The Ties that Bind: The Role of Teacher Relationships in the Adaptation of Minority and Immigrant Adolescents

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INTRODUCTION

Teachers fulfill a special role in the lives of immigrant youth. Since the inception of universal education in the United States in the mid-1800s, teachers have had the responsibility of helping immigrant youth become familiar with norms and social expectations in the United States (Bryk, Lee, and Peter 1993; Katz 1987; 1992). Despite the importance of teachers' roles in the lives of immigrant youth, little research has focused on the personal relationships between teachers and students, which likely facilitate teachers helping immigrant youth navigate their social worlds. Existing work on teacher-student social relationships often does not examine interactions across different racial/ethnic groups of students; therefore, it is unclear whether racial inequalities exist in teacher-student relationships. Studies also often only investigate positive or negative teacher-student interactions and do not reveal the overall nature of relationships. Moreover, it is also unknown how characteristics of teachers and teaching conditions shape personal relationships between teachers and students.

To investigate the personal relationships between teachers and students, I use the Education Longitudinal Study of 2002 (ELS:2002), a nationally representative sample of U.S. high school sophomores. I provide an overall portrait of the potential differences in personal relationships that teachers form with different racial/ethnic and immigrant groups of students. I consider three measures of personal relationship that English and Mathematics teachers[1] form with students: (1) teacher reports of their familiarity with the student respondent; (2) teacher

[1] The ELS:2002 administers a teacher survey to the English and Mathematics teachers of each student respondent.

perceptions that the student is exceptionally passive or withdrawn; and (3) teacher engagement in conversation with students outside the classroom. Next, I examine the association between teacher-student personal relationships and academic expectations teachers have of their students. Finally, I investigate whether teacher-student relationships in early high school are associated with later notions of belonging in the U.S., as measured by the importance students place on being patriotic individuals.

BACKGROUND

A Growing Population: Demographics of Racial/Ethnic and Immigrant Children in the United States

Since the inception of universal education at the turn of the last century, there have never been more racial and ethnic minority and immigrant students in the United States. Currently, racial and ethnic minorities total 44 percent of the United States population under the age of 19, or approximately 37 million individuals (U.S. Census Bureau 2009; 2012; Passel and Cohn 2008). Immigrant youth account for almost a quarter of all children under the age of 18, and, in cities like New York, the large majority of students are children of immigrants (Passel 2011). Hispanics comprise 53 percent of children of immigrants and 51 percent of foreign-born children, and Asians comprise 18 percent of children of immigrants and 24 percent of foreign-born children. Given the sheer number of minority and immigrant students in the United States, it is important to understand the social ties that are formed between teachers and these youth.

Schools and Teachers as Socializing Agents

For immigrant youth, schools are more than buildings in which they learn academic subjects, but an institution that socializes them to life in the United States. The notion that schools can serve as socializing agents garnered much attention over one hundred years ago, when free and public schools in large American cities started to deal with a large and sudden influx of Western, and later Southern and Eastern European immigrants (Bryk, Lee, and Peter 1993; Katz 1987). John Dewey, a prominent American education philosopher, recognized the role that public schools played in the assimilation of immigrant youth (Dewey 1902). In his 1902 address to the National Education Association, he stated that "the power of the public schools to assimilate different races to our own institutions, through the education given to the younger generation, is doubtless one of the most remarkable exhibitions of vitality that the world has ever seen" (Dewey 1902:78). Although the current context of immigration is vastly different from that during the turn of the last century, the role of schools as socializing agents of immigrant youth remains. As one of the primary institutions immigrant youth are exposed to, schools can teach "American" values that foreign-born parents may not be able to imbue in their children. Within schools, teachers are the primary agents responsible for socializing immigrant youth (Wilson 1962; Stanton-Salazar 1997; 2011). The instruction of U.S. values can occur through the classroom curriculum, and teachers can also impart more subtle norms and social expectations through direct interactions with immigrant youth. These interactions are likely to occur when teachers form personal relationships with their students.

The Importance of Personal Relationships for Racial and Ethnic Minority and Immigrant Youth

In addition to scholarship that investigates theoretically the role of schools and teachers in the acculturation of immigrant youth, a small body of empirical work has examined the personal relationships between teachers and students. This body of research argues that personal relationships between teachers and students are vital for students' social experiences in school. Personal relationships are measured in a variety of ways including teacher familiarity with, care for, and informal interactions with students (Hamre and Pianta 2001; 2005; Osterman 2000; Wentzel 1998). Research documents examples where teachers form very close personal relationships with their minority and immigrant students (Phelan, Davidson, and Cao 1991; Erickson 1987; Warikoo 2004). In one study of 32 racially and ethnically diverse high school students, researchers found that the majority of students reported having at least one caring teacher, and that even small efforts on behalf of teachers to reach out to students – such as asking about students' daily lives and encouraging them to persevere after receiving a low grade – were perceived as evidence of caring (Ozer, Wolf, and Kong 2008).

For immigrant students, personal relationships with teachers may be particularly important, given that many immigrant students must learn to navigate their new surroundings without the assistance of their parents. Immigrant parents often lack the English proficiency necessary to communicate with teachers and school officials (Njue and Retish 2010; Phelan, Yu, and Davidson 1994; Stanton-Salazar 2001; Suárez-Orozco, Suárez-Orozco, and Todorova 2009). Teachers can help newcomers, who may be unfamiliar with the educational system or mainstream norms, acclimate to their new environment and navigate obstacles both in and outside of the classroom (Rumbaut and Cornelius 1995). One study of a high school that served an immigrant Latino population found that some teachers were sensitive to stressors that many of

their students faced, such as discrimination and acclimating to their new country, and would talk with them outside of class about these issues (Sosa and Gomez 2012). They often maintained relationships with these students for several years after having taught them.

Through strong personal relationships with teachers, immigrant youth may learn important values that can aid them with their lives in the U.S. One such value is the desire to be a patriotic citizen, which has been linked to a wide array of positive outcomes, including a sense of belonging in school and in their new country (Banks 2013; Schwartz, Montgomery, and Briones 2006; Sherrod 2003; Sherrod, Flanagan, and Youniss 2002). For example, in one study of approximately 8000 young people from twenty six countries, immigrant youth who identified with their new country had higher life satisfaction, self-esteem, and reported fewer problems adjusting to the school environment (Berry et al. 2006).

However, not all teachers have positive personal relationships with their minority and immigrant students, and scholars argue that negative relationships may reflect teachers' prescriptions to racial stereotypes (Lee 2005; Louie 2012; Rosenbloom and Way 2004). An ethnographic study found that immigrant Latino middle school students pointed to their teachers' racial/ethnic discrimination against them – disparaging them for not speaking English, suggesting that they were not hard working or invested in school – as the primary reason for their lack of investment in school (Katz 1999). Another study of Chinese immigrant students found that they often felt invisible and poorly supported by school personnel (Yeh et al. 2008). These students reported that their personal qualities and academic achievements were often overlooked by teachers, who often did not pay attention to them. At the same time, school teachers and counselors reported being unfamiliar with or unaware of the many challenges that Chinese immigrant youth face.

Student perceptions of poor personal relationships with teachers are also more prevalent among immigrant youth than White students who have dropped out of school (Wayman 2002). One notable comparative study of 607 academically at-risk first-grade students found that teachers perceived their relationships with African Americans to be more negative than their relationships with White and Latino students (Hughes, Gleason, and Zhang 2005).

Overall, previous research provides evidence that interactions between teachers and minority and immigrant youth can result in both positive and negative outcomes: minority students and particularly newcomers may rely on teachers to help them navigate their surroundings, but they also report discriminatory experiences with staff. While it is clear that the ways that teachers perceive and interact with minority and immigrant students are important, gaps in knowledge exist in research on these topics. The majority of this research only examines personal relationships between teachers and students belonging to one racial/ethnic group. It remains unclear, therefore, whether teacher-student relationships differ across different groups of students. Existing work also only focuses on positive or negative interactions between teachers and students and does not illuminate the overall nature of teacher-student relationships. Finally, there is little empirical evidence supporting the claim that strong relationships with teachers foster students' feelings of belonging in the U.S.

Student, Teacher, and School Characteristics that Influence Student-Teacher Personal Relationships

In addition to students' racial and ethnic background and generation status, other factors such as student, teacher, and school characteristics may be associated with teacher-student personal relationships. Gender and social class are important lenses through which to interpret students' relationships with teachers. Teachers may have more favorable interactions with girls

and students from higher social class backgrounds than boys and youth with fewer class resources (Bettie 2002; Ispa-Landa 2013). Other student characteristics, such as the desire to engage with peers and academic activities, are also likely to influence personal relationships with teachers. Moreover, the ability of students to communicate in English with teachers can also help facilitate teacher-student relationships (Rosenbloom and Way 2004; Valdés 1998). For example, one study of Latino students in English-only and bilingual classrooms found that teachers perceived students in bilingual classrooms to be less academically and socially competent than students who had a better command of English (Edl, Jones, and Estell 2008).

Individual characteristics of teachers, such as their gender, race/ethnicity, age, and teaching experience, may influence their interactions with students. One study using the National Education Longitudinal Survey of 1998 (NELS:88) dataset found that even after considering student performance, White female teachers evaluated their White female students more highly than did White male teachers (Ehrenberg, Goldhaber, and Brewer 1995). The race of the teacher has also been shown to matter in terms of interactions between teachers and students (Beady and Hansell 1981; Dee 2004; Downey and Pribesh 2004; Steele and Aronson 1995). For example, one study found that White teachers criticized Black students more than Black teachers (Simpson and Erickson 1983).[2] Prior work has also shown that experienced teachers employ more effective teacher-student interaction styles than less experienced teachers (Brekelmans, Wubbels, and den Brok 2002; Enz and Christie 1997).

Finally, the school conditions may also influence personal relationships between teachers and students. Existing research has shown that school size and instructional space are important to interactions teachers have with students (Bourke 1986; Buckley, Schneider, and Shang 2005;

[2] Criticism included reprimands for social and academic behavior, including using phrases like "that's wrong" and "you could do better."

Lee and Smith 1997; Schneider 2003). One study of 5000 teachers and 23,000 students in Chicago schools found that teachers in smaller schools had a more positive attitude about their responsibility for students' learning (Lee and Loeb 2000). Another set of analyses that examined the facilities of 80 middle schools in Virginia found a positive association between better school facilities, such as adequate classrooms, and measures of school climate, such as the belief that teachers are committed to helping students (Uline and Tschannen-Moran 2008).

DATA AND METHODS

Data

The ELS:2002 is particularly well suited for the study of relationships between youth and their teachers. First, the teacher survey is linked to student respondents, and contains a variety of specific questions about perceptions and interactions teachers have with their students. Given that the ELS dataset is also nationally representative of sophomores in high school, any patterns in personal relationships between teachers and students can be generalized to the student population of the United States. Second, teacher surveys were collected for both English and Mathematics teachers, which allow researchers to examine whether different subject-matter teachers have varying personal relationships with students.

Measures

Dependent variables. *Teacher-student personal relationships* are operationalized in three ways from questions on the teacher surveys. First, one question captures *teacher familiarity with student*, on a scale of 1 – 3, indicating whether the teacher knows the student not well, well, or very well. Second, the indicator *teacher does not perceive student to be passive* is taken from a

survey question that asks the teacher whether the student appears to be excessively withdrawn or passive in class (coded 1 if the teacher does not perceive the student to be passive and 0 if the teacher does). Third, *teacher and student talk outside of class* is measured by a question asking teachers whether they have conversations with the student respondent outside of class. This variable is coded 1 if teachers and students have conversations and 0 if they do not have conversations.

For models that estimate students' feelings of belonging (which are based off of question from the student survey), two factor variables representing the six measures of English and Mathematics *teacher-student personal relationship* are used. Student report of belonging is operationalized in one binary variable, and draws from the twelfth grade student survey. The variable that the student finds it *important to be patriotic* is coded 1 if it is very or somewhat important that the student be patriotic and 0 if it is not important.

Student characteristics. In addition to the race/ethnicity, generation status, gender, family socioeconomic status, and age of the student respondent (descriptions of these variables can be found in Chapter 1), a number of other student characteristics are used in the analyses of this chapter. Two variables are used to represent whether the adolescent engages socially with peers and in other activities. The first is whether the *respondent has friend(s),* which is coded 1 if the respondent has at least one friend in school and 0 if the respondent does not have any friends in school. The second is whether the *respondent participates in extracurricular activities*, which is coded 1 if the respondent participates in at least one extracurricular activity and 0 if he or she does not participate. A factor variable representing the *respondent's English ability* is the average of four measures of English language: the student's ability to organize ideas logically and coherently, use coherent English grammar, elaborate on points, and express analytical,

critical, and creative thinking (the Cronbach's alpha for the factor variable is 0.95). Finally, a binary measure representing whether the *respondent is attentive in class* draws from a categorical variable representing how often the student is attentive in the English or Mathematics teacher's class (coded 1 if the student is attentive all or most of the time and 0 if the student is attentive some of the time, rarely, or never). In models that estimate teacher expectations for students, a variable representing the student's *10th grade GPA* is used.

Teacher characteristics. The analyses of this chapter utilize three measures of teacher characteristics. The first variable is a categorical variable representing the *teacher's race/ethnicity*, and includes categories for whether the teacher is White, Black, Asian, Latino (of any race), or Other (which includes Native Hawaiian or Other Pacific Islander or American Indian / Alaska Native). I also include a variable representing the *teacher's age*, measured in years, and the *years taught*, which represents the total number of years the teacher has taught in any school.

School characteristics. As a proxy for the number of students in the school, I use a measure of school size that is available with the ELS:2002 restricted-access dataset, and is based on information collected in the Common Core Data of schools.[3] From this measure, I create a categorical variable for school size quintile to account for potential non-linearities. From the categorical variable, I create a binary measure of *school size in highest quintile*, (0 = school is in the bottom four quintiles of school population, 1 = school is in the highest quintile of school population). *Adequate instructional space* is a binary variable that is based on a question from the base year administrator survey. The question asks the administrator how much the learning of 10th graders in the school is hindered by lack of instructional space, such as classrooms, and is

[3] The Common Core of Data (CCD) is a program that collects annually information on all public schools in the U.S., and is run by the National Center for Education Statistics.

coded 1 if administrators reported the learning of 10th graders was hindered by the lack of instructional space "not at all" or "very little", and 0 if "to some extent" or "a lot."

Analytic Strategy

This chapter first utilizes two-sample tests for proportion and two-sample t-tests to determine whether there are descriptive differences in personal relationship measures between English and Mathematics teachers and racial and ethnic and immigrant groups. In order to control for additional factors that may shape descriptive results, I employ logistic and ordered logistic regression to determine whether patterns of teacher-student personal relationships are shaped by other student, teacher, and school characteristics. I also use logistic regression to examine the relationship between teacher-student personal relationships early in high school and students' feelings of belonging later in high school. Appropriate primary sampling units and base-year and first follow-up sample weights are used to adjust for the complex sampling design.[4]

ANALYTICAL RESULTS

Bivariate Relationship between Race/Ethnicity and Generation Status and Teacher Relationships

Table 3.1 presents weighted means and proportions for all English teacher reports of their personal relationships with students, by race/ethnicity and generation status. Turning to the first outcome, English teachers report being less familiar with all generations of minority students than with third-generation White students. English teachers are also less familiar with first- and second-generation Blacks than with third-generation Blacks, although the difference is

[4] Models with interaction terms between race/ethnicity and generation status and gender and family socioeconomic status were considered in supplemental analyses. No interaction~~s~~ terms were found to be significant.

marginally significant between second- and third-generation Blacks. English teachers perceive certain minority students to be exceptionally passive or withdrawn. All generations of Asian students[5], first- and third-generation Latinos, and second-generation Blacks are more likely to be perceived as passive. For example, English teachers perceive a quarter of first-generation Asian youth and 20 percent of second- and third-generation Asian youth to be exceptionally passive or withdrawn, but only 12 percent of third-generation Whites to be the same. First-generation Latinos and second-generation Blacks are also perceived to be more passive than their third-generation intra-racial/ethnic counterparts. Finally, a lower percentage of English teachers report talking outside of class with a second-generation Asians (31 percent) compared to third-generation Whites (42 percent). There are also differences that are marginally significant between first-generation Asians and second- and third-generation Blacks, and third-generation Whites.

[Table 3.1 about here.]

Table 3.2 presents means and proportions of Mathematics teacher and student relationship measures by race/ethnicity and generation status, and is organized in the same fashion as Table 3.1. Mathematics teachers report being less familiar with all generations of Asians and Latinos, as well as third-generation Blacks. Mathematics teachers also perceive all generations of Asians and Latinos to be exceptionally passive or withdrawn. For example, approximately 20 percent of all generations of Latinos and are perceived to be passive by Mathematics teachers, which is 10 percentage points higher than for third-generation White students. Mathematics teachers also report less interaction outside the classroom with first- and

[5] The difference between third-generation Asians and Whites is marginally significant.

second-generation Latinos than with third-generation White students: teachers report talking with approximately 30 percent of Latino students outside of class and 35 percent of White youth.

[Table 3.2 about here.]

Multivariate Regression Analyses of English Teacher-Student Personal Relationships

Descriptive results show patterns of social disadvantage for minority and immigrant adolescents. These results may be shaped by other student, teacher, and school characteristics; therefore, I use multivariate regression to consider these other factors. Table 3.3 presents coefficients from ordered logistic and logistic regression models that estimate English teachers' familiarity with students (models 1), perception that students are not passive (models 2), and engagement in conversations with students outside of class (models 3). Within each of the three outcomes, model specification (a) includes dummy variables for the race/ethnicity-generation status, family socioeconomic status, gender, and age of the student. Model specifications (b), (c), and (d) include separately other characteristics of students, teachers, and schools. Model specification (e) is a full model that includes all other variables from previous models. Overall, Table 3.3 provides evidence that English teachers report having weaker social relationships with Asian students than White students, and these patterns are robust even in models that consider other student, teacher, and school characteristics.

In Model 1a, English teachers are less likely to be familiar with Asians, although the coefficients for first- and third-generation Asians are marginally significant. This pattern of disadvantage remains unchanged in Models 1b through 1d, where other student, teacher, and school characteristics are considered. In the full model (Model 1e), English teachers are still less

likely to be familiar with second-generation Asians, and there is no disadvantage for first-generation Asians.

The disadvantage that Asian students experience is even clearer for the second outcome: in all models, Asians are perceived to be passive.[6] For example, in Model 2a, English teachers have almost half the odds of not perceiving first-, second-, and third-generation Asians to be exceptionally passive compared to third-generation Whites.[7] Additionally, in Model 2b, English teachers have 35 percent lower odds of not perceiving first-generation Whites as exceptionally passive.[8] When school characteristics are included in Model 2d, all generations of Asians are still at a disadvantage, and second-generation Latinos are more likely not to be perceived as passive. In the final model, Model 2e, first- and third-generation Asians are still disadvantaged. The coefficient for second-generation Asians and Latinos are only marginally significant, and third-generation Blacks are less likely to be perceived as passive.

Asians also experience a disadvantage in terms of English teachers reporting not talking with them outside of class. In all models, English teachers are less likely to talk with second- and third-generation Asians outside of class. For example, in the final model, Model 3e, English teachers have 41 and 21 percent lower odds of talking with second- and third-generation Asians outside of class compared to third-generation Whites.[9] English teachers are also less likely to report talking with second-generation Blacks in the final model, although this coefficient is only marginally significant.

Other student, teacher, and school characteristics are also associated with relationships students have with English teachers. Teachers are more likely to report having closer

[6] In Model 2e, the coefficient for second-generation Asians is significant at the $p < 0.10$ level.

[7] e^-0.71 = 0.49, e^-0.59 = 0.55, e^-0.67 = 0.51

[8] e^-0.43 = 0.65

[9] e^-0.54 = 0.58, e^-0.23 = 0.79

relationships with students who participate in extracurricular activities, are attentive in English class, speak better English, are younger, and are female. There is no association between whether students have school friends and their student-teacher relationships. Additionally, in most models across the three outcomes, teachers have better personal relationships with students from families with higher socioeconomic backgrounds. Asian, Black, and Latino teachers also form stronger personal relationships with all students: they are more likely not to perceive students as passive. Finally, English teachers form stronger personal relationships with students in schools that are smaller and have better facilities. English teachers in schools with the largest number of students are less likely not to perceive students as passive, and are more likely to be familiar with students in schools with adequate instructional space.

[Table 3.3 about here.]

Multivariate Regression Analyses of Mathematics Teacher-Student Personal Relationships

Prior analyses find evidence that English teachers report having less intimate social relationships with Asian youth than with third-generation White students. Analyses of social relationships between Mathematics teachers and students reveal a different pattern: overall, Mathematics teachers report having worse personal relationships with Latino students than with White third-generation students. In contrast to patterns in the previous table, the lack of familiarity Mathematics teachers have with their Latino students disappears once school characteristics are considered. Therefore, the disadvantage Latino youth experience may be due to the fact that they attend, on average, poorly-resourced schools with large populations, which are two factors that hinder teacher-student relationships.[10] Table 3.4 shows coefficients from

[10] For example, second-generation Latinos attend schools that have on average 1000 more students than third-generation Whites.

regression models that estimate measures of Mathematics teacher-student personal relationships. The organization of Table 3.4 is the same as that of Table 3.3.

[Table 3.4 about here.]

Model 1a shows that Mathematics teachers report being less familiar with all generations of Latinos, as well as third-generation Asians.[11] These patterns of disadvantage remain net of other student and teacher characteristics (Models 1b and 1c). However, once school characteristics are considered in Models 1d and 1e, there is no overall disadvantage for Latino students. In all models, Mathematics teachers are less familiar with third-generation Asians.

Turning to teachers' perceptions of student passivity, Model 2a provides further evidence of disadvantage for second- and third-generation Latinos. For example, Mathematics teachers have 23 percent lower odds of not perceiving second- and third-generation Latinos as exceptionally passive or withdrawn.[12] The disadvantage remains in Models 2b – 2d; however, once student, teacher, and school characteristics are considered in the Model 2e, only third-generation Latinos are disadvantaged, and the coefficient is marginally significant.

There is also some evidence that Mathematics teachers are less likely to talk with students belonging to certain immigrant groups. In Model 3c, second-generation Latinos have 19 percent lower odds of talking with their Mathematics teachers outside of class[13], although the coefficient is not significant in other models. In the final model, Model 3e, second-generation Latinos are still disadvantaged, but the coefficient is now marginally significant.

Associations between Mathematics teacher-student relationship measures and variables representing other student, teacher, and school characteristics are similar to patterns in the

[11] The coefficients for first- and second-generation Latinos is significant at the $p<0.10$ level.
[12] e^-0.26 = 0.77
[13] e^-0.21 = 0.81

previous table. Mathematics teachers report having stronger personal relationships with students who participate in extracurricular activities, are attentive in class, and have a better command of English. They also are more familiar with students from higher socioeconomic backgrounds. Asian, Black, and Latino teachers are more likely not to perceive students as passive and more likely to talk with students outside of class; the same is true for female teachers. Similar to findings with English teachers and students, Mathematics teachers in larger schools are less likely to form strong personal relationships with students. Mathematics teachers are also more likely to be familiar with students in schools that have better resources.

To provide an overall portrait of teacher-student personal relationships, Table 3.5 presents coefficients from linear regression models that estimate factor variables representing personal relationships English and Mathematics teachers report having with students. Models 1 estimate students' personal relationships with English teachers and Models 2 focus on Mathematics teachers. Similar to Tables 3.3 and 3.4, model specification (a) considers the race/ethnicity-generation status, family socioeconomic status, gender, and age of the student. Model specification (b), (c), and (d) include other student, teacher, and school characteristics, respectively. Model specification (e) includes all other student, teacher, and school variables from previous models.

Overall, Table 3.5 confirms patterns from the two previous tables: English teachers have tepid relationships with second- and third-generation Asians and Mathematics teachers have weak relationships with first- and second-generation Latinos. Evidence of disadvantage in Table 3.5 is robust to student, teacher, and school characteristics (Models 1e and 2e). These patterns are in contrast to findings from Table 3.4 that show that school characteristics account for Latino disadvantage from their Mathematics teachers. Moreover, English teachers report having weak

relationships with second-generation Black students, but have stronger relationships with third-generation Black students. Teachers also have closer personal relationships with students who participate in extracurricular activities, have a stronger command of English, are more attentive in class, come from higher socioeconomic backgrounds, are older, and are female. Unlike in previous tables, there is not a clear association between the race/ethnicity of teachers and the personal relationships they form with students, although female Mathematics teachers form stronger relationships with students (Models 2c and 2e). Larger school size is again associated with weaker personal relationships, and there is evidence that English teachers in schools with adequate instructional space have better relationships with students.

[Table 3.5 about here.]

Multivariate Regression Analyses of Students' Feelings of Belonging as a Function of Teacher-Student Personal Relationships

Previous tables provide evidence that teachers report having weaker personal relationships with minority and immigrant youth than with third-generation White students. However, it is unclear whether teacher personal relationships are associated with students' feelings of belonging. Table 3.6 presents coefficients from logistic regression models that estimate whether students report it is important to be patriotic. Model 1 includes only two variables representing English and Mathematics teacher relationships with students in 10^{th} grade. Model 2 includes only dummy variables for the race/ethnicity and generation-status of the student and variables representing the family socioeconomic status, gender, and age of the student. Model 3 includes both measures of English and Mathematics teachers' relationships with students and student characteristics variables.

Overall, personal relationships with teachers early on in high school are associated with a higher probability that students report feelings of citizenship and belonging two years later. In Model 1, stronger English and Mathematics teacher relationships with students in 10th grade is associated with greater feelings of patriotism in 12th grade, although the coefficient for English teacher-student relationships is only marginally significant. In Model 2, first-generation Asians and third-generation Blacks are less likely to find it important to be patriotic than do third-generation Whites. First-generation Blacks find it more important to be patriotic than third-generation Whites. In Model 3, the relationship between Mathematics teachers and students is still significant and associated with greater importance placed on patriotism. First-generation Asians and third-generation Blacks are still less likely to find it important to be patriotic, while first-generation Blacks find it more important to be patriotic than third-generation Whites do.

[Table 3.6 about here.]

DISCUSSION

Summary of Findings

Results from this study provide evidence that certain racial/ethnic minority and immigrant groups experience social disadvantage in terms of having tepid relationships with their teachers, as reported by teachers. Patterns of teacher-student personal relationships vary by subject, race/ethnicity, and generation status. English teachers report having worse personal relationships with Asian students than with third-generation White students. The overall personal relationship Mathematics teachers have with Latino students is weaker. When other characteristics of students, teachers, and schools are considered, patterns of social disadvantage do not change substantially on overall measures of teacher-student personal relationships.

While patterns of personal relationships are robust to student, teacher, and school characteristics, these characteristics are associated with personal relationships. Both English and Mathematics teachers form stronger relationships with students who come from higher socioeconomic backgrounds, are female, participate in extracurricular activities, are more attentive in class, and have better command of English. Minority teachers form stronger relationships with all students, although this pattern was only found on individual measures and not the summative measure of teacher-student relationships. Having a large student population in the school was associated with weaker personal relationships between teachers and students. Moreover, having adequate school resources was linked to stronger relationships. On one measure of personal relationships, Mathematics teacher familiarity with students, factoring in school characteristics, accounted for the disadvantage Latinos experienced. This pattern suggests that the net disadvantage Latino youth face may be due to the larger size and lower levels of resources available in their schools. Finally, strong teacher-student relationships early on in high school are also associated with students' feelings of belonging later on in high school, as measured by the importance of being patriotic. Certain immigrant and minority groups feel that being patriotic is less important than third-generation Whites do, and this difference remains in models that consider teacher-student personal relationships.

Implications

Results showing that teachers form weaker personal relationships with minority and immigrant students, which in turn is associated with lower feelings of belonging, suggest that, on a large scale, certain groups may not be exposed to valuable forms of social capital that are conducive to their socialization. And while teacher-student personal relationships matter in terms of students' feelings of belonging in the U.S., racial/ethnic and generational disparities still

remain after factoring in these relationships. Therefore, the assumption that schools and teachers socialize youth who may be unfamiliar with U.S. norms and customs may not be correct. Patterns of disadvantage among specific groups of adolescents may also serve as evidence of the subtle discrimination minority and immigrant youth may experience in their daily lives. Qualitative research has revealed that racial minority students often report experiences of discrimination by their teachers (Carter 2005; Tuan 1998). These accounts usually include active discrimination – verbal name calling, direct mentions of the race of the student and misbehavior, etc. – and suggest that other forms of discrimination may exist. In particular, passive discrimination may shape how familiar teachers are with certain students, perceptions teachers may have of student passivity, and teacher interactions with students. The results of this paper suggest that these forms of social disadvantage may be due to potential discrimination that is widespread. Moreover, minority and immigrant disadvantage are robust to student, teacher, and school characteristics, which suggest the pervasive and pertinacious nature of racist ideologies.

Different patterns in interactions between English and Mathematics teachers and Asian and Latino students suggest that distinct stereotypes of each group may shape relationships. For Asian Americans, two stereotypes are described by academic literature. First, the "Model Minority" stereotype assumes that Asian Americans are academically successful, particularly in Mathematics (Kao 1995; Lee 1996; Tuan 1998). Another prominent stereotype presumes that Asian American students are quiet and passive in social interactions (Yeh et al. 2008). Both Mathematics and English teachers may have more tepid relationships with Asian American students because they assume Asian Americans are innately passive. However, Mathematics teachers may also believe they are innately talented in their subject, which can promote closer relationships with Asian American youth. Thus, the assumption that Asian American youth are

passive may explain the result that youth are less close with their English instructors, whereas the Model Minority stereotype may counteract such social disadvantage with their Mathematics teachers.

My findings suggest that different stereotypes may shape Latino students' relationships with their teachers, particularly their isolation from Mathematics but not English teachers. In contrast to stereotypes of Asian Americans as high achieving in Mathematics and passive, studies suggest that teachers hold stereotypes of Latinos as less competent in Mathematics (Bouchey and Harter 2005), while no studies suggest that Latinos are stereotyped as particularly passive. Teachers' perceptions that Latino youth are less competent in Mathematics than Whites may explain why Latino adolescents are more isolated from their Mathematics teachers. Regarding the relationships between English teachers and their Latino students, there is no previous empirical evidence to suggest that Latinos are or should be isolated from their English teachers, which my study also finds. There is a widespread notion that Latino students struggle with English. This stereotype may hinder how English teachers develop relationships with their Latino students. However, I control for English language ability in my analyses and still find that English teachers do not form weaker personal relationships with their Latino students compared to White students. It may be the case that many Latino students are enrolled in English language learning classes with teachers who may be sensitive to their particular needs.

I also find that closer teacher-student relationships are associated with students' stronger feelings of belonging in the U.S. However, certain minority and immigrant students still identify less with the U.S, regardless of the relationships teachers form with them. Personal relationships with other key social actors, such as peers, parents, and other important adults may explain these

disparities, and future research should investigate the role of these relationships in the social acclimation of minority and immigrant youth.

Although this paper provides evidence of both distinct social disadvantage that minority and immigrant youth experience and equity in teacher expectations, there are limitations to this chapter. First, only three available measures of teacher and student relationship are used in this chapter. However, even with these conservative and limited measures, clear differences between teacher-student relationships emerge, which suggests that other measures of teacher and student relationships may also reveal similar patterns. Second, few measures of belonging and understanding of social norms are available in the follow-up student survey in the 12^{th} grade. Third, racial/ethnic categories and generation status used in this chapter are, at best, an approximation of the variety of racial/ethnic backgrounds reflected in the sample.

Despite these limitations, the findings in this chapter provide strong evidence that teachers have weak personal relationships with certain groups of minority and immigrant youth. The findings of this paper may reflect a subtle, more "passive" form of racial discrimination, and are consistent with racist stereotypes that work to disadvantage certain racial/ethnic groups.

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TABLES

Table 3.1 Descriptive Means and Proportions of English Teacher and Student Personal Relationship Measures, by Race/Ethnicity and Generation

	Teacher familiarity with student				Teacher does not perceive student to be passive			Teacher and student talk outside of class	
	Mean			Standard deviation	Proportion			Proportion	
First–generation Asian	2.74	***		0.47	0.76	***		0.38	*
Second–generation Asian	2.74	***		0.5	0.8	***		0.31	***
Third–generation+ Asian	2.67	***		0.58	0.8	*		0.37	
First–generation Latino	2.78	***		0.48	0.8	***	+	0.41	
Second–generation Latino	2.78	***		0.46	0.87			0.42	
Third–generation+ Latino	2.79	***		0.44	0.84	**		0.39	
First–generation Black	2.96	**	+++	0.2	0.84			0.49	
Second–generation Black	2.67	***	+	0.55	0.75	***	++	0.32	*
Third–generation+ Black	2.79	***		0.46	0.86			0.39	*
First–generation White	2.86			0.35	0.82			0.44	
Second–generation White	2.82			0.38	0.9			0.44	
Third–generation+ White	2.84			0.39	0.88			0.42	
Overall	2.82			0.42	0.87			0.41	

Note: The question asking whether teachers remember student is on a scale of 1 to 3 (1 = not well, 2 = well, 3 = very well). Two-sample t-tests were used for English teacher's familiarity with student. Two-sample tests of proportion were used for other questions.

* represent statistical difference from third-generation+ White. + represents statistical difference from third-generation+ co-racial/ethnic counterpart. Appropriate weights were used for estimates. *** / +++ $p < 0.01$, ** / ++ $p < 0.05$, * / + $p < 0.10$.

Table 3.2 Descriptive Means and Proportions of Mathematics Teacher and Student Personal Relationship Measures, by Race/Ethnicity and Generation

	Teacher familiarity with student				Teacher does not perceive student to be passive			Teacher and student talk outside of class	
	Mean			Standard deviation	Proportion			Proportion	
First–generation Asian	2.73	***		0.52	0.83	***		0.33	
Second–generation Asian	2.75	***		0.49	0.86	***		0.31	
Third–generation+ Asian	2.65	***	+++	0.57	0.88	**		0.37	
First–generation Latino	2.69	***	+	0.52	0.78	***	+	0.30	*
Second–generation Latino	2.73	***		0.51	0.82	***		0.29	***
Third–generation+ Latino	2.79	**		0.42	0.84	***		0.33	
First–generation Black	2.81			0.40	0.91			0.36	
Second–generation Black	2.78			0.42	0.83		++	0.37	
Third–generation+ Black	2.76	***		0.45	0.87			0.35	
First–generation White	2.76			0.52	0.83			0.37	
Second–generation White	2,85			0.38	0.90			0.34	
Third–generation+ White	2.83			0.40	0.88			0.35	
Overall	2.81			0.42	0.87			0.35	

Note: The question asking whether teachers remember student is on a scale of 1 to 3 (1 = not well, 2 = well, 3 = very well). Two-sample t-tests were used for Mathematics teacher's familiarity with student. Two-sample tests of proportion were used for other questions.

* represent statistical difference from third-generation+ White. + represents statistical difference from third-generation+ co-racial/ethnic counterpart. Appropriate weights were used for estimates. *** / +++ $p < 0.01$, ** / ++ $p < 0.05$, * / + $p < 0.10$.

Table 3.3 Coefficients from Ordered Logistic and Logistic Regression Models Estimating English Teacher-Student Personal Relationship Measures

	Teacher familiarity with student					Teacher does not perceive student to be passive					Teacher and student talk outside of class				
	(1a)	(1b)	(1c)	(1d)	(1e)	(2a)	(2b)	(2c)	(2d)	(2e)	(3a)	(3b)	(3c)	(3d)	(3e)
Student characteristics															
First–generation Asian	-0.51*	-0.51*	-0.46*	-0.44*	-0.40	-0.71**	-0.81**	-0.68**	-0.64**	-0.73**	-0.12	-0.15	-0.14	-0.09	-0.14
Second–generation Asian	-0.57**	-0.60**	-0.50**	-0.52**	-0.51**	-0.59**	-0.74**	-0.54**	-0.52**	-0.65*	-0.45**	-0.53**	-0.48**	-0.41**	-0.54**
Third–generation+ Asian	-0.88*	-0.88*	-0.74*	-0.91*	-0.78*	-0.67**	-0.67*	-0.58***	-0.65**	-0.56**	-0.23***	-0.22*	-0.23***	-0.22***	-0.23**
First–generation Latino	-0.15	-0.05	-0.07	-0.11	0.05	-0.30	-0.15	-0.25	-0.22	-0.03	0.09	0.19	0.05	0.13	0.19
Second–generation Latino	-0.20	-0.18	-0.10	-0.16	-0.05	0.14*	0.20	0.19*	0.24***	0.34*	0.16	0.20	0.12	0.21*	0.21*
Third–generation+ Latino	-0.27	-0.20	-0.19	-0.27	-0.12	-0.17	-0.02	-0.11	-0.13	0.09	-0.04	0.07	-0.07	-0.02	0.06
First–generation Black	1.63	1.76	1.71	1.66	1.86	-0.11	0.12	-0.11	-0.06	0.15	0.36	0.52	0.34	0.40	0.52
Second–generation Black	-0.84*	-0.71	-0.81	-0.76	-0.60	-0.87	-0.55	-0.86	-0.80	-0.50	-0.42*	-0.22	-0.39**	-0.39*	-0.17*
Third–generation+ Black	-0.20	-0.12	-0.02	-0.18	0.06	0.01	0.20	-0.00	0.02	0.20**	-0.04	0.08	-0.06	-0.04	0.06
First–generation White	0.08	0.13	0.08	0.13	0.17	-0.46*	-0.43**	-0.30	-0.40*	-0.23	0.09	0.11	0.04	0.12	0.07
Second–generation White	-0.21	-0.17	-0.20	-0.22	-0.16	0.23	0.36	0.27	0.25	0.42	0.08	0.13	0.08	0.09	0.15
Female	0.00	-0.09	0.01	0.01	-0.08	0.19	-0.07	0.19	0.20	-0.07	0.22***	0.07**	0.21**	0.22**	0.06**
Age	-0.11**	-0.06*	-0.10***	-0.12**	-0.07***	-0.15	-0.05	-0.16	-0.16	-0.07	0.06*	0.12**	0.04	0.06*	0.10**
Family socioeconomic status	0.19**	0.06	0.18**	0.19**	0.05	0.29**	0.01	0.29**	0.29**	0.02	0.19**	0.03*	0.20**	0.20**	0.04*
Student has friend(s)		0.20			0.15		0.25			-0.22		-0.06			0.32
Student participates in extracurricular activities		0.33***			0.32**		0.61***			-0.17*		0.31			0.13
Student's English ability (scale)		0.28***			0.28***		0.57***			0.01		0.31***			0.00
Student is attentive in class		0.01			-0.01		0.56**			0.00		0.47***			-0.00
Teacher characteristics															
Female			0.06		0.07			0.24**		0.19			0.10		0.10
Asian (reference: White)			-0.65		-0.58			-0.01		0.60***			0.17		0.32
Black			-0.47		-0.47			-0.03		0.58***			0.04		0.07
Latino			-0.50*		-0.49*			-0.25		0.53**			0.26		0.32
Other			-0.52**		-0.48***			-0.21		0.25**			0.12		0.13
Age			0.00		0.00			0.01		0.26			0.00		0.00
Years of experience			-0.01		-0.01			0.01		0.01			-0.00		-0.00
School characteristic															
School size in highest quintile				-0.11	-0.08				-0.19**	-0.18*				-0.11	-0.12
Adequate instructional space				0.33**	0.30**				-0.12	-0.09				-0.03*	-0.01
Observations	8700	8700	8600	8700	8600	9720	9720	9600	9720	9600	9780	9780	9670	9780	9670

*** p<-0.01, ** p<-0.05, * p<-0.1

Table 3.4 Coefficients from Ordered Logistic and Logistic Regression Models Estimating Mathematics Teacher-Student Personal Relationship Measures

	Teacher familiarity with student					Teacher does not perceive student to be passive					Teacher and student talk outside of class				
	(1a)	(1b)	(1c)	(1d)	(1e)	(2a)	(2b)	(2c)	(2d)	(2e)	(3a)	(3b)	(3c)	(3d)	(3e)
Student characteristics															
First–generation Asian	-0.45	-0.47	-0.46	-0.30	-0.35	-0.33	-0.46	-0.35	-0.25	-0.44	-0.08	-0.13**	-0.09**	-0.02	-0.11**
Second–generation Asian	-0.41	-0.42*	-0.41	-0.23	-0.26	-0.17	-0.27*	-0.17	-0.08	-0.21	-0.15	-0.19	-0.15	-0.09	-0.14
Third–generation+ Asian	-0.90**	-0.90**	-0.94***	-0.89**	-0.96***	-0.06	-0.04	-0.07	-0.04	-0.01	0.09	0.11	0.11	0.11	0.14
First–generation Latino	-0.52*	-0.50*	-0.55*	-0.28	-0.33	-0.48	-0.45*	-0.43	-0.37	-0.30	-0.09	-0.06	-0.12	-0.01	-0.02
Second–generation Latino	-0.32*	-0.29*	-0.42**	-0.04	-0.14	-0.26**	-0.18**	-0.20*	-0.13***	-0.00	-0.15	-0.10	-0.21***	-0.06	-0.06*
Third–generation+ Latino	-0.23**	-0.19*	-0.28**	-0.10	-0.13	-0.26**	-0.16**	-0.20***	-0.20**	-0.04*	-0.06	-0.00	-0.09	-0.02	0.01
First–generation Black	-0.13	-0.08	-0.16	0.04	0.06	0.49	0.66	0.54	0.56	0.77	0.08	0.13*	-0.02	0.13	0.08
Second–generation Black	-0.36	-0.33	-0.37	-0.24	-0.25	-0.37	-0.25	-0.34	-0.28	-0.15	0.07	0.16	0.09	0.12	0.22
Third–generation+ Black	-0.23*	-0.21*	-0.26**	-0.21*	-0.21*	0.03	0.18	0.02	0.04	0.17*	0.06	0.15	0.02	0.07	0.12
First–generation White	-0.25	-0.24	-0.25	-0.18	-0.19	-0.44	-0.56	-0.43	-0.39	-0.54	0.08	0.07	0.07	0.11	0.06
Second–generation White	0.13	0.16	0.10	0.22	0.23	0.23	0.32	0.23	0.27	0.36	-0.05	-0.00	-0.08	-0.02	-0.02
Female	0.10**	0.05	0.09**	0.11**	0.04	0.34**	0.14**	0.32**	0.35**	0.13*	0.23***	0.12***	0.21**	0.23***	0.10**
Age	0.07	0.09	0.06	0.06*	0.08**	-0.08**	-0.01	-0.08**	-0.08**	-0.01	0.10*	0.15**	0.09*	0.10*	0.14**
Family socioeconomic status	0.22**	0.16**	0.22**	0.25**	0.18**	0.27	0.08	0.27	0.29	0.09	0.19*	0.08	0.19*	0.20*	0.08
Student has friend(s)		0.06			0.06		0.31**			-0.40**		-0.16			0.31
Student participates in extracurricular activities		0.37*			0.33*		0.62***			0.22		0.41*			0.04
Student's English ability (scale)		-0.00			0.01		0.20***			0.00		0.08***			0.01**
Student is attentive in class		0.32***			0.32***		0.93***			-0.00		0.70***			-0.02***
Teacher characteristics															
Female			0.32		0.31			0.36***		0.30**			0.22*		-0.15
Asian (reference: White)			-0.11		-0.08			0.05		0.60***			-0.14		0.42*
Black			0.07		0.08			-0.10		0.20***			0.24		0.10***
Latino			0.34		0.33			-0.28**		0.93***			0.33		0.72***
Other			0.31*		0.45**			0.18		0.34**			-0.00		0.21*
Age			0.01		0.01			-0.00		0.06*			0.00		-0.11
Years of experience			-0.01		-0.01			0.00		-0.05			-0.02***		0.29
School characteristic															
School size in highest quintile				-0.56***	-0.54***				-0.26**	-0.24**				-0.20**	-0.20***
Adequate instructional space				0.21***	0.23**				0.00	0.06				0.07	0.05
Observations	9120	9120	9040	9120	9040	10,120	10,120	10,040	10,120	10,040	10,170	10,170	10,080	10,170	10,080

*** p<-0.01, ** p<-0.05, * p<-0.1

Table 3.5 Coefficients from Linear Regression Models Estimating Personal Relationship Measures with English and Mathematics Teachers

	Personal relationship with English teacher					Personal relationship with Mathematics teacher				
	(1a)	(1b)	(1c)	(1d)	(1e)	(2a)	(2b)	(2c)	(2d)	(2e)
Student characteristics										
First–generation Asian	-0.18	-0.19	-0.18	-0.16	-0.17	-0.13	-0.16	-0.14	-0.09	-0.13
Second–generation Asian	-0.24**	-0.27**	-0.24**	-0.22**	-0.25**	-0.10	-0.12*	-0.10	-0.06	-0.08
Third–generation+ Asian	-0.29***	-0.27**	-0.26***	-0.28***	-0.26***	-0.18	-0.17	-0.17	-0.17	-0.16
First–generation Latino	-0.03	0.01	-0.02	-0.01	0.04	-0.17**	-0.15**	-0.16**	-0.11*	-0.09**
Second–generation Latino	0.01	0.03	0.03	0.04	0.07	-0.12***	-0.09**	-0.13***	-0.05**	-0.05**
Third–generation+ Latino	-0.05**	-0.01	-0.04*	-0.04**	0.01	-0.08***	-0.05*	-0.07*	-0.05**	-0.02
First–generation Black	0.15	0.21	0.15	0.16	0.23	0.06	0.09	0.05	0.10	0.11
Second–generation Black	-0.31**	-0.22***	-0.30***	-0.29**	-0.20***	-0.09**	-0.06**	-0.08*	-0.05***	-0.02*
Third–generation+ Black	-0.02***	0.03	-0.01	-0.02**	0.04**	-0.02	0.01	-0.03	-0.02	0.01
First–generation White	-0.02	-0.01	-0.01	-0.01	0.01	-0.11	-0.12	-0.12	-0.09	-0.11
Second–generation White	0.02	0.05	0.03	0.03	0.06	0.05	0.08	0.04	0.07	0.09
Female	0.06	-0.01	0.06	0.06	-0.01	0.09***	0.04***	0.08***	0.09***	0.03**
Age	-0.02**	0.00	-0.03***	-0.03**	-0.00	0.01*	0.03**	0.01	0.01**	0.03***
Family socioeconomic status	0.09**	0.02	0.09**	0.09**	0.02	0.09***	0.04***	0.09**	0.09**	0.04**
Student has friend(s)		0.06			0.04		0.02			-0.01**
Student participates in extracurricular activities		0.17**			0.17**		0.18**			0.17**
Student's English ability (scale)		0.14***			0.14***		0.04***			0.04***
Student is attentive in class		0.16**			0.15**		0.28***			0.28***
Teacher characteristics										
Female			0.06		0.06			0.12**		0.11**
Asian (reference: White)			-0.05**		0.02			-0.07		-0.06
Black			-0.06		-0.05			0.03		0.04
Latino			-0.06*		-0.04			0.05		0.04
Other			-0.04		-0.04			0.04		0.07**
Age			0.00		0.00			0.00		0.00
Years of experience			-0.00		-0.00			-0.00*		-0.01*
School characteristic										
School size in highest quintile				-0.06***	-0.05**				-0.14***	-0.13***
Adequate instructional space				-0.06	-0.05				0.03	0.04**
Constant	0.37**	-0.35***	0.35**	0.41**	-0.31**	-0.26*	-0.90**	-0.28**	-0.03	-0.70***
Observations	9930	9930	9800	9930	9800	10,300	10,300	10,210	10,300	10,210

*** p<-0.01, ** p<-0.05, * p<-0.1

Table 3.6 Coefficients from Logistic Regression Models Estimating 12th Grade Report of the Importance of Being Patriotic

	(1)	(2)	(3)
Teacher-student personal relationships in 10th grade			
English teacher	0.11*		0.10
Mathematics teacher	0.13**		0.11**
Student characteristics			
First–generation Asian		-0.55**	-0.53***
Second–generation Asian		-0.37	-0.34
Third–generation+ Asian		0.43	0.47
First–generation Latino		-0.29	-0.28
Second–generation Latino		-0.30	-0.29
Third–generation+ Latino		-0.16	-0.14
First–generation Black		1.65**	1.63***
Second–generation Black		-0.52	-0.48
Third–generation+ Black		-0.44***	-0.44***
First–generation White		-0.83*	-0.82*
Second–generation White		-0.24	-0.25
Family socioeconomic status		-0.09	-0.11
Female		0.06*	0.05
Age		0.10**	0.10**
Observations	9950	9950	9950

*** p<-0.01, ** p<-0.05, * p<-0.1