							0.00	
Family Income 2007 (Log)							0.05	+
No Early Marriage							-0.29	***
Parental Education 2007							0.02	+
N	92	27	926	6	920	6	90	0
R-Square	0.11	29	0.14	51	0.15	19	0.20	36
+p-value <.10 *p-value <.05	**p-va	lue <.()1 ***p-	value ·	<.0001			

The coefficients for the race/ethnicity variables were significant and positive in all models. Black and Hispanic young adults were consistently more likely to have lower educational expectations than aspirations. The community belonging coefficient was significant and negative. Stronger feelings of community belonging was associated with a lower likelihood of aspiring to a higher educational level than one expected to actually attain. The Black-community interaction term was not significant, meaning that just like whites and other racial groups, Black young adults who felt more belonging to their communities were less likely to have lower expectations. They were more likely than whites/other overall, but the effect of community belonging had the same strength and direction.

The Hispanic-community interaction term was significant and negative.

Therefore, the effect of community belonging on having lower expectations than aspirations was similar in direction to other racial groups but stronger in effect. These effects are displayed visually in Figure 5.2

My sixth hypothesis stated, "during the period from 2007 to 2011, Black and Hispanic young adults who report a stronger sense of community belonging will be more likely to report lower educational expectations than educational aspirations." This hypothesis is somewhat supported. At all levels of community belonging, Black and Hispanic young adults have a higher likelihood of expecting lower educational achievement than they aspire to. The direct effects of community belonging, however, do not differ in direction for any of the three groups and are actually stronger in effect for Hispanics. The gap narrows considerably at high levels of community belonging, although it does not close completely.

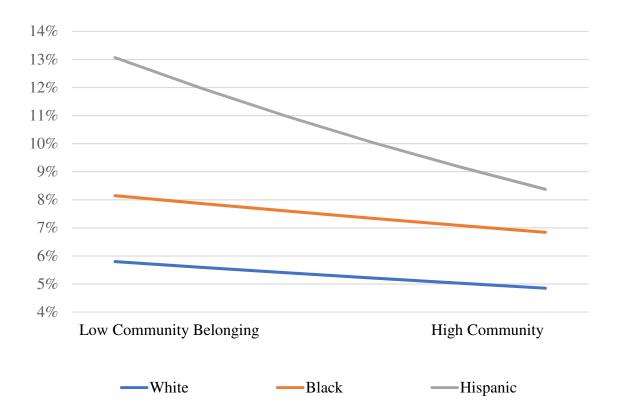


Figure 5.2. Odds of Educational Expectations being Lower than Aspirations

The third series of models used binary logistic regression to assess the effects of community belonging on the likelihood of attaining a higher educational degree between 2007 and 2011. Again, the three race/ethnicity dummy variables were used with "white/other" as the reference group. The first model included only the housing variables, the second added the community belonging variable, the third added the interaction terms while the fourth and final included all of the above plus the control variables. The results are listed in Table 5.3 and displayed visually in Figure 5.3.

Table 5.3

Progress in Educational Attainment from 2007 to 2011

Variable	Coeffi	cient	Coeffi	cient	Coeffi	cient	Coeffi	cient
Intercept	-0.37	***	-0.87	***	-0.81	***	1.08	**
White/Other – Ref								
Black	-0.25	***	-0.23	***	-0.22	**	0.01	
Hispanic	-0.46	***	-0.38	***	-0.74	***	-0.51	***
2007 Community Belonging			0.17	***	0.15	***	0.11	***
Community*Black					0.00		0.05	*
Community*Hispanic					0.14	***	0.12	***
Sex (male=1)							-0.38	***
Lived in Owned Home - Ref								
Lived in Parent's Rented Home							-0.07	
Lived in Self-Rented Home							-0.75	***
Age							-0.16	***
Family Income 2007 (Log)							0.09	***
No Early Marriage							-0.05	
Parental Education 2007							0.05	***
N	100	04	100	02	100)2	97	5
R-Square	0.12	220	0.45	560	0.47	763	0.78	398
+p-value <.10 *p-value <.05 **	p-value	<.01 *	***p-val	lue <.0	001			

The coefficients for Black young adults were significant and negative for the first three models. Compared to white and other racial groups, Blacks were less likely to attain a higher level of education between 2007 and 2011. However, this effect loses significance in the full model with the community interaction and control variables, indicating that one or more of the other control variables mediates the main effect at low levels of community belonging. But both the community belonging and the Black-community interaction terms were significant and positive. Therefore, it appears that community belonging increases the likelihood of attaining a higher educational degree for both Blacks and whites/other, but the effect is stronger for Blacks. At low levels of community belonging, there is no difference in the likelihood of educational progress

when controlling for housing status, age, family income, marital status and parental education. At high levels, however, the stronger community effect for Blacks makes them more likely to have attained a higher degree than whites and other racial groups.

For Hispanic young adults, the coefficients are negative and significant in all models. Overall, Hispanics were less likely than whites and other racial groups to attain a higher level of education between 2007 and 2011. The community and Hispanic-community interaction variables were significant and positive, indicating that community belonging may increase the likelihood of educational progress at a greater rate for Hispanics. Therefore, at low levels of community belonging, Hispanic young adults were less likely to attain a higher degree but at high levels, they were more likely. These results are displayed visually in Figure 5.3.

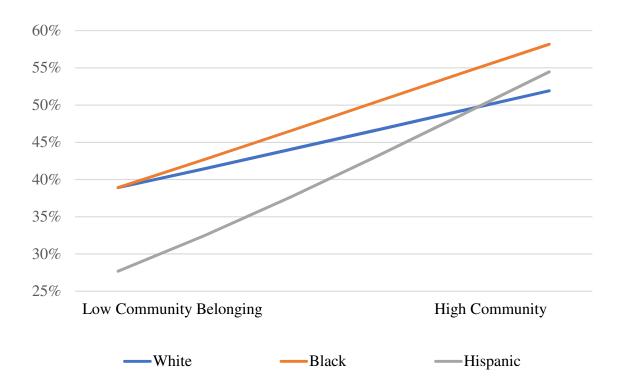


Figure 5.3. Odds of Attaining a Higher Educational Degree between 2007 and 2011

My seventh hypothesis stated, "during the period from 2007 to 2011, Black and Hispanic young adults who report a stronger sense of community belonging will be less likely to attain a higher level of education." This hypothesis is not supported. For both racial minority groups, stronger feelings of community belonging is associated with increased odds of attaining a higher level of education between 2007 and 2011.

The fourth and final series of models for this chapter used binary logistic regression to assess the effects of community belonging on the likelihood of having dropped out of school or postponed educational plans between 2007 and 2011. Again, the three dummy variables for race/ethnicity were used with "white/other" as the reference group. The first model included only the housing variables, the second added the community belonging variable, the third added the interaction terms while the fourth and final included all of the above plus the control variables. The results are listed in Table 5.4 and displayed visually in Figure 5.4.

The coefficients for Black young adults were significant and positive in all models. Overall, Blacks were more likely to report having dropped out or postponed schooling to the Recession. The community belonging effects were all significant and negative, meaning a stronger feeling of community belonging was associated with a lower likelihood of reporting these Recession-induced changes. The Black-community interaction term was insignificant. Although Black young adults were more likely than whites/other to drop out or postpone, community belonging lowered these odds at the same rate for both groups.

Table 5.4

Dropped Out of Postponed Education Plans Due to Great Recession

Variable	Coefficient		Coeffi	cient	Coeffi	cient	Coeffi	cient
Intercept	-2.24	***	-1.73	***	-1.76	***	-0.24	
White/Other – Ref								
Black	0.52	***	0.47	***	0.38	***	0.45	***
Hispanic	0.14	*	0.02		0.26	**	0.08	
2007 Community Belonging			-0.20	***	-0.18	***	-0.16	***
Community*Black					0.04		-0.02	
Community*Hispanic					-0.15	***	-0.13	**
Sex (male=1)							-0.01	
Lived in Owned Home - Ref								
Lived in Parent's Rented Home							-0.95	***
Lived in Self-Rented Home							-0.16	*
Age							0.07	***
Family Income 2007 (Log)							-0.22	***
No Early Marriage							0.32	***
Parental Education 2007							-0.05	***
N	10	66	100	64	100	64	97	'9
R-Square	0.07	710	0.27	749	0.29	901	0.4ϵ	607
+p-value <.10 *p-value <.05 **	p-value	<.01 *	***p-val	ue <.0	001			

The Hispanic coefficient was significant in the first model, but lost significance when community interaction variables and all control variables were included. This indicates that at low levels of community belonging, the Hispanic effect was mediated by housing status, age, family income, marital status and parental education. Because the Hispanic-community interaction term is significant, however, it appears that Hispanic young adults with a high sense of community belonging were less likely to drop out or postpone school. These results are displayed visually in Figure 5.4.

My eighth hypothesis stated, "during the period from 2007 to 2011, Black and Hispanic young adults who report a stronger sense of community belonging will be more likely to report a Recession-induced change in educational plans." This is not supported

by the analysis described above. Compared to whites and other racial groups, Hispanic young adults were not more likely to drop out or postpone schooling due to the Recession. At high levels of community belonging, they were actually less likely. Black young adults were more likely compared to whites/other, but community belonging decreased these odds at the same rate.

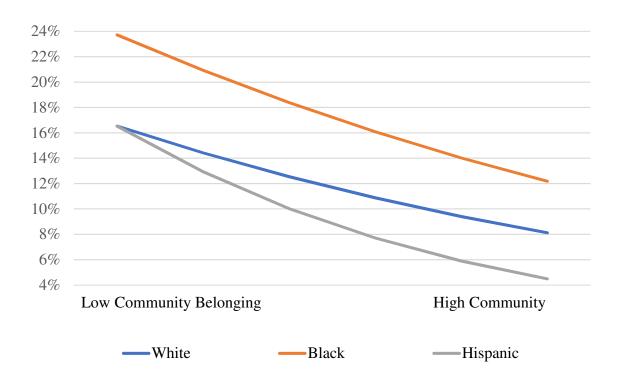


Figure 5.4. Odds of Dropping Out or Postponing Education Plans

CHAPTER SIX

Economic Outcomes in 2017

Housing Status, Community and Education

A series of multinomial logistic regressions were used to estimate the effects of the 2007 independent and control variables on educational attainment in 2017. The first model used a series of dummy variables for the three housing status in 2007 categories, using "lived in an owned home" as the reference group. The second model included these dummy variables plus the community belonging variable while the third added the interaction variables for the race/ethnicity and community items. The fourth and final model in this series included all of the above as well as the control variables described in the preceding section. The results are listed in Table 6.1 and visually displayed in Figure 6.1 (final model with all controls).

All coefficients for housing variables were significant and positive in the first two models. Compared to those who lived in an owned home in 2007, both those who lived with their family in a rented home and those who rented their own place at that time were less likely to have a college degree in 2017. The 2007 community belonging variable had significant and negative coefficients in all models. This indicated that, in general, higher community belonging was associated with a lower likelihood of not graduating high school or only graduating high school compared to attaining a four-year college degree.

Table 6.1

Educational Attainment in 2017

Variable	No HS	vs Degree	HS vs Colleg Degree		No HS College	vs Degree	College No HS vs		HS vs College Degree		No HS College		HS vs College Degree			
Intercept	-2.51	***	-0.41	***	-1.47	***	0.57	***	-0.97	***	0.82	***	9.76	***	8.91	***
Lived in Owned Home - Ref																
Lived in Parent's Rented Home	1.30	***	0.88	***	1.03	***	0.65	***	0.09		-0.66	***	-1.03	***	-1.45	***
Lived in Self- Rented Home	1.90	***	1.44	***	1.77	***	1.33	***	-0.09		0.65	***	0.06		0.65	***
Community Belon	iging in 20	007			-0.36	***	-0.34	***	-0.57	***	-0.42	***	-0.42	***	-0.37	***
Community*Fami	ly Renter								0.22	***	0.39	***	0.35	***	0.48	***
Community*Self	Renter								0.54	***	0.16	***	0.26	***	0.05	+
Sex (male=1)													0.68	***	0.45	***
White/Other - Ref																
Black													0.84	***	0.59	***
Hispanic													0.05		0.09	
Age													-0.05	*	-0.10	***
Family Income 2007 (Log)													-0.51	***	-0.16	***
No Early Marriage													-1.01	***	-0.73	***
Parental Education	n 2007												-0.27	***	-0.23	***
N		86	3			86	1			86	51			78	7	
R-Square		0.80	48			0.96	540			0.97	771			0.99	81	
+p-value <.10 *p-	value <.05	**p-valu	ie <.01 *	***p-va	lue <.0001											

When the community interaction terms were added, the coefficients for family renters either lost significance or became negative. In the full model, both were negative and significant. This indicated that at low levels of community belonging, family renters were less likely than those from homeowning households to have not completed or only completed high school rather than graduating from college or higher. The interaction terms were both significant and positive, which reversed the general community belonging effect. At high levels of community belonging, those from renting households were more likely than those from homeowning households to have less than a four-year college degree.

In the full model, the 2007 self-renters' coefficient lost significance in the "no high school vs college degree" category while the corresponding interaction term was significant and positive. Though it was not large enough to reverse the general community belonging effect, it indicates that this effect is weaker for self-renters than for those from a homeowning household. The other coefficient for self-renters in the "high school vs college degree category" remained significant and positive in the final model. The corresponding interaction term was marginally significant and positive. Therefore, while self-renters appeared to be more likely to only have a high school degree rather than a college degree compared to those from homeowning households, the effect of community belonging is only slightly weaker for them. These results are displayed visually in Figure 6.1.

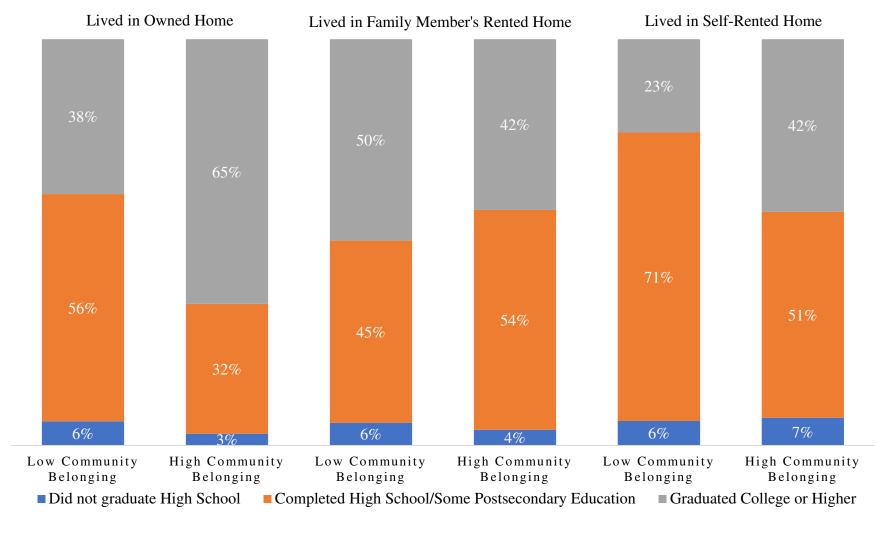


Figure 6.1. Odds of Educational Attainment in 2017

The next series of models used binary logistic regression to assess the effects of community belonging on the likelihood of becoming a homeowner by 2017. As with the previous analyses, the first model used a series of dummy variables for the three housing status in 2007 categories, using "lived in an owned home" as the reference group. The second model included these dummy variables plus the community belonging variable while the third added the interaction variables for the race/ethnicity and community items. The fourth then added educational attainment in 2017 as a further control to determine how much of the relationship between the 2007 independent variables might be mediated by current level of education. The fifth and final model in this series included all of the above as well as the control variables described in the preceding section. The results are listed in Table 6.2 and visually displayed in Figure 6.2 (final model with all controls).

The coefficients for family renters were significant and negative in all models. Those who lived in a family member's rented home in 2007 were consistently less likely to own a home in 2017 compared to those who lived in an owned home in 2007. The community belonging coefficients were all significant and positive, as was the family renter-community interaction term. While sense of community belonging increases the odds of owning a home in 2017 overall, the effect is stronger for those who lived with a renting family member in 2007.

The coefficients for self-renters in 2007 were not significant until the self-renter-community interaction terms were included. This indicated that self-renters do not differ significantly from those from homeowning households overall, but there are differences by level of community belonging. In particular, the interaction term was negative,

meaning that the overall positive effect of community belonging on odds of homeownership was reversed for those who were self-renters in 2007. Among this group, a higher sense of community belonging was associated with a lower likelihood of owning a home. These results are displayed visually in Figure 6.2.

Table 6.2

Homeownership in 2017

Variable	Coefficient Coefficien		cient	Coeffi	cient	Coefficient		Coefficient			
Intercept	-0.51	***	-0.60	***	-0.79	***	-0.37	***	-0.77	+	
Lived in Owned Home - Ref											
Lived in Parent's Rented Home	-0.99	***	-0.97	***	-1.55	***	-1.53	***	-1.99	***	
Lived in Self-Rented Home	-0.01		0.01		1.32	***	1.38	***	0.79	***	
2007 Community Belonging			0.03	**	0.09	***	0.07	***	0.07	***	
Community*Family Renter					0.17	***	0.25	***	0.44	***	
Community*Self Renter					-0.41	***	-0.41	***	-0.37	***	
College Graduate - Ref											
No High School Diploma							-1.07	***	-1.51	***	
High School Graduate							-0.37	***	-0.65	***	
Sex (male=1)									-0.48	***	
White/Other - Ref											
Black									-1.33	***	
Hispanic									-0.87	***	
Age									0.15	***	
Family Income 2007 (Log)									-0.10	***	
No Early Marriage									-0.97	***	
Parental Education 2007									-0.11	***	
N	98	0	97	8	97	8	861		78	7	
R-Square	0.36	533	0.37	18	0.61	6128 0.7142		42	0.9662		
+p-value <.10 *p-value <.05 **p-	+p-value <.10 *p-value <.05 **p-value <.001										

The addition of current education into the model did not lessen this effect. The interaction coefficient was actually a little bit larger in the model with current education. Although educational attainment in 2017 does have its own significant direct effect on

homeownership, it does not appear to mediate the association between housing status in early adulthood, community belonging and homeownership in 2017.

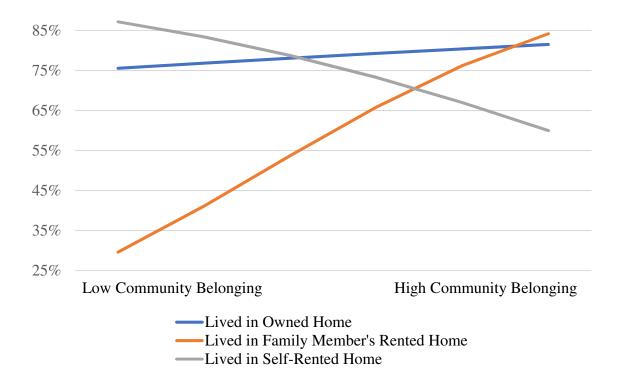


Figure 6.2. Odds of Homeownership in 2017

The next series of models used OLS regression to assess the effects of community belonging on taxable income 2017. As with the previous analyses, the first model used a series of dummy variables for the three housing status in 2007 categories, using "lived in an owned home" as the reference group. The second model included these dummy variables plus the community belonging variable while the third added the interaction variables for the race/ethnicity and community items. The fourth then added educational attainment in 2017 and the fifth and final model in this series included all of the above as well as the control variables. The results are listed in Table 6.3.

The housing variable coefficients and interactions terms were mostly insignificant, especially after controlling for current education. In the full model, neither of housing coefficients nor the community belonging coefficient were significant and the interaction terms only marginally significant. Current education and race had the strongest effects. Due to the lack of significance for the variables of interest, these results are not visually displayed with a figure as previous results were.

Table 6.3.

Income in 2017

Variable	Coeffi	cient	Coefficient		Coefficient		Coefficient		Coefficient		
Intercept	9.07	***	8.80	***	8.62	***	11.08	***	12.39	***	
Lived in Owned Home - Ref											
Lived in Parent's Rented Home	0.42		0.49		2.02	*	0.28		0.37		
Lived in Self-Rented Home	-0.56		-0.49		-0.47		-0.46		-0.46		
2007 Community Belonging			0.09		0.15	+	0.04		0.04		
Community*Family Renter					-0.47	*	-0.24	*	-0.19	+	
Community*Self Renter					0.01		0.11		0.18	+	
College Graduate - Ref											
No High School Diploma							-2.23	***	-2.35	***	
High School Graduate							-0.92	***	-0.90	***	
Sex (male=1)									-0.02		
White/Other - Ref											
Black									-0.60	**	
Hispanic									0.34		
Age									-0.06		
Family Income 2007 (Log)									0.08		
No Early Marriage									-0.43	*	
Parental Education 2007									-0.01		
N	0.00	24	0.00	30	0.00	062	0.1173		0.1381		
R-Square	100)1	99	8	99	8	861		78	7	
+p-value <.10 *p-value <.05 **p-value <.01 ***p-value <.0001											

My ninth hypothesis stated, "among those who were young adults in 2007, those who lived in a rented dwelling and reported a stronger sense of community belonging

will report worse economic outcomes in 2017, including lower educational attainment, lower likelihood of homeownership and lower income." This hypothesis was partially supported. Those who lived in an owned home in early adulthood were the most likely to graduate college and sense of community belonging increased this likelihood further. For those who lived with a family member who rented in 2007, community belonging had the opposite effect, decreasing the odds of attaining a college degree. But it increased those odds for self-renters, although not enough to close the gap between them and those from homeowning households entirely. The homeownership models also showed mixed effects. Community belonging had a very slight positive effect on odds of homeownership in 2017 for those who lived in an owned home in 2007. It had a much stronger positive effect for those who lived with a renting family member and a strong negative effect for self-renters. No substantive effects were seen for income in 2017. Therefore, while 2007 housing status and community belonging do seem to relate to some economic outcomes in 2017, the effects vary by subgroup and are not consistently beneficial or harmful. My tenth hypothesis stated, "for 2017 homeownership and income, current education level will mediate some, but not all, of this relationship." This was supported for income but not for homeownership.

Race/Ethnicity, Community and Education

A series of multinomial logistic regression were used to estimate the effects of the 2007 independent and control variables on educational attainment in 2017. The first model used a series of dummy variables for the three race/ethnicity categories, using "white/other" as the reference group. The second model included these dummy variables plus the community belonging variable while the third added the interaction variables for

the race/ethnicity and community items. The fourth and final model in this series included all of the above as well as the control. The results are listed in Table 6.4 and visually displayed in Figure 6.3 (final model with all controls).

The community belonging coefficients were significant and positive throughout all models, indicating that community belonging decreased the odds of not having a high school degree or only have a high school degree rather than a college degree by 2017. For the last two models with the interaction terms, this is the effect for the reference group (whites/other). Both of the coefficients for the Black group were significant and positive in the first two models, but the coefficient for the "high school vs college degree" category lost significance when the interaction terms were included. At low levels of community belonging, Blacks were no more or less likely than whites to have a high school degree over a college degree. Since the interaction term was significant and positive, the effect of community belonging in this category was weaker for Blacks than for whites and other racial groups, though it was still negative. The interaction term in the "no high school vs. college degree" category was not significant, meaning that community belonging had the same effect for Blacks as for whites/other in reducing the odds of not completing high school over attaining a college degree by 2017.

The Hispanic coefficients were negative in the full models. At low levels of community belonging, Hispanics were less likely than whites and other racial groups to have only completed high school or less over having a college degree. However, the Hispanic-community interaction terms were positive, thus counteracting the negative effects of the general community belonging variable. At high levels of community belonging, therefore, Hispanics are more likely to have not graduated high school by

2017. Still, although the community belonging effect is not as strong for Hispanics compared to whites/other, it does decrease the likelihood of having only a high school degree over a college degree. These results are displayed visually in Figure 6.3.

Table 6.4.

Educational Attainment in 2017

Variable	No HS vs College Degree	HS vs College Degree		No HS v		HS vs College Degree		No HS v College		HS vs College Degree		No HS v		HS vs College Degree	
Intercept	-2.37 ***	-0.32	***	-1.29	***	0.67	***	-0.96	***	0.88	***	9.83	***	8.73	***
White/Other -	Ref														
Black	1.76 ***	1.09	***	1.71	***	1.05	***	0.95	***	0.10		0.73	***	0.03	
Hispanic	0.78 ***	0.83	***	0.53	***	0.61	***	-0.83	***	0.27	**	-1.58	***	-0.37	***
2007 Commu	nity Belonging			-0.38	***	-0.35	***	-0.52	***	-0.42	***	-0.36	***	-0.35	***
Community*I	Black							0.25	***	0.34	***	0.02		0.21	***
Community*I	Hispanic							0.59	***	0.11	***	0.66	***	0.18	***
Sex (male=1)												0.85	***	0.48	***
Lived in Own	ed Home - Ref														
Lived in Paren	nt's Rented Home											0.19		0.20	**
Lived in Self-	Rented Home											1.10	***	0.87	***
Age												-0.06	*	-0.10	***
Family Incom	ne 2007 (Log)											-0.52	***	-0.16	***
No Early Marriage												-0.94	***	-0.70	***
Parental Education 2007												-0.28	***	-0.22	***
N	80	51			86	60 86		360		787		7			
R-Square	0.6	637		0.9492				0.96	545		0.9978				
+p-value <.10) *p-value <.05 **p-	value <.0	1 ***p-	value <.00	01										

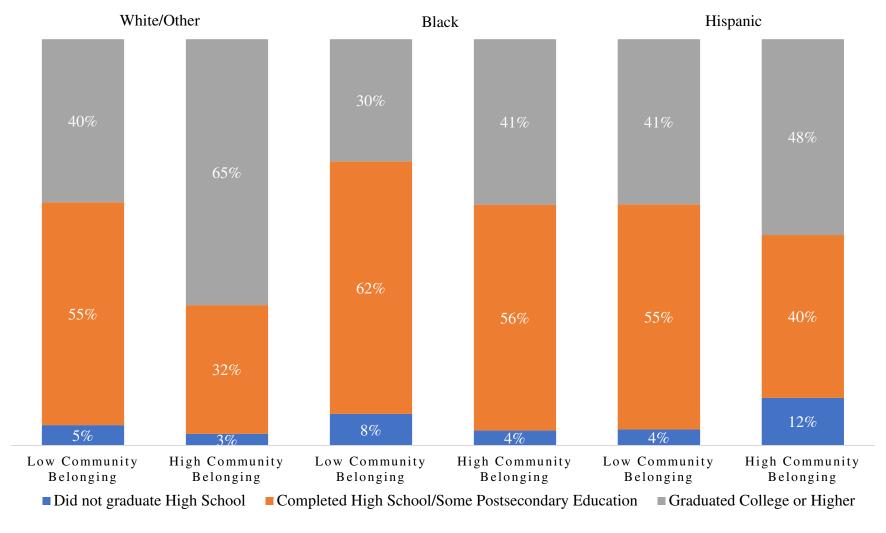


Figure 6.3. Odds of Educational Attainment in 2017

The next series of models used binary logistic regression to assess the effects of community belonging on the likelihood of becoming a homeowner by 2017. These models used a series of dummy variables for the three race/ethnicity categories using "white/other" as the reference group. The second model included these dummy variables plus the community belonging variable while the third added the interaction variables for the race/ethnicity and community items. The fourth then added educational attainment in 2017 as a further control to determine how much of the relationship between the 2007 independent variables might be mediated by current level of education. The fifth and final model in this series included all of the above as well as the control variables. The results are listed in Table 6.5 and visually displayed in Figure 6.4 (final model with all controls).

The coefficients for Blacks were significant and negative in all models. Black respondents were consistently less likely to own a home in 2017 compared to whites and other racial groups. The community belonging coefficients were all significant and positive, but the Black-community interaction term was negative. While sense of community belonging increases the odds of owning a home in 2017 overall, the effect is the opposite for Blacks. Black respondents had the lowest odds of homeownership and the gap widened with increased community belonging.

The coefficients for Hispanics were also significant and negative, as was the Hispanic-community interaction term. The effect sizes were not as large for Hispanics as they were for Blacks and the in the final model, the interaction term was small enough that it did not reverse the general community effect. Therefore, Hispanics were less likely than whites and other racial groups (but more likely than Blacks) to own a home in 2017

and community belonging had a very slight positive effect. These results are displayed visually in Figure 6.4.

Table 6.5

Homeownership in 2017

Variable	Coeffi	Coefficient		Coefficient		Coefficient		Coefficient		cient
Intercept	-0.28	***	-0.35	***	-0.48	***	-0.13	**	-1.61	**
White – Ref										
Black	-1.73	***	-1.72	***	-1.44	***	-1.35	***	-1.01	***
Hispanic	-0.85	***	-0.84	***	-0.35	***	-0.37	***	-0.64	***
2007 Community Belonging			0.02	**	0.07	***	0.03	**	0.06	***
Community*Black					-0.10	**	-0.05		-0.11	**
Community*Hispanic					-0.21	***	-0.10	**	-0.05	+
College Graduate – Ref										
No High School Diploma							-0.92	***	-1.54	***
High School Graduate							-0.21	***	-0.53	***
Sex (male=1)									-0.48	***
Lived in Owned Home - Ref										
Lived in Parent's Rented Home									-0.51	***
Lived in Self-Rented Home									-0.29	***
Age									0.15	***
Family Income 2007 (Log)									-0.05	*
No Early Marriage									-0.92	***
Parental Education 2007									-0.09	***
N	97	8	97	7	97	7	860		787	
R-Square	0.75	36	0.75	75	0.77	['] 80	0.7457		0.93	558
+p-value <.10 *p-value <.05 **p	o-value «	<.01 *	**p-valu	ie <.00	001					

The addition of current education into the model did weaken the interaction terms. In addition to having its own significant direct effect on homeownership, educational attainment in 2017 does appear to partly mediate the association between housing status in early adulthood, community belonging and homeownership in 2017.

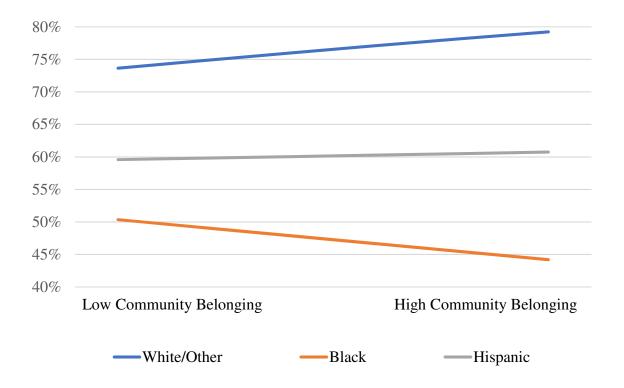


Figure 6.4. Odds of Homeownership in 2017

The final series of models used OLS regression to assess the effects of community belonging on taxable income 2017. These models used a series of dummy variables for the three race/ethnicity categories using "white/other" as the reference group. The second model included these dummy variables plus the community belonging variable while the third added the interaction variables for the race/ethnicity and community items. The fourth then added educational attainment in 2017 and the fifth and final model in this series included all of the above as well as the control variables. The results are listed in Table 6.6.

The housing variable coefficients and interactions terms were mostly insignificant, especially after controlling for current education. The Hispanic and community belonging coefficients were consistently significant and positive, though the

effect sizes decreased substantially when 2017 educational attainment was included. The Black coefficients were never significant, and the interaction terms never exceeded marginal significance. Current education had the strongest effect overall, in addition to partially mediating the Hispanic and community belonging effects. Due to the lack of significance for the variables of interest, these results are not visually displayed with a figure as previous results were.

Table 6.6.

Income in 2017

Variable	Coeffi	cient	Coeffi	cient	Coeffi	cient	Coefficient		Coefficie	
Intercept	8.90	***	8.55	***	8.34	***	10.88	***	12.66	***
White - Ref										
Black	-0.25		-0.18		0.62		-0.34		-0.12	
Hispanic	1.00	**	1.11	**	1.45	*	0.59	*	0.62	*
2007 Community Belonging			0.12	+	0.20	*	0.10	*	0.11	*
Community*Black					-0.31		-0.17	+	-0.17	+
Community*Hispanic					-0.14		-0.14		-0.15	
College Graduate - Ref										
No High School Diploma							-2.03	***	-2.30	***
High School Graduate							-0.88	***	-0.91	***
Sex (male=1)									0.00	
Lived in Owned Home - Ref										
Lived in Parent's Rented Home									-0.24	
Lived in Self-Rented Home									0.09	
Age									-0.06	
Family Income 2007 (Log)									0.06	
No Early Marriage									-0.45	**
Parental Education 2007									-0.02	
N	99	8	99	6	99	6	860		78	7
R-Square	0.00	59	0.00)78	0.00	085	0.13	04	0.13	28
+p-value <.10 *p-value <.05 **p	-value <.	01 ***	*p-value	<.000	1					

My eleventh hypothesis stated, "among those who were young adults in 2007, Black and Hispanic respondents who reported a stronger sense of community belonging will report worse economic outcomes in 2017, including lower educational attainment, lower likelihood of homeownership and lower income." This hypothesis was partially supported. The whites/other group was the most likely to graduate college and sense of community belonging increased this likelihood further. Community belonging also increased the odds of attaining a college degree by 2017 for Blacks and Hispanics though the effect wasn't as strong. The homeownership models showed mixed effects.

Community belonging had a very slight positive effect on odds of homeownership in 2017 for whites and other racial groups, as well as for Hispanics (although Hispanics were still much less likely overall to own a home in 2017). However, it had a negative effect for Blacks. No substantive effects were seen for income in 2017. Therefore, while 2007 housing status and community belonging do seem to relate to some economic outcomes in 2017, the effects vary by subgroup and are not consistently beneficial or harmful.

My twelfth and final hypothesis stated, "for 2017 homeownership and income, current education level will mediate some, but not all, of this relationship." This was supported for both income and homeownership.

CHAPTER SEVEN

Discussion and Conclusion

This study examined the relationship between community belonging, educational outcomes and long-term economic outcomes, looking particularly at how this relationship differed by race and housing status. The results showed that these associations are varied and complex and not always what one might expect based on current sociological research and theory. These analyses add important findings to the literature by demonstrating how this form of social capital may affect the educational and economic outcomes of various subgroups differently.

Among all the relationships and variables examined in this study, the most consistency by far appeared with the subgroups usually considered to be the most advantaged in U.S. society: young adults from homeowning households and non-Black, non-Hispanic young adults (the vast majority of whom were white in this sample). For almost every measure of educational and economic outcomes, these groups not only fared better than their comparison groups overall, but community belonging also had a consistently beneficial effect for them. In particular, young adults from these backgrounds who reported more frequent feelings of community belonging were:

- Less likely to expect to achieve a lower educational degree than they aspired to achieve.
- More likely to actually attain a higher educational degree between 2007 and 2011 (the economically unstable period during which the Great Recession occurred).

- Less likely to have dropped out or postponed schooling due to the Great Recession.
- More likely to have attained a college degree ten years later in 2017.
- More likely to own a home ten years later in 2017.

The only variable examined in this study that did not seem to be beneficially affected by community belonging for these groups was changes in educational expectations from 2007 to 2011. Young adults with frequent feelings of community belonging were actually more likely to reduce instead of raise their expectations in they were from a homeowning household. However, this effect was relatively small compared to renters and no effect was seen in their likelihood of maintaining stable expectations. No substantive effect was seen for young adults who were white or of another non-Black, non-Hispanic race.

The results for the "disadvantaged" subgroups, however, were more mixed. Table 7.1 summarizes the effects of community belonging on the variables of interest for the different subgroups. For the educational expectations and 2017 educational attainment variables, the numbers listed reflect the changes in proportional odds for each category. For example, young adults living in an owned home who frequently felt a sense of community belonging were four percent less likely to raise their educational expectations between 2007 and 2011. For the rest of the variables, the numbers listed reflect odds ratios for each category converted to percent change. For example, young adults living in an owned home who frequently felt a sense of community belonging in 2007 were thirteen percent less likely to have lower educational expectations than aspirations in 2011.

Table 7.1.

Effects of Community Belonging on Variable Odds

Variable	Owned	Family-	Self-	White/	Black	Hispanic
	Home	Rented	Rented	Other		
Educational Expectations						
Raised	-4%	-1%	-2%	-2%	-2%	-6%
Stable	0%	+13%	+5%	+1%	+9%	+5%
Reduced	+4%	-12%	-3%	0%	-7%	+1%
Expectations vs. Aspirations	-13%	+5%	+12%	-4%	-4%	-9%
Educational Progress	+17%	-1%	+17%	+11%	+17%	+26%
Dropped/Postponed School	-21%	-2%	-13%	-15%	-15%	-25%
2017 Education						
No HS Degree	-3%	-2%	+1%	-2%	-4%	+8%
At Least HS	-24%	+9%	-20%	-23%	-6%	-15%
College Degree or Higher	+27%	-8%	+19%	+25%	+11%	+7%
Owned Home in 2017	+7%	+66%	-26%	+6%	-5%	+1%

The results reveal several overall patterns. As noted above, among 2007 young adults, those from a homeowning household and whites/other generally experienced a beneficial effect from community belonging. In contrast, young adults from renting households generally experienced a harmful or at best weak beneficial effect. Among this group, those with higher levels of community belonging were more likely to have lower educational expectations than aspirations and less likely to have attained a college degree by 2017. They were also more likely to have stable rather than reducing educational expectations over the 2007-2011 time period, which could be interpreted as a beneficial effect. Still, overall, the educational effects of community belonging for this group were either very small or in a harmful direction.

Those who rented their own place in 2007 generally experienced beneficial effects. While those with higher levels of community belonging were more likely to have lower expectations than aspirations, they were also more likely to have made educational

progress between 2007 and 2011, less likely to drop out of or postpone school due to the Recession and more likely to have attained a college degree by 2017. Despite still lagging behind young adults from homeowning households in most of these areas, they experienced a similar protective effect from community in their educational progress.

Interestingly, the results were quite different when looking at other long-term economic outcomes besides education. Community belonging had a positive effect on the odds of owning a home by 2017 for those both from homeowning households and families who rented in 2007. In fact, this effect was much stronger for those from renting families, enough to actually close the gap between the two groups at high levels of belonging. However, for those who rented their own place apart from their parents in 2007, the community effect was negative. At high levels of community belonging, this group was the least likely to own a home by 2017.

When examining the community effects by race, the story is a little more straightforward. Overall, for white/other, Black and Hispanic young adults, these effects were similar in direction but different in strength. Like whites and those from other races, Black and Hispanic young adults who frequently felt a sense of community belonging were less likely to have lower expectations than aspirations, more likely to attain a higher degree between 2007 to 2011, less likely to drop out or postpone school due to the Recession and more likely to attain a college degree by 2017. In each case, however, these effects were strongest for Hispanics, even though they usually lagged behind the other groups overall. At low levels of community belonging, Hispanics were the most likely to have lower expectations than aspirations and the least likely to attain a higher

degree. Yet, because of the stronger community effect, these gaps either significantly narrow or close completely at high levels of community belonging.

This pattern does change when looking to long-term educational and economic outcomes. With regard to 2017 educational attainment, community belonging has the strongest beneficial effect for the white/other group. All three groups are more likely to have attained a college degree with higher community belonging, but the effect size for both Blacks and Hispanics is less than half that of whites and other races. Furthermore, Hispanics with high community belonging are also more likely not to have completed even high school. Whites and those from other races also have the highest likelihood of owning a home in 2017 and community belonging has a positive effect. Despite being small, this effect larger than the positive effect for Hispanics while the effect for Blacks is actually negative (though also not very large).

The potential effects of community belonging in young adulthood consistently differed by housing status and race/ethnicity. However, these associations were not consistently beneficial or harmful. They often vary even among the various "disadvantaged" groups. Community belonging had the most consistently harmful effects on education for young adults who lived with renting family members. Despite this, it had a strong positive effect on odds of later homeownership for this group. For young adults who rented their own place, community belonging had mixed effects, being beneficial for both short- and long-term educational attainment, but harmful for other outcomes such as later homeownership. For Black and Hispanic young adults, community seemed to most often have a protective effect. For short-term outcomes, this

effect was actually strongest for Hispanics. Yet for long-term educational attainment and homeownership, it was strongest for whites and those from other races.

Housing Status and Community Belonging

There are several important points to consider from these findings. First, in line with Portes' concept of "negative social capital" (1998), this study provides evidence that community belonging, one common measure of social capital, is not equally beneficial for every individual and may actually be harmful for some. In particular, with regard to educational outcomes, renters appear to benefit less (or not at all) compared homeowners. Portes outlines several reasons that could theoretically be behind these differing relationships.

Communities tend to be segregated by housing tenure and resulting in renter communities which suffer from disproportionate rates of poverty, crime and other negative outcomes (Hoff and Sen 2005). With this deprivation of resources, residents of such communities may not be able to acquire economic support for their educational pursuits from fellow community members. Even if they feel a strong sense of belonging and trust with their community, it may simply be a case of others not being able to give what they do not have. Within a homeowning community that has more resources, however, young adults with a strong sense of belonging would more likely be able to tap those resources, as much as their fellow members are both willing to share (because they know and care about the person asking) and able (because they have enough to spare). Importantly, these "resources" are not strictly financial. They could be something as simple as a quiet place to study, as owned homes tend to be larger (Dwyer 2007).

It could also be social networking opportunities. Another theoretical contribution to the differing effects of social capital has been Granovetter's concept of weak and strong ties (1973). Weak ties are especially beneficial for networking and obtaining a broader range of economic opportunities. A strong sense of community belonging among renting young adults may not provide access to these "weak ties" which could result in recommendations, education and career advice, living examples of a variety of potential career paths and other such resources.

Other ways that Portes theorized social capital could have negative consequences include "excess claims on group member" and "downward leveling norms" (1998:15). Most forms of social capital come with an expectation of reciprocity. As renter communities are more likely to be resource-deprived, the expectation to give back may prohibit members from using what little they have on their own educational pursuits. Also, for those who grew up in communities mostly surrounded by others in similar situations, their socialization may not have provided them with the encouragement to pursue higher education or the cultural know-how to navigate the educational system successfully. Annette Lareau observed how parents from lower class backgrounds interact with their child's school and education differently than middle and upper class backgrounds and how this and teachers' reactions to it affected educational outcomes for the children (Lareau 2000). It is not difficult to imagine how a similar situation could put young adults hoping to pursue their own college education at a disadvantage.

One finding from this study that is not explained by the negative social capital concept is the strong, positive effect of community belonging on homeownership for those who lived with renting family members in young adulthood. At low levels of

community belonging, this group had very small odds of owning a home by 2017, about 45 points behind those who lived in an owned home in young adulthood. At high levels of community belonging, however, this gap *completely* closed. This is surprising, as it is the only positive community effect seen in this study and it is not only significant but very strong. It is even more surprising compared to the community effect for self-renters, which was significant and negative despite the fact community had a beneficial effect on several of the education outcomes.

The reasons for this are not clear, either from this study, past empirical research or theory, so I can only speculate as to the cause. One possibility is that because this group was generally less likely to pursue higher education, they may have generally settled down in one place earlier in life and put what limited financial resources they had to saving for a house rather than for college. Importantly, even in 2017, the oldest respondents in this sample were only 33. While formal education is typically complete by this point in the life course, buying a home often takes a while longer. It is possible that the group differences on homeownership would narrow, disappear or reverse in a few more years' time. Regardless of the reason, it is clear from this, however, that despite both homeownership and education being indicators of socioeconomic status, they obviously have distinctly different relationships to certain variables.

Race/Ethnicity and Community Belonging

Community effects also differed among various racial/ethnic groups. One might have expected the trends for minority groups to follow the patterns similar to those observed above for renters. Afterall, racial and ethnic gaps in homeownership have persisted for decades and became further exacerbated in some areas during the Great

Recession (Allen 2002; Cahill and Franklin 2013; Seah et al. 2017). Indeed, my hypotheses for this study laid out similar expectations for racial minorities and renters. However, the empirical findings of this study did not support this initial assumption.

The full models in each of the race/ethnicity analyses did include housing status as control variables. In several cases, when these were added to the models, one or more of the Black, Hispanic or community coefficients dropped in size. This indicates that part of the race/ethnicity effect on educational outcomes may be mediated by these and/or other control variables. This is particularly noteworthy for the short-term educational attainment (from 2007 to 2011) analysis. Before the control variables were added, the coefficients indicated that Black and Hispanic young adults were less likely than whites/others to have attained a higher degree. After the control variables are added, the Black coefficient becomes insignificant and the Hispanic coefficient drops by about a third. This is important to note because previous research has clearly and consistently found correlations between race/ethnicity and socioeconomic indicators and the findings of this study should not be interpreted as contradicting that trend. What I do find here is that race and ethnicity have distinct effects outside of their connection to socioeconomic status. The educational obstacles for racial/ethnic minorities go beyond issues related to class and potential solutions (like increased social capital through community belonging) might likewise differ.

With every educational measure, community belonging had a beneficial effect for all three groups (white/other, Black and Hispanic). Not only that, but the effect was usually the strongest among the minority groups, especially Hispanics. The strength of this effect consistently narrowed the racial gap and in the case of short-term educational

attainment, the gap actually closed completely. It is important to note that this pattern of effect strength did not hold for long-term educational attainment. In that case, while it still increased the likelihood of attaining a college degree for all three groups, it was by far the strongest for whites and other races. Even so, it still provided a protective effect against lower educational attainment.

Clearly, Portes' negative social capital concept does not explain these findings. Of course, most social capital theorizing focuses on its benefits (Bourdieu 1986; Coleman 1988; Portes 1998). Therefore, it could certainly simply be the case that the educational pursuits of Black and Hispanic young adults benefit from community belonging as a form of social capital in exactly the way it is typically theorized.

Yosso's critical race theory-based pushback to the tendency to see minority communities only in terms of their resource deprivation also merits discussion here (2005). This study may even provide some empirical support for her argument. While Black and Hispanic communities may be disproportionately poor and economically disadvantaged, that does not mean it is the whole story. These communities still have rich histories, cultures and resources to offer their members and their members can contribute back as well. There is also some evidence in previous literature that minorities (particularly African Americans) do not tend to segregate by socioeconomic status as much as whites do. Black adults who attain higher education often still live in poverty-stricken and racially segregated neighborhoods (de Vuijst et al. 2017). While this may not be an altogether positive thing, it could provide a social resource Black children and young adults who share a community with these highly educated individuals. The analyses in this study indicate that, when controlling for economic indicators such as

housing status and family income, community belonging is strongly associated with the educational progress of Black and Hispanic young adults. Their communities do not appear to be a drain on their individual resources or a barrier to success.

Conclusion

This study provides a meaningful sociological contribution to our understanding of the interrelationships between community, housing status, race and ethnicity. It is also limited in several noteworthy ways that indicate important areas for future research. One obvious shortcoming is the small sample size which limited these analyses to whites, Blacks and Hispanics, lumping in "other races" with whites. A larger sample could be used to explore the relationship between community and education for Asian Americans, indigenous Americans and different immigrant groups, for example.

Future research could also examine community effects at different life stages, both earlier (childhood) and later (middle and older adulthood), to see if the effects hold at different points in the life course. This study used social capital theory to interpret empirical findings related to community belonging. However, community belonging is just one out of many measures of social capital that have been used in the literature. Future research could look at social networks and resource measures, social trust and/or civic engagement to see if these factors also affect education and economic outcomes differently by housing status and race/ethnicity.

Non-economic outcomes, such as life satisfaction or health, also deserve consideration. Even where community belonging appears to have a detrimental effect on economic outcomes, it could be providing some positive psychosocial benefits. Finally, we need to learn more about the how and the why. Through what mechanisms does

community belonging work differently for some groups than for others? How can communities be invested in to benefit their individual members? How can individuals be provided with the means to reinvigorate their communities? How can society be more accommodating to the unique strengths and traits some minority communities provide their members?

In summary, this study contributes to research on social capital, community belonging, education, housing status, race and ethnicity with several findings. Social capital is not equally advantageous to every group in a society. Using a measure of community belonging, it actually has some detrimental effects on educational outcomes for young adults from renting households. At the same time, it is not equally disadvantageous for all generally-disadvantaged groups. Community belonging actually had positive relationship with educational progress for racial and ethnic minorities, often to a stronger degree than it did for whites. Researchers should be wary of the tendency to view minority communities primarily through the lens of resource deprivation. Race and class effects are distinct. One "disadvantaged" group in society will not necessarily mirror another.

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