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# Exploring rural Latino/a middle school student perceptions of their futures and careers

Mollie Katherine Burke  
*University of Iowa*

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EXPLORING RURAL  
LATINO/A MIDDLE  
SCHOOL STUDENT  
PERCEPTIONS OF THEIR  
FUTURES AND CAREERS

by

Mollie Katherine Burke

A thesis submitted in partial fulfillment  
of the requirements for the Doctor of  
Philosophy degree in Psychological and  
Quantitative Foundations (Counseling  
Psychology)  
in the Graduate College of  
The University of Iowa

December 2015

Thesis Supervisor: Associate Professor Saba R. Ali

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Graduate College  
The University of Iowa  
Iowa City, Iowa

CERTIFICATE OF APPROVAL

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PH.D. THESIS

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This is to certify that the Ph.D. Thesis of

Mollie Katherine Burke

has been approved by the Examining Committee  
for the thesis requirement for the Doctor of Philosophy  
degree in Psychological and Quantitative Foundations (Counseling  
Psychology) at the December 2015 graduation.

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Finally, to the schools and students of Project HOPE. This is all because of you.

## **ABSTRACT**

The population of Latino/a individuals and students in the United States continues to rise (US Census Bureau, 2012). Moreover, Latino/a students have been shown to have increased concern for dropping out, and for not believing they can achieve positive career outcomes (Pew Hispanic Center Report, 2009). As a result of these concerns in this increasing population, it is important to further explore the career-related concerns, specifically supports and barriers, among Latino/a students. The present study utilized qualitative interviews as a means of gaining a greater understanding of how rural middle school Latino/a students perceive their futures, including supportive factors to their career development, as well as barriers that may impede them from achieving their career goals. The data were analyzed using Consensual Qualitative Research (Hill, 2012). Results indicate that while students perceived potential barriers in their future, they also believed that they would be able to pursue and achieve their desired futures, and were able to generate individuals and resources that could help them to do so. These findings contrast previous research regarding Latino/a career development, and also highlight the potential importance of career interventions for rural Latino/a youth.

*Keywords:* career, supports, barriers, Latino, middle school, rural.

## **PUBLIC ABSTRACT**

The population of Latino/a individuals and students in the United States continues to rise (US Census Bureau, 2012). Moreover, Latino/a students have been shown to have increased concern for dropping out, and for not believing they can achieve positive career outcomes (Pew Hispanic Center Report, 2009). As a result of these concerns in this increasing population, it is important to further explore the career-related concerns, specifically supports and barriers, among Latino/a students. The present study utilized qualitative interviews as a means of gaining a greater understanding of how rural middle school Latino/a students perceive their futures, including supportive factors to their career development, as well as barriers that may impede them from achieving their career goals. Results indicated that while students perceived potential barriers in their future, they also believed that they would be able to pursue and achieve their desired futures, and were able to generate individuals and resources that could help them to do so. These findings contrast previous research regarding Latino/a career development, and also highlight the potential importance of career interventions for rural Latino/a youth. Continued research and intervention with rural Latino/a students may be beneficial in promoting educational and career beliefs and behaviors.

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## PREFACE

As a part of one of my interviews for this project, I asked the student if he had any questions for me. He did; *Why would you guys take time out of your day to come here and educate us?* At the time, I gave him a response about my passion for careers, and the joy that I found in helping others learn about themselves and explore their options. What I wish I had said, and what comes back to me when things get difficult, is that *this work matters*. He matters. I feel deeply honored and humbled to have been able to meet these students, many of whom approached the program with curiosity, genuineness, and gratitude. The question he asked me spoke volumes, and has given me the drive to try and speak volumes for them, to try and help their voices be heard. Some of the students I met have endured life experiences and barriers that I have never had to face, and at such young ages they are engaging their struggles and growing in ways that give me hope for the world and the workforce that they will enter into. Students like this are the reason that I have made Project HOPE an integral part of my life for the last five years, and why this dissertation means more to me than a step on the path to a degree. Because even though I didn't say it at the time, my hope in the program and with this project is to honor these wonderful students, and to make it clear – I think he matters.

## Chapter 1: Introduction

“the portrait of empirical findings on the career development of Hispanic youth is, while promising, vague and incomplete, yielding inconsistent results” (Perry & Calhoun-Butts, 2012, p. 481).

The above quote characterizes the state of research and information on the career development of Hispanic/Latino youth today. While research currently exists on the population, the results are often contradictory, or even absent. This dearth of information is problematic in general as a research concern, but is also elevated by the rapid increase of the Latino/a population within the United States. As of 2011, people who identify as Hispanic/Latino/a made up 16.7% of the United States total population; this is in comparison to 12.5% in 2000, and less than 9% in 1990 (U.S. Census Bureau, 2012). These numbers represent the rapid increase in the Latino/a population and call researchers and practitioners to a greater awareness of the needs of this population. More specifically, there is a need to have more educational and career services for this rapidly growing population.

To further illustrate this need, the Pew Hispanic Center Report (2009) found that Latino/a youth were more likely than other racial/ethnic groups (i.e., White, Black, and Asian groups) to drop out of high school. As of 2010, the national high school dropout rate in the United States was 3.4%; however, the dropout rate among Latino/a-identified individuals was 5.0%. Furthermore, in the state of Iowa, the state-wide dropout rate was consistent with the national rate at 3.4%, but the dropout rate among Latino/a students was twice that at 6.9% (National Center for Education Statistics [NCES], 2012). These statistics identify a key problem in the United States as a whole, namely that Latino/a students are dropping out of high school at higher rates than many of their peers. Moreover, while nearly 90% of Latino/a youth believed “that a

college degree is important for getting ahead in life” the Pew Hispanic Center Report found that, “just under half of Latinos ages 18 to 25 say they plan to get a college degree” (p. 10). When asked about their reasoning for this, students identified finances, “dislike of school,” and “belief that they do not need more education for the careers they plan to pursue” as reasons (p. 10). As is evident from these findings, there is a gap between aspirations and achievement for Latino students (Pew Hispanic Center Report, 2009; Flores, Navarro, & DeWitz, 2008; Yowell, 2002). At a more local level, the disparity between state-wide dropout rates in Iowa and the dropout rate of Latino/a students becomes even more significant. That is, in the state of Iowa, Latino/a students are dropping out of high school at over twice the rate of the average (NCES, 2012).

Furthermore, when looking at the state of employment among Latino/a individuals, it is notable that while 67.5% of Latino/a individuals participate in the labor force (which is higher than all other racial groups), only 69% of these individuals had completed high school, which is significantly lower than all other racial groups (U.S. Bureau of Labor Statistics [BLS], 2011). In addition, educational statistics show that while 57% of Asian individuals, 35% of White individuals and 24% of Black individuals have completed a bachelor’s degree, only 16% of Latino/a individuals have achieved the same education levels (BLS, 2011). These statistics demonstrate that while Latino/a individuals may be participating in the national labor force, they may be limited in their job choice based on lower educational attainment, both at the high school and college level.

In regards to job choice and trends, the Bureau of Labor Statistics (2011) also found that Latino/a and Black individuals were “less likely to be in management, professional, and related occupations – the highest paying major job category – than Asian and White workers” (p. 2). Moreover, “nearly one-half of employed Hispanic men were in two job groups – natural

resources, construction, and maintenance occupations; and production, transportation, and material moving occupations” (p. 2) which is a significantly higher rate than other racial groups. Among Latino/a women, 65% were in “service occupations and sales and office occupations” (p.2) which is also at a significantly higher rate than all other racial groups. To further explain these findings, the Bureau of Labor Statistics writes that “In 2010, Hispanics accounted for 14% of all employed workers but were overrepresented by a substantial amount in several job categories, including drywall installers (59%), grounds maintenance workers (44%), construction laborers (43%), and maids and housekeeping cleaners (41%)” (p. 2). As evidenced by these statistics, Latino/a individuals are significantly more likely to be employed in occupations that primarily consist of physical and manual labor, and which offer less pay and less opportunity for advancement.

In fact, the average full-time weekly wage for Latino/a individuals was \$535 per week, the lowest of all of the racial groups. Latino/a men and women make only 60% and 66% respectively of the highest-earning racial group’s earnings per week. Overall, the national trends show that regardless of the occupation, Latino/a individuals earned less than their Asian and White counterparts, and in most cases, earned less than Black individuals as well (BLS, 2011).

These statistics demonstrate that overwhelmingly, Latino/a individuals are more likely to drop out of high school, work in manual labor jobs with minimal advancement opportunity, and are likely to be paid significantly less than members of other racial/ethnic groups. As an overall picture, this information demonstrates a need for further study and intervention on the educational attainment and employment exploration and placement of Latino/a-identified individuals.

### **Circumstances Affecting Educational Attainment and Employment Among Latinos/as**

As a cultural group, Latino/a individuals in the United States may face a particular set of circumstances that may affect their ability to both attain and sustain their desired careers.

According to the U.S. Census, 14.3% of the U.S. population lives below the poverty level; however, 23.2% of Latino/a individuals in the United States live below the poverty level (U. States Census Bureau, 2011). For these individuals living in poverty, the need to find employment may be more immediate, and thus job seeking and placement may be out of necessity more than interest. Moreover, individuals experiencing poverty may lack the resources to continue their education in order to pursue more stable or sustainable career paths.

In addition, many Latino/a individuals may speak Spanish in the home, and may have different levels of English-speaking proficiency (Pew Hispanic Center, 2013). Limited English proficiency may prevent individuals not only from gaining employment, but from seeking employment; a 2007 study found that Latino/a individuals with limited English proficiency also had significantly lower rates of utilizing the internet (Fox & Livingston). Lack of access to the internet may be particularly detrimental to seeking employment, especially in the current employment climate that utilizes technology as the main avenue through which to disseminate and receive information regarding employment opportunities. While there is some evidence that English-language proficiency is more of a problem among Latino/a individuals over 18, with 41% stating that “English is spoken less than very well,” the evidence also shows that 14.2% of youth stated that they “spoke English less than very well” (Pew Hispanic Center, 2013, p. 22). Finally, these rates are even higher in both age groups when the individual is born outside of the U.S. (Pew Hispanic Center, 2013). Overall, these statistics indicate that limited language proficiency may be a relevant factor for Latino/a individuals of all age groups, but especially

those born outside of the U.S.; these individuals may have increased difficulty seeking and gaining employment.

Along with concerns related to income and language skills, Latino/a youth in the United States have greater risk for teen pregnancy and being involved or associated with violent behavior. According to the Pew Hispanic Center, 26% of Latina women are mothers by age 19 (2009). This is significantly higher than other racial groups at the same age, and may be a contributing factor as these young men and women engage in planning their futures and career expectations. In fact, 69% of “Latino youths say that becoming a parent prevents a person from reaching one’s goals in life” (p. 9). In addition to high rates of teen pregnancy, 31% of Latino/a youth reported knowing someone in a gang, and reported engaging in behaviors such as getting into fights, carrying weapons, and being questioned by police in the past year (Pew Hispanic Center, 2009, p. 11-12). Often these issues are directly linked to lack of resources and academic success which results in long-term unemployment, and career difficulties.

Overall, the prevalence of Latino/a individuals living in poverty, the potential limitations associated with limited English-speaking proficiency, and the risks of teenage pregnancy and violence among Latino/a youth create a set of circumstances that may significantly affect career decision-making and attainment. These national issues, as well as other local factors related to rural communities relevant to this study, are vital to understanding the employment concerns and pursuits of Latino/a individuals.

Latinos living in rural areas can be at even more risk for employment related concerns. The number of Latino/a immigrants in small rural towns has been on the rise in the Midwest, largely due to the availability of meat-packing plants with available jobs (Grey, 1997). According to Jordan, Kostandini, and Mykerezi (2012), the decreased likelihood of Latino/a

rural students graduating high school (as compared with non-rural areas) may potentially be caused by the availability of meat-packing jobs without post-secondary education. Previous research on Latino/a individuals working in small towns has shown that while the individuals believed that they were paid well for their work and enjoyed the small town atmosphere, they described the work as physically taxing and dangerous, and reported experiencing racism and discrimination both on the job as well as in the town at large (Dalla, Ellis, & Kramer, 2005). While no research has been conducted on the experiences of children in these towns, it is likely that the local context of a meatpacking town, and the positive and negative effects, may have an effect on Latino/a children's perceptions of careers and their futures.

While there have been recent efforts both to better understand Latino/a youth career development, it is clear that continued efforts will be necessary to further elucidate the needs of this community, especially as it continues to grow within the United States. Specifically, the majority of available research and interventions focus on high school students, but there is little information regarding middle school student career development. This may be particularly important given that Yowell (2002) and Flores et al. (2008) found that by the time Latino/a students reached high school, they were already expressing that they had educational and career aspirations, but simultaneously did not believe that they could achieve those aspirations. As Flores et al. (2008) suggest, this information demonstrates the need to intervene with Latino/a students at a younger age and attempt to further understand where this gap between aspirations and expectations is occurring.

In addition, nearly all the previous research has been conducted quantitatively; while this research has been vital in helping to better understand Latino/a youth career development, it is important to also gain a greater understanding of the students' own thoughts and perceptions of

their futures. Qualitative inquiry into Latino/a student experiences surrounding careers may reveal important aspects of their experience for further study. Moreover, qualitative studies would give Latino/a students a voice in vocational research and allow students to represent themselves and their experiences.

Given that the population of Latino/a individuals in the United States is growing (U.S. Census Bureau, 2012), that Latino/a individuals experience unemployment, limited career experiences, and decreased earnings, and that research is limited both in the number of studies and in the nature of the research, it is evident that continued study of Latino/a career development is an important area of study. Thus, the present study focuses on rural Latino/a middle school students who participated in Project HOPE (Ali, 2013). In this study, Latino/a middle school students were asked a series of qualitative questions regarding their goals and perceptions of the future, beliefs about what may assist or interfere with their goals, and the role of Project HOPE in shaping their career development and thoughts about the future. The purpose of this study is to give voice to Latino/a youth, specifically middle school students, in order to gain a greater understanding of beliefs about their futures and what they believe might happen as they pursue them.

## **Chapter 2: Literature Review**

The literature reviewed is organized in the following way: studies on the career development of rural students, studies on the career development of Latino/a students, qualitative research findings on career development among youth of color and Latino/a students, and career interventions with Latino/a students. The implications of these findings will be discussed with relation to the present study, specifically in order to further examine the career development, and especially perceptions of future goals and possibilities, for the rural Latino/a middle school students in this study.

### **Career Development of Latino Students**

In response to the career and employment needs in the Latino community, and especially among Latino/a youth, vocational psychology research investigated different aspects of Latino students' career development. Much of this research has been conducted within the last decade, and consists of studies related to career decision-making (Gushue, Clark, Pantzer, & Scanlan, 2011; Flores & Obasi, 2005), goals for the future (Flores, et al., 2008; Perry & Calhoun-Butts, 2012), perceptions of future (Yowell, 2002; Perry & Calhoun-Butts, 2012) and resources and barriers (McWhirter, 1997; Gushue, 2006). However, all of these studies focus on high school students, and only two (Yowell, 2002; Perry & Calhoun-Butts, 2012) employ qualitative methods to reflect student perceptions of their futures in their own words. Furthermore, only two studies were found on Latino/a middle school students' career development. These studies address the roles of culture, stress, self-efficacy, and parental roles on career decision-making and goals (Ojeda, Piña-Watson, Castillo, Castillo, Khan, & Leigh, 2011; Hill, Ramirez, & Dumka, 2003). As with the studies of high school students, only one of these studies utilized qualitative methods to capture the Latino/a students' experiences.

Jackson, Kacanski, Rust, and Beck (2006), conducted a quantitative study to further investigate urban high school students of color regarding their perceptions of supports and barriers to their career development. Participants consisted of 66 high school students of color, including 49% Black or African-American identified students, 42% Hispanic or Latino/a identified students, and 9% biracial or multiracial identified students. Participants completed the Economic Value of Education Questionnaire (Murdock, 1999, as cited in Jackson et al., 2006), which gauged student perceptions of the relevance and importance of higher education on their futures. Students in this study also listed their perceived supports and their possible desired careers. The results indicated that students who reported higher “school and work barrier beliefs” were more likely to have “lower educational and career aspirations” (p. 212). Moreover, the students in this study expressed beliefs that they would not be able to achieve an advanced education or career due to their race/ethnicity as well as their lack of access to resources. In regards to student perceptions of supports, Jackson et al. (2006) found that increased supports did not correlate with decreased worry about barriers. Given that this is in contrast to previous studies suggestions (see Gainor, 2006), more information may be necessary to understand the relationship of supports and barriers for students.

The results of Jackson et al. (2006) also differentiate between students who recently immigrated to the United States versus those who have been here longer. Their results indicated that students who been in the US longer were more likely to perceive increased barriers and decreased belief in their ability to achieve advanced education and careers. Jackson et al. (2006) postulate that while recent immigrants “still believe in the U.S. ideal of equal opportunity, minority youth who are not recent immigrants and have a history of experience contrary to this ideal may be particularly at risk for doubting the future economic value of education” (p. 212).

This finding demonstrates the importance of considering recentness of immigration as a relevant factor for the perception of resources and barriers for youth of color.

To further understand influences on student career development, Diemer (2007) conducted a study “to identify contextual resources facilitative of career development” in “poor youth of color” (p. 502). In this study, participants were selected from a pool of data from the National Educational Longitudinal Study (NELS), which compiled longitudinal data on student career expectations and development, as well as data from the parents and school systems. A sample of nearly 1300 participants was chosen, all of whom identified as low income and as people of color; nearly half of the participants in the sample identified as Hispanic. The results of the study indicated that both parental support and support from school systems were considered by the students in this study to be important for their career development. This was found to be true not only in students’ perceptions of their future work, but also in their “emotional connection to career and work” (Diemer, 2007, p. 520). This finding further demonstrates the contextual and supportive role of parental and school figures as resources that may affect career perceptions and decision-making for ethnic/racial minority students.

While the previous studies provide information regarding youth of color, with some inclusion of Latino/a identified students as a represented group to varying degrees, the following studies demonstrate the career development issues specific to Latino/a populations. Again, these studies will focus on Latino/a participant perceptions of their career goals, their self-efficacy, and their outcome expectations; where possible, the role of barriers in affecting these factors will be explained. Finally, an overall summary of the compiled literature, as well as its relevance to the present study, will be discussed.

In another study regarding barriers in Latino/a students, McWhirter (1997) surveyed 1139 high school-aged participants who completed measures regarding their “perceived educational and career barriers” (p. 124). In this study, McWhirter compiled a sample of both Mexican-American and Euro-American students and compared their responses regarding their perception of barriers based on a measure developed by McWhirter for the study (which is elsewhere referenced as the Perceived Educational Barriers or PEB). The results of the study indicated that Mexican-American students were significantly more likely to anticipate a greater number of barriers than Euro-American students. While this study is more than 15 years old, it demonstrates some evidence that there may be an increased possibility for Latino/a students to perceive barriers in their career development. Moreover, while this study demonstrates that this may be the case, it does not provide any further information or indication as to what specific barriers the students are concerned about, or how the students understand and experience these barriers; a further analysis of this could facilitate a greater understanding of the difference found in McWhirter’s (1997) study.

To further explore the particular salience of resources and barriers on high school Latino/a students’ career decision-making, Gushue (2006) conducted a quantitative study of 128 Latino/a ninth grade students. These students were predominantly of low socioeconomic status and lived in an urban area. In this study, students completed measures related to their ethnic identity (Multigroup Ethnic Identity Measure; Phinney, 1992), their self-efficacy in career decision-making (Career Decision-Making Self-Efficacy Scale – Short Form (Betz, Klein, & Taylor, 1996), and their outcome expectations (McWhirter, Rasheed, & Crothers, 2000). The results indicated that for the students in this study, a strong sense of Latino/a ethnic identity corresponded to an increased sense of self-efficacy in making decisions about future careers.

Gushue (2006) postulates that “to the extent that adolescents successfully negotiate the tasks involved with achieving an ethnic identity, they may also gain confidence in their ability to negotiate the tasks associated with career decision-making” (p. 92). In other words, Gushue suggests that the process of creating or understanding one’s identity as a Latino/a may foster a student’s ability to create or understand his or her identity as a member of the working world. Thus, Gushue (2006) suggests that these findings may indicate a need to incorporate and even promote ethnic identity as a part of career interventions in order to best capture the students’ development within their specific contexts. That is, for the Latino/a high school students in this study, and perhaps for others of this population, it may be particularly important to include ethnic identity as an integral part of the career programming in order to maximize the impact for this group of students. For the purposes of the present study, this finding is important in demonstrating the elements of career development that may be unique or specific to Latino/a students.

Flores et al. (2008) conducted a quantitative study of Mexican American high school students to better understand the relationship between SCCT variables and educational goals for this particular group of students. The authors used a sample of 89 Mexican American students, all of whom were in their senior year of high school. The students were given several measures, including measures on acculturation (ARSMA-II-R; Cuellar, Arnold, & Maldonado, 1995), self-efficacy (College Self-Efficacy Inventory, CSEI; Solberg, O’Brien, Villarreal, Kennel, & Davis, 1993, as cited in Flores et al., 2008), outcome expectations (College Outcome Expectations Questionnaire, COE; Flores et al., 2008), and goals (Educational Goal Expectations and Aspirations; Farmer, 1985, as cited in Flores et al., 2008). The results indicated that all students who participated in the study expressed intent to pursue higher education, either at a four-year or

two-year level. However, despite these goals, students identified “higher educational aspirations than educational expectations” (p. 496). This is consistent with previous research, and indicates a gap between what these Mexican American students *hope* to achieve and what they believe is possible for them. Because of this, Flores et al. (2008) suggest that researchers examine Latino/a children at earlier ages to better discern when this gap begins to appear. Thus, research on younger Latino/a students could help to elucidate further the mechanisms that may be occurring at younger ages that prompt students to believe that they cannot achieve their career aspirations.

The evidence from Flores et al. (2008) suggests that increased acculturation was associated with higher aspirations and outcomes. This is in slight contrast to previous studies, (Gushue, 2006) which have indicated that a strong ethnic identity promotes these higher aspirations. Thus, as Flores et al. (2008) point out, there continue to be some discrepancies as to the role of culture, ethnic identity, and acculturation in terms of the effect they have on career self-efficacy and decision-making. However, despite this discrepancy, it is important to note that both sets of results (i.e., Gushue, 2006; Flores et al., 2008) indicate that ethnic identity and acculturation could potentially be factors for how students perceive their future barriers and careers.

In further exploration of the career development and decision-making of Latino/a students, Gushue et al. (2011) conducted a quantitative study of 128 Latino/a high school students to assess “the potential influence of career decision-making self-efficacy and perceptions of barriers on vocational identity” (p. 309). In this study, students were given measures to assess their career self-efficacy (Career Decision-Making Self-Efficacy Scale – Short Form, CDMSES-SF; Betz, Klein, & Taylor, 1996), the problems they may be experiencing with respect to their career (My Vocational Situation, MVS; Holland et al., 1980), and their

participation in searching behaviors related to career (Career Search Activities Index; Solberg et al., 1995). The results indicated that students who exhibited high levels of self-efficacy were more likely to have a stronger sense of identity around their career, and were also more likely to engage in career exploration. Conversely, students who perceived a significant number of barriers to achieving career goals were more likely to have a low sense of their vocational identity. However, although students who perceived more barriers had less of a vocational identity, they were not any less likely to engage in career exploration; Gushue et al., (2011) postulate that perhaps other more supportive variables “such as parent or teacher support” (p. 313) are meaningful in fostering exploratory activities even in the face of students’ perceived barriers.

This particular study is important in delineating the need for further research on exactly what barriers students perceive as being problematic in their career paths. That is, the findings of Gushue et al. (2011) correspond to the findings regarding other rural populations (Ali & McWhirter, 2006) where barriers appeared to be a significant reason for students to discount their ability to pursue a particular career. In either of these populations, or in a combination of the two, it would be meaningful to explore what particular barriers the students are experiencing as well as what supports they do, or do not perceive, in order to better understand how to intervene. Moreover, a better understanding of what may motivate a student to explore careers even in the face of barriers would provide valuable insight as well as information regarding possible interventions to promote student exploration. As Gushue et al. state, “these findings suggest the importance of gathering information regarding Latino/a students’ perceptions of barriers in discussions about career interests, goals, and plans” (2011, p. 314).

With respect to more specific influences on Latino/a students, Flores and Obasi (2005) studied the influence of mentors on Mexican American youth. In this study, 714 Mexican American high school students completed quantitative measures to assess their career development, especially with respect to the role of mentorship on their experiences. Participants completed the Career Self-Efficacy Scale, Career Interest Scale, and Career Consideration Scale (Church, Teresa, Rosebrook, & Szendre, 1992, as cited in Flores & Obasi, 2005). After completing these measures, students with mentors were asked about the nature of the mentorship and the role that it had on their career decision-making. Results of this study indicated that the majority of students (nearly 80%) identified a family member as their mentor; the majority of the family members identified were parents. Teachers were also identified as mentors by some of the students. In terms of these mentors' roles in the students' career development, Flores and Obasi (2005) found that students largely identified the importance of witnessing the mentors' career-related experiences, both positive and negative, as "vicarious learning" opportunities (p. 160). However, students also noted that mentors were helpful in providing "verbal encouragement for students' educational or career goals" (p. 160). These results indicate that for these Mexican American students, family members and educators were active mentors who provided not only modeling for careers, but also encouragement and support. For the purposes of the present study, this finding is meaningful in identifying possible sources of external and contextual support for Latino/a students.

In addition, a study by Ali and Menke (2014) utilized Social Cognitive Career Theory (SCCT; Lent, Brown, & Hackett, 1994) to study the career development of 94 rural 9<sup>th</sup> grade students, of whom 52 identified as Latino/a. This quantitative study administered several measures, including the Vocational Skills Self-Efficacy Scale (VSSE; McWhirter, Rasheed, &

Crothers, 2000), the Career Decision Outcome Expectations Scale (CDOE; Betz & Vuyten, 1997), Perceptions of Educational Barriers (PEB; McWhirter et al., 2000), and the Career Aspirations Scale (CAS; O'Brien, 1996), to a group of 94 students, ~55% of whom identified as Latino/a. The results of the study indicated that the Latino/a students who participated reported both greater self-efficacy as well as greater perceived barriers. However, these Latino/a students felt more able to achieve their desired goals than did their White counterparts, and were comparable in reports of outcome expectations and career goals. These findings suggest that for the students in this study, increased perceptions of anticipated barriers was not related to a decreased sense of self-efficacy nor in reduced expectations for their futures. This contradicts other research indicating that barriers negatively impact Latino/a student beliefs about their futures (Flores et al., 2008; Yowell, 2002), and further highlights the need for further study on Latino/a student perceptions of their futures and careers.

The findings based on Latino/a high school students, overall, provide an important set of information about the possible career development, perception of barriers, supports, and goals of this particular racial/ethnic minority group. More specifically, it appears that barriers are present for these students and that these barriers may affect students' perceptions of their future abilities and options (McWhirter, 1997; Gushue et al., 2011). Furthermore, there may be specific supports that are relevant to Latino/a students, including familial support and encouragement (particularly in goal-setting, Hill et al., 2003) as well as the relevance of family and mentors in promoting career development (Perry & Calhoun-Butts, 2012; Flores & Obasi, 2005). These findings are important to consider in understanding the career development of Latino/a students; however, as suggested by Flores et al. (2008), the present study will focus on middle school students; thus, it is important to consider the research related to Latino/a middle school students.

Presently, few studies exist on the career development of middle school students. One of these studies was by Ojeda et al. (2011) conducted a quantitative study in which Latino/a middle school students responded to measures regarding culture and self-efficacy. More specifically, the study “examined the role of acculturation, enculturation, ethnic identity, and conscientiousness on career decision self-efficacy” (Ojeda et al., 2011, p. 28). The purpose of this study, then, was similar to that of Gushue (2006) investigating ways in which the cultural identity of these students may have an effect on their ability to make career decisions. The students in this study were in seventh grade, were identified as low income, and were from an urban area. They were given the Middle School Self-Efficacy Scale (MSSES; Fouad & Smith, 1997), the Acculturation Rating Scale for Mexican Americans – II – Brief (ARSMA-II; Cuellar, Arnold, & Maldonado, 1995), the Multigroup Ethnic Identity Measure – Revised (MEIM-R; Phinney & Ong, 2007), and the Conscientiousness measure from the Big Five Inventory (John et al., 1991). The results showed that for the students in this study, as seen in Gushue (2006), a strong sense of ethnic identity was related to an increased sense of self-efficacy in career decision-making (Ojeda et al., 2011). More specifically, increased acculturation levels were directly related to increased self-efficacy, whereas increased enculturation levels did not appear to improve self-efficacy. Because of this, Ojeda et al. (2011) suggest that it may be important to be aware of how acculturating to the specific practices, and even language, of the United States may help a student to be more prepared and thus feel more comfortable making career decisions. Conversely, maintaining an enculturated stance that promotes and adheres to mostly Spanish-speaking may cause the student to be less aware of the “resources useful in helping them make career decisions” (Ojeda et al., 2011, p. 219). Thus, Ojeda et al. echo the findings of Gushue (2006) in highlighting the importance of a strong ethnic identity in establishing career-related

self-efficacy, but also demonstrate that language use and level of acculturation may be specific factors within the cultural identity that affect career decision-making self-efficacy among Latino/a youth.

Overall, the evidence on Latino/a students, both in middle school and in high school, demonstrates that barriers are a significant factor in student's understanding of their future career options and goals (McWhirter, 1997; Gushue et al., 2011) even though there may be a lack of consensus about what the impact of these barriers is on overall student career development (Ali & Menke, 2014). Furthermore, the minimal evidence on Latino/a middle school students' career development and the relevance of barriers and supports to overcome them (Ojeda et al., 2011) suggests the relevance of career variables even at younger ages. Generally, this evidence demonstrates the impact of barriers, ethnic identity, and support of others on the career development and future goals and aspirations of Latino/a students.

In addition to identifying as Latino/a, the students in the present study were also living in a rural community in Iowa. The following section describes the current research with regard to the career development of students in rural communities.

### **Career Development of Rural Students**

Given that the present study focuses on rural Latino/a students, it is important to address the career development information related to rural students and populations. Rowan-Kenyon, Perna, and Swan (2011) conducted a study of high schools and high school students regarding their hopes for their future careers, as well as the impact of contextual factors on these hopes and goals. In this study, Rowan-Kenyon et al. (2011) proposed a model for understanding contextual factors as they relate to student career development, and then conducted a multicase qualitative case study on 15 schools of varied resource levels in order to assess the model; within this, 595

individuals were interviewed, including 343 students, 118 parents, and 134 teachers and counselors. In this model, Rowan-Kenyon et al. (2011) hypothesized four levels of context that might be relevant to the student. The first of these is Student and Family Context, which utilizes Social Cognitive Career Theory variables (such as self-efficacy and outcome expectations; Lent et al., 1994) to describe the contextual variables most immediately related to the student. Rowan-Kenyon et al. (2011) also take into account three additional levels, which are School Context, Higher Education Context, and Federal and State Policy Context (p. 331). The intent of these four layers is to acknowledge the role of both immediate and systemic contextual variables on the career goals of high school students.

In assessing this model, Rowan-Kenyon et al. (2011) found that “students’ occupational aspirations and their understanding of the education required to achieve these aspirations appear to correlate with the resource level of the schools in this study” (p. 335). More specifically, students at schools with better resources thought of college as an opportunity to explore their career options, even in the face of career indecision. Additionally, students at schools with better resources were more likely to say that they found the school system helpful in career exploration but that they also relied on parents and family to learn about careers; in contrast, students from low-resourced schools expressed that they only learned about careers from the school system. Finally, lower-resourced schools noted that “career education programs had been reduced or eliminated to spend more time preparing for state achievement tests” (p. 338). These findings highlight the differing career exploration experiences and attitudes of students based on the level of resources that their schools had access to. Given that resource levels in school systems may be relevant to the career exploration and development of its students, it may be especially important for career programming and interventions to pay particular attention to school systems

in lower-resourced areas such as rural school systems. Rural populations may experience increased difficulties due to issues such as isolation, lack of resources, and lack of opportunity (Ali & McWhirter, 2006). Further, rural students of color may be at a particular disadvantage due to lack of access to similar others who can serve as role models. The following section will present studies related to rural students and career development.

Ali and McWhirter (2006) applied Social Cognitive Career Theory to rural students in their study of adolescents in Appalachia, which is a region in the eastern United States that has a high rural, low income population. Students in this study were predominantly Caucasian (>90%) with less than one percent identifying as Latino/a. In this study, Ali and McWhirter “examine rural central Appalachian high school students’ postsecondary aspirations using SCCT” (2006, p. 92). In order to do this, 338 high school students completed a series of measures. These included their background and socioeconomic status, Vocational/Educational Self-Efficacy (VESES; Ali, McWhirter, & Chronister, 2005), My Beliefs about Future Opportunities (MBFO; Rasheed, 2001), Parental Support Index (PSI; Ali & Saunders, 2006), Sibling Support Scale (SSS; Ali, McWhirter, & Chronister, 2005), Friend Support Scale (FSS; Ali et al., 2005), Teacher Support Scale (TSS; McWhirter et al., 2000), Perception of School Characteristics (PSC; McWhirter, 1992), Perceptions of Educational Barriers (PEB; McWhirter, 1997), and Vocational/Educational Aspirations Checklist (Rasheed, 2001). The results indicated that SCCT variables, especially outcome expectations and self-efficacy, were effective in predicting students’ goals following high school. Moreover, the results showed a difference in self-efficacy and outcome expectations based on whether or not the student planned to go to college. That is, students with higher self-efficacy and outcome expectations were more likely to aspire to college whereas students with lower self-efficacy and outcome expectations were more likely to aspire to

enter the workforce after high school. These findings elucidate the relevance of the SCCT variables as significant factors that influence student perceptions of their futures, to the point that they can predict a student's postsecondary plans.

Ali and McWhirter (2006) also found that students' perception that they would experience barriers on the path to going to college also affected their perception of whether or not they aspired to attend college. That is, perceiving that there would be significant barriers to pursuing a college education appeared to negatively affect students' belief that they could attend college, be successful, and achieve positive outcomes. Ali and McWhirter postulate that this is partially due to the students' rural status and perceived lack of access to resources to overcome these barriers.

Overall, Ali and McWhirter state that "The findings suggest that rural Appalachian students who choose direct entry into the paid workforce may do so because they perceive too many obstacles and do not feel confident in their abilities to obtain postsecondary education" (2006, p. 107). Given this finding, it seems relevant to investigate the particular obstacles that rural students perceive, as well as the ways in which they see – or do not see – themselves overcoming them.

In another study of rural students in Appalachia, Ali and Saunders (2009) found that SCCT variables may also be useful in predicting goals of students in their more distant future careers, beyond college. In this quantitative study participants consisted of 63 rural high school students in Appalachia. More than 90% of the students identified as Caucasian, and no students identified as Latino/a. In the study, students were administered the Vocational/Educational Self-Efficacy Scale (VESES; Ali et al., 2005), the Career Decision Outcome Expectancies Scale (CDOR; Betz & Vuyten, 1997), the Parent Support Index (PSI; Ali & Saunders, 2006), the

Sibling Support Scale (SSS; Ali et al., 2005), the Friend Support Scale (FSS; Ali et al., 2005), and the Career Aspirations Scale (CAS; O'Brien, 1996). The results of the study indicated that self-efficacy and outcome expectations were again found to be the variables most useful in predicting "career advancement behavior" (Ali & Saunders, 2009, p. 184). That is, students who had high belief in their skills and abilities and held an expectation that they could achieve a good outcome were more likely to engage in behaviors to advance in their careers (p. 184). This research bolsters the evidence that SCCT variables, specifically self-efficacy and outcome expectations, are relevant to rural students, not only in their perception of their career path after high school, but also extended further into their future careers. This finding, in conjunction with Ali and McWhirter (2006) demonstrates the relevance of SCCT variables for future careers, both in the more immediate (i.e., post-high school plans) as well as on a more extended timeline (i.e., future careers).

In regards to resources, Ali and Saunders (2009) study of high school rural Appalachian youth showed that while SCCT variables were predictive of students' goals for future careers, the support of important others (such as family and friends) did not appear to be significantly related to students' future goals. However, other studies (e.g., Ali & Saunders, 2006) have demonstrated the importance of parental support in increasing student self-efficacy. Thus, there appears to be some differential evidence regarding the importance of support from others in bolstering student self-efficacy. Further inquiry into student perceptions of the relevance and importance of support from others, specifically in terms of what elements of that support are relevant to their perceptions of their self-efficacy, could be beneficial.

In addition to Appalachia, studies have been conducted in various other rural areas. An example is Wettersten et al. (2005) who conducted a study of 689 rural high school students in

rural Minnesota and North Dakota. In this study, participants were asked to respond to a series of questionnaires about their beliefs regarding their futures in both education and vocation. The group of participants was largely Caucasian, with less than one percent identifying as Latino/a. The measures used included the Social Support for Adolescents Scale (SSAS; Cauce, Felner, & Primavera, as cited in Wettersten et al., 2005), the Self-Efficacy for Self-Regulated Learning Scale (Pajares & Giovanni, 2002, as cited in Wettersten et al., 2005), the Student Academic Self-Efficacy Scale (Valiante & Pajares, 1999, as cited in Wettersten et al., 2005), the Behaviors Subscale of the Perceived Parent Educational Attitudes and Behaviors Scale (PPEABS-B; Baker et al., 2005, as cited in Wettersten et al., 2005), the Perceptions of Educational Barriers Scale (PEB; McWhirter et al., 2000), the Outcome Expectations Scale (OES; McWhirter et al., 2000), the Academic Outcome Expectations Scale (AOE; Betz & Voyten, 1997), the Career Salience Scale (CSS; Greenhaus & Simon, 1977, as cited in Wettersten et al., 2005), the Identification with School Questionnaire (IWSQ; Voelkl, 1996, as cited in Wettersten, et al., 2005), and the School Engagement Scale (SENG; Dombusch & Steinberg, 1990, as cited in Wettersten et al., 2005).

The multiple measures in Wettersten, et al. were intended to gather more information about students' understanding of their own educational and vocational futures, as well as their perceptions of their parents' beliefs about their future careers. The results showed many things; for one, the analysis revealed that the SCCT framework was more useful in predicting student attitudes than student behaviors. Results indicated that students' perceptions of both work and school were affected by "contextual factors (social support and parent involvement) and self-efficacy" (p. 658). This further illustrates the potential importance of supports and context as meaningful ingredients in rural students' perceptions of their current and future education, as

well as their career possibilities. These results of Wettersten et al. (2005) demonstrate that SCCT variables are relevant to rural students, and further highlights the need to gain a greater understanding of how the supports and contextual factors, as well as the consequences of these factors, are perceived by students.

While Wettersten et al. (2005) employed multiple SCCT-related measures to evaluate students' perceptions, Lapan, Hinkelman, Adams, and Turner (1999) took a slightly different approach. In a study regarding self-efficacy and career expectations in rural high school students, Lapan et al. (1999) asked 126 participants, 98% of whom were Caucasian, to first complete the "Mapping Vocational Challenges" (MVC) activity (Lapan, Loehr-Lapan, & Tupper, 1993, as cited in Lapan et al., 1999). The MVC activity requires students to create a map of factors including their "perceptions about current employment patterns for men and women, the perceived self- efficacy and value students have for different careers, and the perceived support and encouragement students expect from parents" (Lapan et al., 1999, p. 112). Students used rating systems to identify these factors on their maps, and these ratings were used in the study analysis. The results of Lapan et al. (1999) indicated that, "perceived parental support was a significant predictor of differences in efficacy expectations, perceived value, and vocational interest" (p. 119). This finding once again provides evidence to support the relevance of SCCT variables and constructs for rural students. Moreover, it demonstrates the important of external forces, such as the support of parents, as a contributing part of self-efficacy in career decision-making for these rural adolescents.

A summary of the findings of the research investigating the career development of rural high school students demonstrates that SCCT models were useful in conceptualizing student career development, and that the perception of barriers, especially those considered to be

insurmountable, was a significant factor in student expectations and plans for their future, both in post-high school education and future careers (Ali & McWhirter, 2006). The studies also show some contradictory evidence as to the importance of the support of others and contextual factors; while some studies indicate that it may not be a significant factor in rural student self-efficacy (as in Ali & Saunders, 2009), other studies have demonstrated that parental support and support from important others does have a positive effect on self-efficacy (Ali & Saunders, 2009; Wettersten et al., 2005; Lapan et al., 1999). This suggests again that the role of resources and supports may be complex and nuanced, and may require more study to further understand the role of these variables on career development and decision-making. Overall, the evidence highlights the relevance of barriers to rural high school populations, while also demonstrating the need for more information to better understand the role that supports and resources may have for these students.

While useful in demonstrating some of the relevant issues for rural students, these studies are limited in their generalizability to other populations, including the population of interest for several reasons including 1) the age of the participants, who were all high-school age and 2) the overwhelming number of Caucasian students (and perhaps more importantly, the overwhelming lack of Latino/a students) who participated in the studies.

In an effort to better capture rural students' experience at an age that is more comparable to the age of the students in the present study, it is important to examine the experience of rural middle school students. An example of this is the study by Jantzer, Stalides, and Rottinghaus (2009), in which SCCT variables were applied to rural eighth graders. Jantzer et al. (2009) asked 820 students, who were predominantly Caucasian, to complete a series of measures regarding their career self-efficacy and expectations. Measures included the Middle School Self-

Efficacy Scale (MSSES; Fouad et al., 1997), Vocational Identity Status (Rottinghaus, Day, & Borgen, 2005), and an open-ended survey about their career goals. The results indicate that the SCCT model for understanding career development was appropriate for a middle school age group. Moreover, the results indicate that students' sense of self-efficacy was related to their career goals.

More specifically, "participants with high career decision-making self-efficacy and outcome expectations were more likely to have made a tentative career choices, whereas those with lower scores had not yet committed" (Jantzer et al., 2009, p. 114). These results demonstrate that even in middle school, specifically in eighth grade, the SCCT model was useful in predicting students career planning, and that self-efficacy and outcome expectations seem to play a role in how much (or how little) students are planning for the future.

The findings of Jantzer et al. (2009) are important in demonstrating that self-efficacy and outcome expectations were useful and appropriate for middle school rural populations. While this is useful for the present study in providing important rationale for the use of these SCCT variables, it is important to note that this study lacks an explanation as to how these students may understand supports and barriers as a part of their self-efficacy and outcomes. Moreover, given that the sample of students who participated in Jantzer et al. (2009) is largely Caucasian, it may be less generalizable to a group of students who are similar in rural status and age, but who differ in race or ethnicity.

Overall, the information on rural students, from both middle school and high school age groups, demonstrates the factors of self-efficacy and outcome expectations are useful in predicting how students understand their career futures. These expectations appear to be positively influenced by the support of family and peers (e.g., Ali & Saunders, 2009; Wettersten

et al., 2005). Moreover, in studies of high school students results demonstrated that perceptions of barriers as insurmountable contributed to negative outcome expectations in rural students.

While studies regarding other rural areas and students, such as Appalachia, are helpful in elucidating some possible concerns or phenomena that may be occurring in other rural areas, it is important to note that there may also be distinct difference. Findings of these previous studies may be useful in guiding research questions for studies that address rural Midwest Latino/a students career development issues.

For the purposes of this study, the findings reviewed in this section are useful in illustrating that rural students and Latino/a students of varying ages may have specific needs related to career development; a greater understanding of these needs could facilitate improved interventions for impacting rural Latino/a students' career decision-making. However, all of these studies have employed quantitative methodology to gather information regarding the career development of these students. While this is hugely beneficial, it is also extremely important to gather information in the voice of the participants, to give them a chance to address and explain their experiences (Prilleltensky & Nelson, 2002). To this end, the following section addresses qualitative studies on career development to better understand the experiences of the participants.

### **Getting the Participant Voice: Qualitative Research on Career Development**

For the purposes of the present study, qualitative methodology was chosen in attempt to capture the voices of the participants and their perceptions of their personal and career futures. This section will review qualitative studies that have been done regarding the career development of students of various ages, followed by a section specifically elucidating the qualitative studies that have been done with Latino/a identified students.

In order to better understand the role of contextual factors within the SCCT framework from the perspective of the participants, Lent et al. (2002) conducted a qualitative study investigating the role of resources and the barriers among college students. In this study, 31 college students of varying racial/ethnic backgrounds were interviewed regarding their perceptions of resources and barriers to pursuing career goals. To gather this information, participants were asked about their desired career, other careers they chose not to pursue and their reasoning, and barriers they may expect in their career path (Lent, 2002, p. 64). The data were analyzed via a constant comparative method from which four major themes were identified; these themes were Choice Factors, Barriers to Choice Pursuit, Supports for Choice Pursuit, and Barrier Coping Strategies. The results in these categories indicated that there were several relevant contextual factors that positively affected participant career choices, including their interests, abilities, and social/family influences (p. 66); there were also factors that negatively influenced career choices, including “disinterest and ability considerations... negative expectations regarding work conditions... and negative social/family influences” (p. 66). The results also indicated that most of the students in the study believed that they could achieve their desired career outcome; however, they also stated that they experienced barriers including “financial concerns, personal difficulties, ability concerns, and negative social/family influences” (p. 66-67) in pursuing these career goals. In regards to supports, the results of Lent et al. (2002) suggest that “social support or encouragement [was a] critical support factor” (p. 67). Other supports included “personal strengths, experience with career-relevant tasks, role models/mentors, and expected outcomes” (p. 67). Finally, the results indicated that when students perceived barriers, they believed they would be able to overcome them by using their

own personal resources, such as hard work and determination, as well as outside resources from social contacts and financial resources.

Overall, these results indicate that for the college students in this study there were multiple factors (internal and external) that influenced their decision-making. Students consistently perceived that social support and family influence could be relevant in promoting or deterring their career decisions. Furthermore, access to experiences related to career as well as financial support were relevant to student decision-making. These results help to elucidate some of the potential contextual supports and barriers within the SCCT model (Lent et al., 2002).

The results of Lent et al. (2002) are helpful in demonstrating some of the potential supports and barriers that students may experience as they pursue future careers. However, given that Lent et al. (2002) employed a sample group of college students, who have advanced far further in their educational and career pursuits, and were predominantly Caucasian students (with only three of 31 participants identifying as Hispanic), the results may not be reflective of Latino middle school students living in rural areas.

Howard, Budge, Gutierrez, Owen, Lemke, Jones, and Higgins (2010) also conducted a qualitative study of urban high school students of color to better understand perceptions of influences, barriers, and coping strategies that the students used to overcome their barriers. In this study, three of the nine participants used identified as Latino/a. Semi-structured interviews were conducted in which students were asked to reflect on the jobs that they would like to have, the jobs they expected to have, and the influences and barriers that may affect their future career development. Findings indicated that students' expected to achieve highly. They anticipated that "if they did not reach their first ideal career, an equally good career option was available to them" (p. 668). They reported that influences that made them feel confident in their ability to

succeed included “peers, family members, and teachers” (p. 669). Finally, in regards to barriers, all of the students interviewed stated that they anticipated encountering barriers; however, only five could generate specific issues that concerned them. These included anticipation of the resource (i.e., time and money; p. 664) required to pursue careers, concerns about personal shortcomings, and concerns about negative influence or lack of support from others (p. 665). Overall, the results of Howard et al. (2010) indicate that for these urban high school students of color, there were some external factors, including the influence of others and access to resources, that influenced the students’ perceptions of their future career development.

Similar to the study by Howard et al. (2010), Kenny, Gualdron, Scanlon, Sparks, Blustein, and Jernigan (2007) conducted a qualitative study in which urban high school students of color were asked about their “educational and career goals and perceptions of supports and barriers related to these goals” (p. 336). In this study, 7 of the 16 participants identified as Latino/a (the other 9 identified themselves as African American or biracial). The interviews were semi-structured, and asked students to reflect on their desired career goals as well as the supports and barriers in achieving those goals. The results indicated that nearly all of the students had goals to attend college, but expressed concern about barriers that may prevent them from doing so. Specifically, students were concerned about negative influences from friends, difficulty maintaining their own work ethic in school, and family concerns as the major barriers they anticipated (Kenny et al., 2007, p. 339). However, students also identified several resources that may help them to counteract these barriers, the most significant of these being family, followed by teachers and friends (p. 339). These results indicate several things; for one, it is evident that the students in this study perceive important others in their lives (i.e., friends and family) as sources of both concern and support. Furthermore, the results of this study highlight

the complexity of some of these relationships for students' career development. Finally, student awareness of both internal factors (such as their own motivation) and external factors (such as friends and family) echo the suggestions of Lent et al. (2000) in recognizing the importance and relevance of both personal or psychological factors as well as environmental or contextual factors that may affect student career development and decision-making.

As seen in these findings, resources and barriers appear to be significant factors in the career development of youth of color. Specifically, these students identified familial influences, financial influences, and school/teacher influences that could have both positive and negative impact (i.e., could serve as both resources and barriers) on their future career development (Jackson et al., 2006; Howard et al., 2010; Diemer, 2007; Kenny et al., 2007).

Another relevant element for consideration is the concept of discrimination as one type of barrier that may be perceived to exist, or actually exist, for youth of color. As mentioned by Gainor (2006), racial discrimination factors may be a relevant area of concern for students of color as they pursue career opportunities. In order to further explore this, Jackson and Nutini (2002) conducted a qualitative study in which they interviewed a culturally diverse group of students regarding their career development. In this study, 21 urban middle school students were interviewed; of these students, ~25% identified as Latino/a. The specific intent of the study was to better assess students' perceptions of their resources and barriers, but with specific attention to the role that discrimination may play in their career development. To assess this, Jackson and Nutini (2002) asked the students a series of questions regarding their perceptions of their abilities, the barriers they experience, and how they perceived their racial/ethnic identity as a part of those variables. The results of the study showed four major themes that emerged, all of which "focused on the influence of discrimination" (p. 62). These included "contextual barriers to

learning, psychological barriers to learning, contextual resources for learning, and psychological resources to expand learning and negotiate barriers” (Jackson & Nutini, 2002, p. 63).

To further elucidate the findings, each category will be described. First, contextual barriers were things such as living in a dangerous community, financial insufficiency, and problematic or negative relationships with peers (Jackson & Nutini, 2002, p. 63). These concerns were furthered by the idea that discrimination based on race/ethnicity could be an aggravating factor in contributing or even creating the unsafe environment. Second, psychological barriers included “negative self-efficacy for and performance in academics” as well as concerns for the way that relationships may negatively affect the students’ outcomes (Jackson & Nutini, 2002, p. 64). However, despite these barriers, the students also expressed some resources; this is evident in the third category of contextual resources. In this category, students largely identified specific people or groups of people that could be supportive of them during their career journey and help them through barriers; these included family, friends, community members, and even celebrities with whom the students felt a connection and gained some level of support or inspiration (Jackson & Nutini, 2002, p. 65). Finally, in the fourth category of psychological resources, students expressed faith in their ability to manage and cope with issues related to discrimination, as well as “strategies for managing conflict, stress, and peer pressure” (Jackson & Nutini, 2002, p. 65). Moreover, student expressions of confidence in their academic abilities and skills were also seen as psychological resources.

The belief by some students that they would not face significant barriers due to their race/ethnicity or discrimination was considered by Jackson and Nutini (2002) to be both a psychological barrier as well as a psychological resource. The reasoning given for this is that while this may be encouraging and motivating for the students in believing that they can achieve

their desired outcomes, it may also be detrimental in the case that they are faced with discrimination and are not prepared to handle it.

In a summary of the findings of Jackson and Nutini (2002), it appears that for many of the students in this study, they were aware that issues related to discrimination may be relevant in causing difficulty or barriers in their career paths. Students also appeared to be concerned about barriers related to finances, negative relationship, and poor social environment. These issues are particularly relevant in the present study in highlighting the ways in which race, and potentially discrimination, may impact students' (especially racial/ethnic minority students') perceptions of the future. Moreover, the findings in Jackson and Nutini (2002) also highlight the types of resources, both internal and external, that the students perceive. These findings inform the present study by providing a structure for differentiating between psychological and contextual resources and barriers, as well as providing some information regarding what these barriers may be for racial/ethnic minority populations.

**Participant Voice: Latinos/as.** While the above literature highlights the qualitative inquiry with both Caucasian student groups and students of color, the following section specifically discusses qualitative research studies conducted with Latino/a students. In 2002, Yowell conducted a mixed methods study of urban, ninth grade, low socioeconomic status Latino students in which students were asked to consider how they see themselves in the future, as well as how that vision may affect the likelihood of school dropout. Yowell's findings echoed those of Flores et al. (2008), who observed a gap between what Latino/a high school students would like to achieve and what they believe they can achieve. . In this study, Yowell (2002) employs the "Theory of Possible Selves" in which future possibilities are categorized by "...what persons would like to become 'hoped-for selves,' what persons could become 'expected

selves,' and what persons are afraid of becoming 'feared selves' (Yowell, 2002, p. 63). This theory was used as a framework for the quantitative measure used, which assessed the students' perceptions of their own hoped-for, possible, and expected selves, both in their education and future occupation. Students were also assessed in the quantitative measure for their likelihood to drop out of school. A total of 415 students participated in the quantitative measures, which included the Thinking About Your Future Survey which "contained items measuring educational and occupational possible selves, risk status for school dropout, and background characteristics" (Yowell, 2002, p. 65). After completing the quantitative survey, 30 students completed qualitative interviews; two of the classes were chosen to participate in interviews provided that they brought back permission slips. Yowell does not describe how these classes were chosen, nor is there information regarding how many classes were studied in total.

These qualitative interviews consisted of questions relating to their possible selves as well as their understanding of how they could achieve these possibilities. The list of questions and prompts was not provided in this study; however, Yowell notes that the interviews averaged one hour in length. The results of the study overall indicate that the students in the study saw a significant gap between their ideal future (or hoped-for selves) and their expected future; these results may suggest that the students in this study had difficulty believing that they could achieve their ultimate career goals. Furthermore, the findings showed that students who were more likely to have elaborate and specific understandings of the pathways that would lead to an undesirable future. Moreover, the more a student articulated fear of a negative (or "feared") future, the more at risk that student was to drop out. Yowell (2002) suggests that these results overall may indicate that students are more able to discern the pathways that will lead to negative outcomes than those that lead to positive outcomes. That is, the students appeared to have more elaborate

understandings of what *not* to do than what *to* do. Because of this, Yowell suggests increased programming for Latino/a high school freshmen not only to engage them in discussions of risky behaviors, but also to promote positive behaviors that are oriented toward achieving more desirable futures.

While Yowell's (2002) study is useful in providing some evidence of the issues that are experienced by Latino/a high school students, there are several limitations to the study. First, as stated, there is little information as to how students were chosen to do follow-up interviews. Second, while there is some general information provided regarding the content of questions, there is no interview protocol provided. Third, and finally, the results of the study are a comprehensive look at both the quantitative and qualitative results; a clearer breakdown of the two datasets separately may have been helpful in understanding how the qualitative interviews contributed, contrasted, or bolstered the quantitative findings.

In a qualitative study of Latino/a middle school students, Hill et al. (2003) conducted a qualitative study to better understand the career-related goals of a group of adolescents of varying ethnicities. The authors reported the ages of the participants to be between 12 and 14, and had four different ethnic groups, including Euro-American, African American, Mexican American, and Mexican Immigrants. The interview protocols were semi-structured; no further information was provided regarding the specific content of the questions, other than that they were "based on the central research questions" (p. 940), which were "to gain a better understanding of adolescents' goals and parent-adolescent relationships (including parenting, family conflict, and stress at the transition to junior high school)" (p. 938). The methodology is not directly named within the study; themes were discovered based on what the authors observed

from the pilot interviews, and then applied and modified where necessary to accurately reflect the data collected in the study.

The results of this study provided support for the findings of previous studies demonstrating that those who perceived or experienced fewer barriers were more likely to have a more concrete career goal than those who perceived a large number of barriers. Moreover, in regards to the importance of family support, “all adolescents who expressed that their families were unsupportive did not have clearly defined goals” (Hill et al., 2003, p. 952). This study provides evidence that barriers such as lack of family support can serve as impediments to career decision-making, whereas the support of family can bolster student career decision-making. Furthermore, in this study, Mexican American and Mexican Immigrant students appeared to be more concerned about financial barriers, and were more likely to report that barriers to their education and career were out of their control. However, the Mexican American and Mexican Immigrant students were also more likely to report supportive families. This information may give a glimpse of the types of supports and barriers that Latino/a students are experiencing.

In contrast to McWhirter (1997), Hill et al. (2003) found that Mexican American and Mexican Immigrant adolescents were *less* likely to perceive barriers than were African Americans or Euro-Americans. Hill et al. (2003) offered explanations for these contradictory findings such as these immigrants may perceive relative improvement of opportunities in the United States as compared to those in Mexico. However, these contradictory findings further elucidate the importance of a more comprehensive and in-depth inquiry of specifically *what* barriers students are perceiving and expressing in order to have a greater understanding of the effect that they may be having on students.

### **Career Interventions with Latino Students**

In contrast to the burgeoning literature on career development of Latinos, there is relatively little research that investigates interventions with this group. There are a few notable exceptions that will be reviewed here.

In 1995, Fouad conducted a year-long intervention to “improve minority students’ awareness of and preparation for math and science careers” (p. 527); participants consisted of 118 ethnically diverse (with 24% identified as Latino/a) middle school students. The intervention was repeated modules of six sessions, with each module focused on a particular career; during these sessions, students were exposed to information about the career, met individuals who were working within that career, and had the opportunity to take field trips and shadow professionals. The results of the study showed that this intervention was “moderately successful” in helping students to learn about specific careers, make “concrete decisions about the high school they would attend,” and perform better in their math and science courses (Fouad, 1995, p. 73). While this study was more broadly to provide an intervention for an ethnically diverse set of students, the majority of whom were people of color, rather than being focused solely on Latino/a students. However, despite this, the findings of this study demonstrate the potential impact of career programming on middle school students, both in planning and in educational engagement.

In addition to Fouad’s (1995) program, Perry and Calhoun-Butts (2012) conducted a qualitative study in which they interviewed 11 Latino/a students (ages 14-18) about their career goals, priorities, visions of their future in a job or career, and their perceptions of their identity as Latino/a. The purpose of the interviews was to collect more in-depth information about these students’ perceptions not only of the above content areas, but also their perceptions of an after-school program for Hispanic youth. As described previously, “the goals of the program are to

enhance the career development, leadership (e.g., life skills, community service, character education), and socioemotional development of youth in middle school and high school” (Perry & Calhoun-Butts, 2012, p. 482). Through the methods of Consensual Qualitative Research (CQR; Hill, 2012), Perry and Calhoun-Butts (2012) found that students were articulating “postsecondary goals, family encouragement to pursue such goals, and a belief in the long-term payoff of school” (p. 508). Moreover, some evidence related to the ethnic identity of the participants supports the assertion by Gushue (2006) that ethnic identity may be an important ingredient in fostering career growth and decision-making in Latino/a youth.

Perry and Calhoun-Butts (2012) findings are also consistent with Gushue (2006) and reveal a different experiences of participants, despite sharing the same ethnic background. For example, while the “typical” profile was described previously, in pursuit of and belief in the higher education system, and with the support of family (Perry & Calhoun-Butts, 2012, p. 508), there were also many participants that diverged from that profile. That is, while many students articulated a value for these areas, others articulated more immediate economic needs, less understanding of the benefit of higher education in meeting those needs, and more of an inclination to pursue work rather than further education. This highlights the same issue raised by Gushue (2006) that students displayed significant within-group differences in their responses. A further inquiry into the students’ own reasoning behind why they perceived their future in either direction may help to shed more light on the origins or impacts of these within-group differences.

The qualitative inquiry of Perry and Calhoun-Butts (2012) is meaningful in providing in-depth information directly from students in regards to their own perceptions of their futures in the world of education and vocation. The data echo previous evidence (i.e., Gushue, 2006; Ojeda et al., 2011) to highlight the differences in experiences and meaningfulness of an ethnic

identity in making career choices. However, the information generated from these research studies suggests the need for research that explores the differences that the various students experience.

Perry (2012) describes “Making My Future Work” which is an intervention that has reached 800-1000 urban high school students in the state of Ohio, and is focused on “reducing the risk for school dropout while preparing young people for transition into post-secondary education and the 21st century workforce” (<http://www.csuohio.edu/cehs/mmfw/making-my-future-work-0>, 2011). However, at present no data has been published regarding the outcomes or effectiveness of Making My Future Work ([http://issuu.com/csaperspective/docs/engaged\\_scholarship-v1\\_i1/31](http://issuu.com/csaperspective/docs/engaged_scholarship-v1_i1/31)).

**Social Cognitive Career Theory-based interventions.** Social Cognitive Career Theory (SCCT, Lent et al., 1994) will be a relevant theory woven into the present study as it is 1) the theory on which Project HOPE is founded and 2) a theory incorporated significantly in the existing career research. SCCT is a common theory used in career development studies to both assess and discuss career development. SCCT posits that career development and decision-making happens as a result of children’s daily experiences and interactions. While these experiences may be career-related, SCCT also incorporates other life experiences and interactions with others and the environment that allow children to learn about their individual context and skills. As children become increasingly able to perform well in certain activities, and are reinforced in these activities by important others in their lives, they may begin to develop increased beliefs that they can continue to do well in these activities, which is referred to as “self-efficacy,” and that they may reasonably expect that have positive outcomes in the future as a result of their skills and abilities, which is known as “outcome expectations” (Lent et al., 1994).

SCCT theorizes that as students begin to have an increased sense of self-efficacy as well as outcome expectations in a particular area, they may begin to develop career ideas and interests that align with their skills. As these students continue to develop, they may begin to engage in more direct decision-making about their career potential based on these previous experiences and expectations for their performance (Lent et al., 1994). For further elaboration on definitions and research support for SCCT, see Appendix A.

An example of SCCT-based career intervention programming with Latino/a students is a program called “A Future in Iowa Career Education” (FICE; Ali, Yang, Button, & McCoy, 2012). This intervention consisted of nine sessions, and had the identified goals of increasing students’ “awareness of self, knowledge of the world of work, awareness of barriers, and identification of and access to support systems” (p.7) among others. In a multi-case study involving three high schools, the results of quantitative inquiry of the students indicated that each school saw different outcomes, but that the program was helpful in increasing vocational skills self-efficacy, career aspirations, academic self-efficacy, and slightly decreasing perceptions of barriers. In addition, school staff at each of the schools articulated appreciation for the collaboration, breadth of knowledge and information presented, and connections made between students and facilitators in the program (Ali et al., 2012). These overall findings indicate the potential benefit of partnerships with school programs and investment of career programming facilitators in enacting some change in student self-efficacy and career beliefs within a career development program.

Later iterations of the FICE program evolved into the program that was utilized prior to the present study; Project HOPE is an Iowa-based career exploration program that was designed to assist rural Latino/a students in considering possible futures, researching careers, and engaging

in conversations about the perceived barriers and potential resources of the students (Ali, 2012). Ali (2012) have conducted multiple iterations of Project HOPE, which is a six-session career exploration program based on FICE and designed to help rural, middle school, Latino/a students to explore their interests, skills, and resources and barriers in achieving a desired career; more specifically, students were asked to explore healthcare careers.

Ali and her research team have collected 5 years' worth of data to determine the effectiveness of Project HOPE on health career outcomes. For example, Ali, Brown & Loh (2014) findings suggested students did not appear to have any greater interest in healthcare careers after the implementation of Project HOPE, which Ali et al. (2014) suggest may be due to the emphasis of math and science relevance to healthcare careers overshadowing the exploration of the careers themselves and problematic measurement. Overall, the findings from Ali et al. (2014) demonstrate that Project HOPE was influential to students' awareness of connections between their academics and their desired or expected futures, and increased student self-efficacy around these areas.

Ali, Fosenburg, Menke, Rowe-Johnson, and Burke (2014) developed SCCT-based measures of health science career outcome measures to better assess the effectiveness of Project HOPE including measures of health science task self-efficacy, health science career self-efficacy, health science outcome expectations, and health science interests. Measures were based on Fouad and Smith's (1996) math/science SCCT based measures and were constructed using classical test theory techniques. Ali et al., used the measure to assess the effectiveness of Project HOPE with 355 8th grade students across 7 rural schools. Results indicated an increase in all of the health science career outcome measures from time 1 to time 2.

## **Literature Summary**

Overall, the outlined literature demonstrates the effects that various experiences, contexts, and identities may have on the students in the present study, and specifically their beliefs, aspirations, and perceptions of their futures and future careers. More specifically, the literature on Latino/a students suggests that perceived barriers may be a significant factor (McWhirter, 1997) and that the ethnic identity of the students was a significant variable in their career development; however, the extent and nature of its influence is less clear (Gushue, 2006; Flores et al., 2008; Perry & Calhoun-Butts, 2012). Moreover, Latino/a students who experienced or perceived a significant number of barriers were less likely to feel a sense of confidence in their abilities, or in what they believed they could achieve (Gushue et al., 2011). This phenomenon of having high hopes for their futures, but not believing that they could achieve these dreams, was seen in studies by both Flores et al. (2008) and Yowell (2002), and may suggest the impact of some other force (potentially barriers) in causing a divergence between goals and expectations. As Flores et al. (2008) state, it may be useful to investigate students prior to high school to attempt to observe when this divergence is occurring.

In addition to the literature on Latino/a students, the literature on rural populations suggests that supports and barriers are a significant source of concern for students in this population and that career interventions may be able to help Latino students to marshal supports to reduce potential barriers. More specifically, students were likely to perceive barriers to their education, and saw these barriers as significant impediments and even reasons why they may not attend college (Ali & McWhirter, 2006). Rural students were also likely to see barriers as problematic not only to their pursuit of higher education, but also to their ability to later advance in their future careers (Ali & Saunders, 2009). However, the research on rural students also provides information not only on the barriers that these students perceive, but also the resources

and supports that they perceive. For many students, support from others and feeling that they can use others as resources for pursuing careers and education was seen as helpful (Lapan et al., 1999; Wettersten et al., 2005). However, Ali and Saunders (2009) found that supports were not a significant factor in the career development of rural youth. Thus, the data for rural students demonstrates some evidence that resources and barriers are a relevant set of variables in the career development of this population. Further information regarding the more specific barriers and supports that are perceived and experienced in rural students may be helpful in better understanding their career development.

Despite the existing body of literature, it is of note that there is relatively little research on the career development of middle school-age children. The evidence that exists, however, suggests that students at this age are already building their own sense of self-efficacy, and that it appeared to affect their views of the future (Jantzer et al., 2009). Furthermore, students (specifically, Latino/a students) of this age are already beginning to perceive barriers to their education and careers, and these barriers appeared to affect their career choices (Hill et al., 2003). It is important to recognize that this research evidence, albeit brief, suggests that the particular aspects of this study (i.e., barriers and career development) are already salient to students of this age.

The existing literature is useful in demonstrating the role of barriers in affecting student self-efficacy, expectations for the future, and goals. Furthermore, evidence regarding groups that represent each salient identity for the present study (i.e., rural students, middle school students, and Latino/a students) have suggested that for each of these groups, supports and barriers appear to be a relevant aspect of their career development. That is, for rural students, the perception of barriers was significant in affecting students' expectations of what they could achieve, which

appeared to also affect student choices and planning (Ali & McWhirter, 2006; Jantzer et al., 2009). In the case of Latino/a students, student beliefs about their futures were affected by their ethnic identity, perception of barriers, and level of perceived support (Gushue, 2006; McWhirter, 1997; Flores et al., 2008; Yowell, 2002). However, due to the complexity of the findings thus far, authors have called for further research on Latino/a perceptions of barriers to gain a better understanding (Gushue, 2006). Thus, the evidence regarding rural students and Latino/a students suggests that students may experience barriers if they identify with either of these groups; this evidence provides a background for better understanding the participants of the present study, who will be both rural and Latino/a.

As evidenced by the literature, there are a number of articles highlighting the general role of barriers in career development (Lindley, 2005), as well as specific issues related to rural students (e.g., Wettersten et al., 2005; Ali & McWhirter, 2006; Ali & Saunders, 2009), middle school students (Jackson & Nutini, 2002), and Latino/a students (e.g., Gushue, 2006; Gushue et al., 2011; Flores et al., 2008). There are also combinations of these identities, including rural middle school students (Jantzer et al., 2009), and Latino/a middle school students (Ojeda et al., 2011; Hill et al., 2003).

In these studies, there is some conflicting evidence about the presence and role of supports and barriers in student career development, but as yet, the present author is unaware of any other studies that examine the specific population of rural, middle school, low SES, Latino/a students. However, this seems appropriate to study given that the presence of barriers and importance of supports and resources was identified in rural students (e.g., Ali & McWhirter, 2006), middle school students (Jantzer et al., 2009), and Latino/a students (e.g., Gushue et al., 2011). These findings in conjunction would suggest that these constructs would be salient in an

intersection of these three levels of identity. Moreover, given the evidence shown in Yowell (2002) and Flores (2008) that Latino/a students experience a gap between aspirations and expectations of themselves, as well as the suggestion that this may develop earlier in the students' career development, it seems imperative to gain a better understanding of the forces that are affecting these students. Not only will this help to facilitate a better understanding of the concerns related to this population, but it may also allow for more targeted interventions related to assessing, understanding, and learning how to promote the access to and use of supports and resources, as well as how to overcome barriers, which may be meaningful in improving student outlook (Gainor, 2006; McWhirter et al., 2000)

As evidenced, the perception of supports and barriers may be categorized as a key component within self-efficacy; that is, students that expect to come up against significant roadblocks, and especially those who do not perceive that they can overcome them, have been shown to have reduced career self-efficacy (Ali & McWhirter, 2006). In understanding this, it follows that a more concrete, specific, and in-depth understanding of how students understand their own resources and barriers could be helpful in crafting appropriate interventions for this population. That is, a potential benefit of the present research may be to better understand the specific supports and barriers that the students perceive, as well as the ways that they may see themselves overcoming their particular barriers. With a better understanding of this, researchers and practitioners may be more equipped to consider interventions based on recognizing and overcoming barriers in order to promote career decision-making self-efficacy; this would in turn, hopefully, improve students' belief in his or her aspirations as reasonable, as seen in previous examples of high self-efficacy (see Lindley, 2005).

The present study will focus on rural middle school Latino/a students in a Midwest town with a meat-packing plant. The number of Latino/a immigrants in small rural towns has been on the rise in the Midwest, largely due to the availability of meat-packing plants with available jobs (Grey, 1997). According to Jordan et al. (2012), the decreased likelihood of Latino/a rural students graduating high school (as compared with non-rural areas) may potentially be caused by the availability of meat-packing jobs without post-secondary education. This information, along with the general dearth of research on Latino/a students' career development further demonstrates the need to engage in research that elucidates the specific contextual factors that may affect rural Latino/a students' future career goals.

Given the need for further research on the career development of rural Latino/a students, the need for further interventions for Latino/a students' career development, and the importance of furthering the research field through the use of the participant voice, the purpose of this study is to utilize qualitative inquiry to gain a more in-depth understanding of the career opportunities, interests, and contextual variables that the Latino/a, rural, middle school students in this study perceive, as well as the ways in which they believe that contextual factors may affect their ability to achieve their personal, academic, and vocational futures.

### Chapter 3: Methods

The purpose of this study is to gain a greater understanding of the career beliefs, expectations, resources, and barriers that the rural Latino/a middle school students in this study perceive in their educational and career pursuits. In order to do this, the present study uses qualitative methods, specifically CQR (Hill, 2012) to ascertain the specific supports, obstacles, resources, and concerns that the students perceive. The findings of this study, in conjunction with the existing literature, may help to bolster the field of research around this population, facilitate new research inquiries, and help to improve interventions with this population.

Students in the present study had just finished an iteration of Project HOPE, which is a six-session healthcare career exploration and development program founded largely on Social Cognitive Career Theory (SCCT; Lent et al., 1994). For a more in-depth description of SCCT, including further definitions of SCCT variables, see Appendix A. Within Project HOPE, students are asked to consider their likes, dislikes, and areas of interest, with particular attention to the ways in which these might overlap with the world of work, specifically within healthcare. While there is some large-group discussion of their resources and barriers throughout Project HOPE (see Appendix B for further description), students were selected to participate in more in-depth interviews to gain further insight into their overall career goals, their perceptions of the future, their perception of barriers that they may encounter, as well as the resources and supports they feel they can access to overcome them.

The rationale to engage the students in interviews is founded largely in Critical Psychology, which is a research lens in which the researcher “is not focused on the creation of ‘knowledge for knowledge’s sake’ ... Rather, we are concerned with research that advances knowledge that helps to create social change for the benefit of marginalized people”

(Prilleltensky & Nelson, 2002). This means that from the perspective of critical psychology, the focus of the research should be to engage participants from underserved groups in the research process in such a way that the research benefits the academic community in the acquisition of knowledge, but also benefits the participants and their communities. This research is intended to contribute to the field, to engage in empowerment and social justice initiatives, and to “give voice to participant experiences” (p. 51).

In order to engage in this type of research, researchers may utilize qualitative inquiry in order to capture this participant voice, as “qualitative research can open up the field of play so that the voices of marginalized people are heard and the interpretation of findings is negotiated between the researchers and disadvantaged citizens” (Prilleltensky & Nelson, 2002, p.52). In the context of the present study, critical psychology is the lens through which participant experiences are understood and the participant is engaged in the process of research and change. Furthermore, qualitative methodology, specifically Consensual Qualitative Research (Hill, 2012) was used as a means of extracting this participant voice and representing it.

As stated by Lent et al. (2000), there is a dearth of research that serves to better explore the contextual variables that may have an effect on career development. Thus, similar to Lent et al., 2002, the present study endeavors to explore these contextual variables in rural Latino/a middle school students through the use of qualitative inquiry. Perry, DeWine, Duffy, and Vance (2007) also employed CQR methodology and analysis in order to better understand SCCT constructs. That is, in their investigation of the effectiveness of an after-school program for youth of color, Perry et al. (2007) conducted interviews regarding SCCT-related constructs of career development, and then employed CQR analysis to explore how the students experienced those constructs.

The present study also utilized CQR methodology analysis (which is described in further detail below) as a means of gathering and analyzing the data in a way that permits themes to emerge based on participant report. Themes found through analysis serve to shed further light on the constructs of contextual variables, specifically supports and barriers, within SCCT. However, this study did not impose the theory of SCCT onto the data that are collected; rather, the data were analyzed based on CQR procedures, and then were related to SCCT variables as relevant or appropriate following analysis.

The author notes that for the purposes of this study, the word Latino/a will be used to encompass students who identify as Hispanic or Latino/a from various countries of origin. However, when provided, the specific nationality of the students will be provided in the methods section.

### **Participants**

The participants in this study were eleven eighth grade Latino/a students from a rural Midwestern middle school. The school from which the students were chosen was selected by Project HOPE due to the rural location, as well as the high incidence of Latino/a students at the school; 64.5% of the student body identifies as Hispanic/Latino (Columbus Community School District, 2013; <http://www.columbus.k12.ia.us/?PN=AboutUs>). These participants had recently finished the Project HOPE Career Program and were recruited for this study following their participation; only students who identified as Latino/a on a Project HOPE pretest were eligible to be chosen. This pool of students were split by gender, and an equal number of boys and girls were chosen at random. Twelve students were chosen to interview; however, given that it was a two-part interview process, one female participant was not present at the time of the second

interview. Thus, 11 participants are included in the final data set, including six male and five female participants.

### **Protocol**

The present researcher has done two previous sets of interviews of students following Project HOPE. The current set of questions has been developed based on the researcher's observations of the effectiveness of questions in eliciting information from the students that elaborated on material and was targeted to the question intent. Moreover, while previous interviews have focused more broadly on student experiences in the program, with some questions in reference to resources and barriers, the present protocol has been modified to reflect a more specific focus on the resources and barriers experienced by the students. In order to facilitate questions regarding both the student perceptions of the future as well as their perceptions of the role of Project HOPE in these perceptions, the interviews were split into two parts. Both interview protocols can be found in Appendices III and IV.

The first protocol consists of 10 interview questions with related prompts; the second protocol consisted of 9 interview questions. These protocol questions, prompts, and lengths were consistent with protocol suggestions for a CQR study (Hill et al., 1997). The interviews were semi-structured to allow for follow up, probing of responses, and student elaboration in order to gather in-depth information about the variables of interest in the study. Feedback regarding the interview protocol was solicited from Project HOPE researchers as well as individuals not involved in the program; the purpose of this was to gain perspective not only from those who are familiar with the mission of the program, but also from those who could provide more general feedback about the scope and comprehensiveness of the questions. For a list of questions that were used in the present study, see Appendix C.

## **Procedure**

The present study was approved by the university board for research with human subjects. Only students who assented, and whose parents consented, to participate in Project HOPE were asked to participate in interviews. From a pool of Latino/a students based on the teacher's roster, an equal number of male and female students were randomly selected. This was done via the following method: the teacher had popsicle sticks with each student's name on one; the popsicle sticks of the students who identified as Latino/a on the Project HOPE initial assessment were separated from the rest of the class, split by gender, and then an equal number of students from the male and female groups were chosen. Students were asked if they were interested in participating, but with the option that they could choose to not participate or withdraw their participation at any time. If a student had declined, he or she would have been removed from the pool of possible participants and another would have been randomly selected. No students refused the interview process, and none chose to withdraw during interviewing. The number of total interviews is consistent with expectations within CQR methodology; 11 students were interviewed in the present study (Hill, 2012).

Interviews were conducted in English; if this is had not been the preference of a selected student, another student would have been randomly selected. However, while some students varied in their English proficiency, all indicated interest in participating and comfort in conducting the interview in English. Each of the interviews lasted for a duration of 18-25 minutes, and were conducted in a confidential area within the school. All of the interviews were conducted by the present researcher. Interviews were audio recorded and then transcribed for data analysis.

## **Informed Consent (Expectations, Benefits, Risk/Harm)**

Consent forms are issued to students and parents prior to the beginning of Project HOPE implementation; both parent consent and student assent are pursued prior to participation in the program. The consent form includes a section regarding being interviewed for research purposes following the program, and includes permission to audio record the interview for research purposes. The potential benefits include improving further programming for students regarding their career choices. Risks include potential boredom, missing a day of class for the field trip, and transmitting information for data collection over the internet. Participants were not provided with compensation of any kind for their participation in the interviews; this was made clear to students prior to interviewing.

### **Consensual Qualitative Research (CQR) Methods**

As stated by Hill (2012) “CQR is an inductive process that allows the results to emerge from the data and uses words and stories rather than numbers as the raw data” (Hill, 2012, p. 25). More specifically, it is a process by which researchers can engage in qualitative data analysis in a systematic manner. Since the original description in 1997 (Hill et al.), CQR has been used as the methodology for multiple studies that endeavor to gain a greater understanding of a particular phenomenon in a way that encompasses both the need to explore and reflect subjective data as well as the need to conduct research in a systematic way. As Hill (2012) explains, the process is grounded within both post-positivism, which emphasizes the pursuit of “truth,” and constructivism, which emphasizes the role of each person in constructing his or her own truth. The process of CQR involves five major components, which include,

- (a) open ended questions in semistructured data collection...
- (b) several judges throughout the data analysis process...
- (c) consensus to arrive at judgments about the meaning of the data
- (d) at least one auditor to check the work of the primary team of

judges and minimize the effects of groupthink... and (e) domains, core ideas, and cross-analysis (Hill, Knox, Thompson, Williams, Hess, & Ladany, 2005).

Reaching a “consensus” in CQR refers to the process of team members not only analyzing the data individually, but also coming together to discuss interpretations and ideas about the data and meanings. This process requires a significant amount of mutual respect and understanding among team members, as well as recognition of differing viewpoints (Hill et al., 1997).

**Research Team.** CQR employs a team of researchers, rather than a single researcher, to analyze and come to a consensus on the data; in this way “the team members are working to co-construct a ‘truth’ as they seek to represent the data as faithfully as possible” (p. 26).

Following the assembly of the research team, the members were trained on the process of CQR and their specific roles in the data analysis; this training was conducted by a faculty member experienced in CQR methodology. Furthermore, each member was asked to engage in reflection regarding her biases and expectations for the present project. The intent of this process within CQR is to be aware of those biases in a way that prevents contamination of the experiences and expressions of the participants (Hill, 2012). These biases were recorded by each person, and included expectations that students would experience a high number of barriers, that they would find Project HOPE helpful, that students would be able to generate career goals, both in general and potentially as a result of Project HOPE, and that they would identify family members as helpful resources. These biases were revisited throughout the analysis process in order to attempt to moderate the effect of these biases on the overall depiction of the data.

The research team members were selected by the primary researcher, and were a set team in which the primary researcher conducts all of the interviews. Two fellow graduate students of

the primary researcher participated in the analysis, and faculty advisor to the project served as the auditor. One of the graduate students on the analysis team is a new graduate student; at the time of data analysis, she had assisted the present author with the implementation of Project HOPE one time. However, the other graduate student on the team was an advanced student; he had never participated in an implementation of Project HOPE, but had experience providing field trip opportunities for the HOPE students and was familiar with the mission of the program. Prior to beginning the study, team members addressed salient aspects of their identity (including race/ethnicity, education level, gender) with respect to how they may affect their perspectives on the study as well as how they may be relevant to team interactions and group dynamics. These were addressed openly in consensus meetings as relevant, along with the previously mentioned biases.

**External Auditor.** As stated, a faculty advisor served as the external auditor for this study. The role of the auditor is important as it “exists outside the process of consensus and acts as a ‘check for the team’ at set points throughout the analysis” (Hill, 2012, p. 137). This person, because they are not actively involved in the analysis throughout the study, can provide a different perspective, and can allow for increased objectivity and potentially recognize or reduce overall bias among the team members’ analyses (Hill, 2012, p. 137). The role of the auditor will be discussed in greater detail throughout the description of the analysis process.

**Coding Domains.** The first step in the analysis is to set up a list of “domains”; this is an early set of broad categories that are used to better organize the data. These domains are developed directly from the data based on the analysis team’s perceptions of the content areas within the data. The data was compiled into a set of Excel spreadsheets with each participant’s transcript having its own spreadsheet document. The analysis team reviewed each transcript to

discern domains. Once these domains were chosen, the team analyzed the data and organized it into the most appropriate domain. As a process of coming to consensus, the analysis team constructed the domains using roughly half of the interviews and then applied these domains to the remaining interviews following consensus of the initial domains; these domains were modified based on the whole set of interviews until they accurately reflect the data (Hill et al., 1997). Team members were instructed to place sections of participant responses into one domain. Given that the participants in this study were often brief in their responses, it was typical that a response to a query or question was only one or two sentences, and thus this was the typical unit of analysis. Within CQR, assigning a portion of a response into two domains may be allowed if there is a rationale. This rationale was discussed with the larger team at the time of the consensus meetings; however, in the present study, the analysis team did not encounter data that meaningfully required double-coding.

As suggested by Hill et al. (1997), there was an “other” domain to capture elements of the responses that have not yet been accounted for in the existing domains. However, in CQR, all data must be coded into a domain. The “other” category, then, was revisited to examine the responses for further domain possibilities (Hill et al., 1997, p. 545); any data that could reasonably be accounted for elsewhere, or in another domain, was moved to maximize meaning within the data. The “other” domain consists mostly of off-topic remarks or conversations.

When all members of the team had the opportunity to code the data into domains, the team assembled in order to come to the aforementioned consensus regarding the best and most appropriate placement for the data. As stated, this required significant listening and cooperation on the part of the team members in order to come to agreement. After this step, the data was presented to the external auditor for review.

**Core Ideas.** After reaching a consensus about the appropriate coding in the domains, and receiving feedback or changes from the external auditor, the next step is to “construct core ideas” (Hill et al., 1997, p. 546). During this process, the members of the team use the previously chosen domains and examine the expression of these domains for each individual participant. Then, each participant’s responses within a domain are to be summarized in a concise and succinct manner that “captures the essence of what was said” (Hill et al., p. 547). A major task of the team members at this level of analysis is to compile these concise descriptions and summarizations in a way that accurately reflects the overall message of the participant’s responses as well as the meaning of the relevant domain (Hill et al., 1997). However, in the present study, the majority of student responses were direct and succinct; that is, students did not elaborate significantly in response to interview questions. Thus, consultation with the research team and external auditor resulted in omitting this step in the traditional implementation, specifically because the intent of this step is to summarize student responses to break them down for easier categorization. In the case of this study, summarization of direct and non-elaborated responses was not necessary, as responses were already typically appearing in the most succinct possible form. Considerations regarding this analysis decision will be included in the discussion. Given this, the team continued from domain sorting and categorization to an examination of themes within and across cases, as seen in cross-analysis.

**Cross Analysis.** After the domains were chosen and the material within those domains has been rewritten into concise summaries of the data, the team members began to focus more on the larger scope of the data. That is, the process up until this point required significant attention to each individual case, and the ways in which each case’s data is representative of domain

concepts. However, once consensus was reached on those areas and cross-analysis begins, the team began to look across multiple cases to search for patterns in the data (Hill et al., 1997).

During this process, Hill et al. (1997) state that the team may choose to do this either individually or as a group. In either case, the data will be compiled “into one mega document sorted by domains” (Hill, 2012, p. 117). In this document, rather than having the data sorted by participant, the data will be sorted by domain; in this way, the team will be able to see all of the core ideas from all participants that fall under each domain. Once this organizational structure is in place, the team analyzed the data one domain at a time. In this level of analysis, the team organized the core ideas by similarity; concurrently throughout this process, the team began to name categories of data. Category names and concepts may change throughout the process to adequately reflect the data, and it is important to note that when there is confusion about core ideas and their meaning, it may be necessary to return to the raw data for clarification (Hill, 2012). This was done for each domain. Given that in the present study, this process was done by each individual team member, the team reconvened to come to a consensus, as is true in the previous steps.

Once again, after a consensus was reached within the primary team, the results of the cross-analysis and the resulting categories were given to the auditor. This can be done one domain at a time, or as a whole; in the present study, the auditor was given all domains at once for review and audit. Hill (2012) recommends that the auditor attend to all categories and the appropriateness of each core idea within them, but calls for special attention to the “other” category in order to determine if there are data that could be coded elsewhere (Hill, 2012, p. 123). After receiving feedback from the auditor, the team worked to incorporate the feedback,

and at times worked in conjunction with the auditor as suggested by Hill “until the most elegant solution to the cross-analysis emerges” (p. 124).

**Frequency.** After the categories were agreed upon by both the primary team as well as the auditor, the next step of the analysis was to determine the frequency within each category. Frequencies within CQR are categorized as general, typical, variant, and rare, and these frequencies are based not on how many core ideas appear beneath a category, but how many participants are represented within that category. That is,

When a category consists of data from all participants, or all but one of the participants, that category is labeled *general*. Categories that consist of data from more than half of the participants up to the cutoff for general are *typical*. Categories that consist of data from at least two participants up to half of the participants are considered *variant*. When samples are larger than 15, a category would be considered *rare* when it included core ideas from two or three participants (in which case variant categories would contain four or more participants) (Hill, 2012, p. 124).

After these frequencies were assigned to each category, a table of the categories and their frequencies was compiled. Again, the auditor was asked to review the frequencies and final analysis and provide any feedback to the primary team.

## Chapter 4: Results

Following analysis, eight domains emerged; these included Future Goals and Beliefs, Worries and Barriers for the Future, Factors that Affect Career Interest and Decisions, Role of Others in Thinking and Planning the Future, Role of the Self in Thinking and Planning the Future, Non-Human Sources of Knowledge and Information, Things Learned in Project HOPE, and Evaluations and Comments on Project HOPE. Each domain was separated into multiple categories, as noted in the methods section; it is notable that in response to many of the questions, most students did not elaborate significantly, but rather responded with less abstract and more direct and concise answers. For this reason, within the results section there are areas in which the use of quotes would not be meaningful in describing the data; rather in these cases, elaboration in the form of descriptive lists will be provided to elucidate data findings. Further information about the specific content of student responses can be found in the appendices corresponding to each domain.

### Pseudonyms

The following table illustrates the pseudonyms for the eleven participants.

Table 1. Pseudonym Chart

| Pseudonym | Gender |
|-----------|--------|
| Sara      | Female |
| Alejandro | Male   |
| Mariana   | Female |
| Joaquín   | Male   |
| Javier    | Male   |
| Victoria  | Female |
| Mía       | Female |
| Tomás     | Male   |
| David     | Male   |
| Luciana   | Female |
| Sergio    | Male   |

### Future Goals and Beliefs

The data within this domain capture students' perceptions of their desired futures, as well as whether or not they believe that those futures are attainable. Within this, five categories emerged, including Career and Education Goals, 10-year Expectations, Beliefs about the Achievability, The Importance of Location for the Future, and Expectations about Changing Jobs. As an overall domain, Future Goals and Beliefs includes descriptive information about what the students in this study are hoping for from their futures in addition to providing more abstract information about how they are perceiving their futures, options, and desires.

Table 2. Future Goals and Beliefs

| Category                              | Frequency | Specifier |
|---------------------------------------|-----------|-----------|
| Career and Education Goals            | 11        | General   |
| 10-year Expectations                  | 11        | General   |
| Beliefs about the Achievability       | 11        | General   |
| Importance of Location for the Future | 5         | Variant   |
| Expectations about Changing Jobs      | 3         | Variant   |

**Career and education goals.** Each student in the study was asked to identify their career goals as a part of the interview; thus, this category is classified as general with a response from each student. Of these responses, it is notable that seven of the eleven participants specifically identified healthcare careers as their desired future career. These included doctor, nurse, medical illustrator, army medic, audiologist, veterinarian, and ultrasound technician. Other careers included policeman, music producer, model, and zoologist.

**10-year expectations.** During the interview, students were asked where they might see themselves in 10 years, which for the majority of them would be at age 23-24. Within this category, the majority of students identified that they would be either in college or working in ten years (nine of the eleven). However, the other two students articulated that they might guess but ultimately were unsure of where they would be. Finally, three students identified that what

they hoped for extended beyond careers and included having a satisfying life, better things (e.g., nicer cell phone, better car) and a nice place to live.

**Beliefs about achievability.** This category includes information about whether or not the students felt that they could achieve the career and educational goals they had identified. Ten of the eleven students believed that they could achieve their goals, although two of these students specifically identified that they believed it would require hard work to do so. Only one student expressed that he was unsure, and felt that based on the skills he has, he could “maybe” achieve his goals.

**Importance of location.** This category includes students’ mention of ideas or hopes related to being in a specific location. Five students mentioned a location; of these, two mentioned wanting to be in areas near family, and the other three mentioned going to destinations where they would either like to live (e.g., “near a coast”) or areas they believe would be better for their careers (e.g., moving to a bigger city where there is “more crime” for a student who wants to be a policeman).

**Expectations about changing jobs.** Three students identified that as a part of their expectations for the future, they anticipated that they would likely change their job or career at some point. All three identified that after they enter the workforce, they may eventually want to transition into a different job; for example, one participant wanted to become a nurse and work in healthcare, and then eventually train and become a doctor.

### **Worries and Barriers for the Future**

The data within this domain capture the students’ concerns about what may happen in the future. Within this domain are 10 categories: Worried about Changing Minds, Financial Concerns, Worries about Failing, Worries about the College Environment, Location-related

Concerns, Social Life Interference, Life Events that Could Interfere, Fears about Elements of the Desired Career, Personal Effort and Confidence Worries, and Worries that the Future Seems too Difficult. This domain generally encapsulates students responses to questions regarding what they fear may get in the way of them pursuing and attaining their desired futures. It is notable that the specific content within these categories, such as money or worries about academic performance, were not directly asked for in the interview. The following categories elucidate the worries and concerns generated by these students based on a general question of what they feared could get in their way in pursuing academic and career success.

Table 3. Worries and Barriers for the Future

| Category                                    | Frequency | Specifier |
|---|-----------|-----------|
| Worried about Changing Minds                | 4         | Variant   |
| Financial Concerns                          | 5         | Variant   |
| Worries about Failing                       | 7         | Typical   |
| Worries about the College Environment       | 1         | Rare      |
| Location-related Concerns                   | 4         | Variant   |
| Social Life Interference                    | 2         | Rare      |
| Life Events that Could Interfere            | 5         | Variant   |
| Fears about Elements of the Desired Career  | 4         | Variant   |
| Personal Effort and Confidence Worries      | 5         | Variant   |
| Worries that the Future Seems too Difficult | 2         | Rare      |

**Worried about Changing Minds.** Four students identified concerns that changing their minds, either about going to college or about their career choices, could be a barrier to them having the future that they wanted. While this is similar to Expectations about Changing Jobs, the difference lies in students' worry that indecision and changing their minds could be problematic for them as they pursue their futures, as opposed to a general expectation that they will work more than one job in their lives. Specifically, two students identified that they may lose interest in the job they are currently interested, and are concerned with how that would change their career trajectory. For example:

*Joaquín: Um... I guess just thinking a lot about it, because then it's gonna be my job for like the rest of my life or something, I'm gonna have to study for it for four years [laughs] and I don't want to study for four years and then end up not liking it. So I think that could probably stop me, 'cause I don't want to be, if I don't like the job, I don't want to be old doing it. I want to be happy doing it. For a long time.*

In addition, one student stated she may choose not to go to college, which would prevent her from pursuing her desired career. The other student who identified this worry expressed that he has changed his mind in the past enough times that he does not feel confident that he will be able to sustain interest in the career he currently wants to pursue:

*David: Like sometimes I think being a policeman, and a couple years ago I wanted to be a soccer player, I could change my mind in high school.*

**Financial Concerns.** Five of the eleven students generated financial concerns and worries about money as something that they believed could prevent them from achieving their goals. It is notable that at no point during the interview were the students asked directly whether or not they were concerned about money unless the student spontaneously brought it up first.

Examples of students' concerns include

*I: Alright, so this is kind of along the same lines, but talk to me about some of the things that might prevent you from getting the job that you want.*

*Sara: Um, having enough money to go to college. Uh, and like, getting the books, and all the stuff you need to be ready.*

*I: Okay. So overall, what would you say is the biggest thing that influences or affects how you think about your future?*

*Joaquín: Money!*

*I: Money? Okay. How's that?*

*Joaquín: Well, if I don't have money I really can't pursue the career that I want to choose.*

In these cases, these students identify having money to attend college and buy the necessary materials as a concern for them as they plan the future, to the point that the second

example shows the student identifying that money was the *most* concerning thing for him in thinking about his future.

**Worried about Failing.** Seven of the eleven students expressed worry that they may struggle or fail academically, which would impede their ability to follow the career path they had identified. Students anticipated that this could happen specifically in high school or college, and others just generally worried about their academic performance as a potential hindrance to their career path.

*I: Okay, is there anything in particular that makes you feel like there's no hope?*

*Tomás: Uh just kind of like, cheaters in general and stuff like that, and they might give you a hard time or whatever and you'd get mad, and also when you're falling behind in school and you can't keep up, that's when people decide to quit.*

*I: Okay, alright. Well on the flip side of that question, it sounds like you have a lot of people who support you, can you tell me about a time when you felt discouraged in your career path?*

*Sergio: Um... Hmm... When I like, I um... When I looked up the college stuff and like um your grades you have to be in it, sometimes I'm like can I really do that, you know? And ya, that's about it.*

*I: Okay, what was that like?*

*Sergio: Um... I felt bad because like I really like, you know like if you have plans and stuff and then you get ruined and I don't know it's just like, ya. So you just gotta work hard.*

**Worries about the College Environment.** Only one student identified concerns about the college environment when asked about potential worries and barriers in the future. This student felt that he needed to attend a large university to achieve his goals, but was worried about the environment there and the impact it could have on his learning:

*I: No? Okay... Well what about the other end. Can you tell me about a time where you felt really discouraged?*

*Sara: ...And having to be there all day or like part time, that's kind of weird. And then going to the big college. Can't go to just the community college, you have to go to like the University of Iowa or UNI.*

*I: Okay, so there's a lot of them in there. So going to school full time feels like a lot, maybe. Okay. And tell me about going to a community college versus going to like the University of Iowa.*

*Sara: There's less people there, and you get to like, I think you get more attention there because like, there won't be like 60 people in your class, they'll be like 20 or something, 30, so the teacher can pay more attention to you than if you were in like big classes.*

**Location-related Concerns.** Four of the eleven students identified specific concerns related to how their location, proximity to family, and transportation could affect their decision-making and ability to pursue their goals. Again, this is similar to the Importance of Location category, but with the distinction that students' thoughts about locations they may want to live in (as in the Importance of Location category) is different from students worrying that location-based issues may impede them from doing or being what they want in the future.

*I: Okay, so actually being able to pay for it and buy everything you need. Okay, what else are you worried could prevent you?*

*Sara: Um, like transportation and stuff like that, 'cause I live here and it's over there and if I don't get my driver's license, but I think I probably will though.*

*I: Okay. Well can you think of anything could get in the way? [of your goals]*

*Mía: Um... Hm. The drive. [laughs] Cause I really think about that because I want to... I don't want to struggle until... I guess, see where locations are, cause I don't want to be in a zoo that's far away, I want to stay in Iowa. I don't want to not know where I'm at, like here I know where to go and stuff. So I guess location. And um... ya. Location.*

**Social Life Interference.** Two students identified worries about getting caught up in their social lives in the future as something that could be problematic in being academically successful. Both were concerned that pressure from friends and the opportunity to “party” could cause them to lose track of their studies.

*I: Okay, um... can you think of anything else as you're thinking about high school, maybe college, that could prevent you from doing well in those?*

*Tomás: Uh, a big one's friends. People might just want to go party and just forget schoolwork and stuff like that.*

*I: Okay, so that could make it tougher. What else?*

*Tomás: If you just kind of follow the crowd, or if the group doesn't want to do... people just choose to party and stuff and you might just ease your way into doing that instead of doing work.*

**Life Events that Could Interfere.** Five students expressed concern that major life events or problems could derail them from their goals, including family problems, accidents, pregnancy, drugs, and jail. Specifically, four of these students expressed that they may get into an accident which would not allow them to meet the physical demands of a job:

*I: Okay, great. So on the other side of that, can you tell me about something that you're worried could prevent you from having the future and job that you want?*

*Sergio: Not really.*

*I: No? What about looking ahead, something that could happen in high school or before you enlist, anything that you're worried could prevent you or get in the way?*

*Sergio: Maybe an injury I guess, if you break a leg or something, you can't run and you can't do the stuff they want you to do, so...*

Two students stated that getting into drugs and going to jail could prevent them from pursuing their education and career goals:

*I: Okay. Um, can you think of other things that you're worried could prevent you from doing what you want to do?*

*Javier: If I go to prison or jail or something like that.*

*I: Okay. Sure. Anything else?*

*Javier: No*

*I: Do you think that that's a real possibility for you?*

*Javier: Maybe*

*I: Okay, why do you say maybe?*

*Javier: because my brothers and them like, they're... they might do drugs and they will ask me if I want to do them but I always say no.*

*I: Okay, ya. So if you, heaven forbid, got in an accident. Um... and what other things do you mean when you say "something that would change your life"?*

*Victoria: You never know okay, I mean I'm not saying that I will, but sometimes if you are under pressure or something, you could probably get into drugs and then that could probably change your life. I don't know, maybe if you start doing bad things, you go to jail and stuff.*

Finally, one student expressed that pregnancy was an issue of concern for her as she anticipated what might prevent her from pursuing her goals in the future.

*I: Okay. And what do you mean if something goes wrong?*

*Victoria: I don't know. There's a LOT of things that can go wrong. If I got pregnant, that would be hard. If I... did something dumb. I don't know!*

**Fears about Elements of the Desired Career.** Four students expressed that certain parts of the job that they were interested in pursuing seemed to be problematic; these students worried that these job requirements or job elements could prevent them from participating in the careers that they wanted.

*I: Oh okay, great. So they really want you to do something that makes good money and that you enjoy. All of those things. Okay. Have you ever had a time when you felt discouraged in your career path [to be an ultrasound technician]?*

*Victoria: Yes, well. Okay, well it was kind of a change in opinion, 'cause they didn't tell me like oh you shouldn't do this, but like there was this girl who also wanted to do the same thing as me, you know the ultrasounds, and she said that she wouldn't recommend it because you would do ultrasounds on other things, cause she said that she wanted to do like... she wanted to do it herself or something, but then she had to like pop this guys... water thing, and then she had to check it? And that kind of discouraged me, but I don't know. Somebody told me that, well I don't know who it was, but they said I don't have to do that I could just focus on doing the stomachs and stuff.*

*I: Okay, so for a second you were a little worried about it because that's not what you want, but maybe you could specialize in the one kind? Okay. Have there been any other times when you've felt discouraged.*

*Victoria: Well I wouldn't want to, but sometimes I get like... I don't know if I could handle myself if I see a baby inside somebody that's like deformed or... I know that it's gonna be sick or... you know.*

*David: Um... maybe other people. If I don't want to work for this person because I know them and I don't like them or something. If I don't get along with them, but I need to in order for me to get this job. Or... sometimes if I was a policeman, I might get hurt, because they work with guns and people might not surrender that easily.*

**Personal Effort and Confidence Worries.** Five students expressed worry that in the face of barriers, they may either lose confidence in their work or begin to give up or make less of an effort in their academic work. In these cases, students articulated worry that if they were faced with difficulty or discouragement, it is possible that they would not feel confident in their

ability to succeed and thus may begin to withdraw from their studies in a way that could negatively impact their ultimate career goals.

*I: Okay. What about you specifically, are there things that you're worried could prevent you from you know, doing high school and college the way you'd want to to get your dream job?*

*Victoria: Um... I don't know. Maybe not trying to put effort into it.*

*I: Okay, not working as hard maybe?*

*Victoria: Losing confidence.*

*I: Losing confidence? How would you lose confidence? What might happen?*

*Victoria: Maybe get lazier, maybe somebody tells me something that just makes me want to stop.*

*I: Okay, great. Well what about from the flip side, can you tell me about a time that you felt discouraged in your career path?*

*Tomás: When something was really extremely difficult and I couldn't find a way through then I just like gave up all hope.*

*I: Okay, did that happen? Can you tell me about a –*

*Tomás: Not that I can recall but that's happened quite a few times.*

**Anticipating Hard Work and Stress.** Two students identified that they believe the future will require a lot of hard work and potentially stress; this was identified as a worry about their ability to pursue their future goals. However, as seen in the following example, the student was worried about the stress that could be a part of her desired career, but ultimately did not feel that it would prevent her from doing what she wanted to do with her life:

*I: well, so on the opposite end, it sounds like you're very supported by your family. Can you tell me about a time when you felt really discouraged about your job?*

*Mariana: Um... [pause] I think it's going to be hard.*

*I: Okay, what do you think is going to be hard about it?*

*Mariana: To do a lot of stuffs, and walk and walk, helping people. It's gonna be a stress.*

*I: Okay, what parts of it do you think will be stressful for you?*

*Mariana: Learning stuffs, and... learning stuffs about the... [pause] what's it called? The... people that are sick. Something like that.*

*I: Okay, like the patients? Okay. So does that make you feel discouraged that you won't be able to do it someday?*

*Mariana: Um, no. I don't think so.*

## **Factors that Affect Career Interest and Decisions**

This domain primarily captures the experiences and elements of particular careers that have caused the students to either rule-in or rule-out a particular career. There are six categories within this domain: Personal Experiences Sparked Interest, Money Matters, Want Challenge from a Job, Activities and Tasks that Promote Job Interest, Activities and Tasks that Deter Job Interest, Work Environment Factors that Affect Job Interest. Some of the domains reflect interests that have come from their own experiences as well as some that have developed out of observing others and making decisions about what particular job factors may be most relevant to them as they think about pursuing a career. Ultimately, the focus of this domain is not on the ways that others have influenced their career decisions, but rather specific aspects of a job or career that they have observed and that have caused them to rule-in or rule-out their possibilities. Some categories beneath this domain tap into a person-environment fit variable, while others include more intrapersonal drives and motivations.

Table 4. Factors that Affect Career Interest and Decisions

| Category  | Frequency | Specifier |
|---|-----------|-----------|
| Personal Experiences Sparked Interest             | 4         | Variant   |
| Money Matters                                     | 5         | Variant   |
| Want Challenge from a Job                         | 3         | Variant   |
| Activities and Tasks that Promote Job Interest    | 10        | General   |
| Activities and Tasks that Deter Job Interest      | 6         | Typical   |
| Work Environment Factors that Affect Job Interest | 6         | Typical   |

**Personal Experiences Sparked Interest.** This category includes experiences and anecdotes that the students reflected on from their lives that have helped them to shape their interests with specific regard to careers. When asked about inspirations and reasons that they were interested in their “dream jobs,” four students cited specific personal experiences which gave them exposure to something important to them and led them to a particular career of interest, for example:

*I: Okay, well that's good. So in thinking, as you're thinking about your career stuff, who would you say your biggest influence is?*

*Sara: Or like I don't know, my animals or something like that. Because I remember, I had... I went to Mexico like there was a lot of animals that couldn't be, like it was sad. Cause they were there like on the streets and I was all like helping them and yeah.*

*I: Okay, alright. Well tell me about a time that you felt really inspired or excited about your dream job.*

*Victoria: Um, oh well like my family members when they are pregnant or something, it really inspires me like I love to see the ultrasounds and I love to see the babies and like... I don't know. It like, it seems whatever, but I've seen like 16 and pregnant and I don't know, it's really... like looking at the people and seeing how happy they are, it just... I love it, it's so... it's beautiful.*

**Money Matters.** Within this category, five students identified that money was a relevant variable in their career decision-making. Four of these five students stated that they would rule out a job that they might otherwise like (e.g., teaching) because it does not make enough money. All five students articulated that money is important in their futures, but one student had a unique response to how money was relevant to him:

*I: Okay what do you like about it?*

*Tomás: Um just uh, just I – well it's pretty fun, decent amount of money.*

*I: Ya okay, so it's good for summer it sounds like. Is that something you'd consider a future in?*

*Tomás: Uhhh future, no. But just like to keep me busy while getting some money? Ya. I'd probably consider it.*

In this case, the student is identifying that money is valuable to him, and that he would be willing to work a job that he does not really enjoy in the service of making money; however, he was also able to identify that money would not be the only drive, and thus he would not want to work this job full time.

**Don't want a Boring Job.** Three students identified specifically that they do not want to work a job that is “boring.” In at least one of these cases, the student is relating their career decision-making to the jobs that her parents have, and specifically articulating that the highly

routinized and rote activities “sound boring.” The three students who mentioned this did not elaborate significantly, but simply stated that they want a “hard job” or something that isn’t “boring.”

**Personal Interests and Likes.** Ten of the eleven students in this study indicated some areas of personal interest or enjoyment that have lead them to particular career decisions. These included helping people, working with animals, getting to solve problems, being creative, and getting to interact with others. In addition to these specific areas that students expressed that they liked, several students also simply articulated an enjoyment or passion for or fascination with an area of a job:

*I: Okay. Alright, well tell me about a time when you felt really inspired to be a music producer.*

*Javier: Um... just like I just like playing with music and stuff, it's what I like.*

*I: Okay.*

*Javier: And, like... it makes me happy.*

*I: Okay, great. So you're just very passionate about it?*

*Javier: Ya*

*I: Okay, how do they influence you?*

*Victoria: I don't know they... uh... they don't really influence... I don't know! I just – ah. Like I'm interested in it because I think I like the sick kids and I always wondered how or why the reasons they'd be coming out like, like twins or something like that. Or like, you know, people with downs syndrome or people with other parts to them, like people who have multiple body parts.*

**Personal Dislikes.** Responses in this category consist of general activities and activities specific to particular jobs that have helped the students to rule out particular occupations. As with the previous category, some of these dislikes are based out of their own personal experiences, although others are based out of awareness of others' jobs and judgments of aspects of those jobs that they would not enjoy. Six students expressed particular activities they would dislike in a job; these included not wanting to kill animals, not wanting to deal with blood, not wanting to do manual labor activities, and not wanting to drive a semi. It is notable that many of

these responses came as a result of asking whether or not the students would want to work in their parents' jobs; thus, some of these responses reflect the things that they have observed in their parents' careers and would not like to engage in themselves.

*Sara: Just unpacking and packing that's all they do. And then, being outside like killing the animals, like the pigs and stuff like that. It's weird... I couldn't do that.*

**Work Environment Elements.** While the previous categories were related to specific job tasks and activities, this domain contains elements of the job environment. Six students identified work environment elements that affect their decision-making; these included not wanting to have to be outside in the sun all day, not wanting to be in danger on the job, wanting reasonable work hours, and wanting a calm work environment. As with the previous category, however, the majority of responses related to their thoughts on work environments stemmed from observations of their parents' experiences that affected their decision-making.

### **Role of Others in Thinking and Planning the Future**

Within this domain are students' perceptions of other individuals in their lives who have affected their thoughts about their futures, as well as how these individuals were influential. To this end, students named several different people who have been influential in some way for them during their career decision-making, totaling nine different categories: Parents, Siblings, Teachers/Counselors, Extended Family, Peers, Project HOPE, Experts, Guest Speakers, and Famous Icons, as well as "Unspecified Others." This last category includes student responses in which they identified that they could anticipate roles that others would play in their career development, but did not specify a particular individual or group. Below is a table which shows the number of students who identified each of these categories.

Table 5. Role of Others: By Individual or Group

| Individual or Group | Frequency | Specifier |
|---------------------|-----------|-----------|
| Parents             | 11        | General   |
| Siblings            | 7         | Typical   |
| Teachers/Counselors | 9         | Typical   |
| Extended Family     | 3         | Variant   |
| Peers               | 3         | Variant   |
| Project HOPE        | 11        | General   |
| Experts             | 7         | Typical   |
| Famous Icons        | 2         | Rare      |
| Unspecified Others  | 6         | Typical   |

In addition, data was also separated by type of influence or support; these types totaled seven categories: Support/Encourage, Discourage, Changed Goals, Vicarious Learning, Resource in Problem Situations, Exposure to Information and Experiences, and Connections to Experts/Professionals. Below is a table showing the frequency with which students identified each type of influence.

Table 6. Role of Others: By Role

| Type of Role                         | Frequency | Specifier |
|--------------------------------------|-----------|-----------|
| Support/Encourage                    | 11        | General   |
| Discourage                           | 6         | Typical   |
| Changed Goals                        | 10        | General   |
| Vicarious Learning                   | 11        | General   |
| Resource in Problem Situations       | 4         | Variant   |
| Exposure to Information/Experience   | 11        | General   |
| Connections to Experts/Professionals | 1         | Rare      |

However, in order to maintain the context of the data and hold the meaning of specifically how individuals were influential to the students, there are now 30 categories corresponding to the intersections of both a specific individual or group and the role that they played for the student. The following is a table which outlines the frequency at which each of these 30 categories were mentioned, after which each category will be explained and examples will be provided.

Table 7. Role of Others: Roles Fulfilled by Each Individual or Group

| Individual or Group | Role                                | Frequency | Specifier |
|---------------------|-------------------------------------|-----------|-----------|
| Parents             | Support/Encourage                   | 11        | General   |
|                     | Discourage                          | 1         | Rare      |
|                     | Vicarious Learning                  | 11        | General   |
|                     | Resource                            | 1         | Rare      |
|                     | Exposure to Information/Experiences | 5         | Variant   |
|                     | Connections to Experts              | 1         | Rare      |
| Siblings            | Support/Encourage                   | 4         | Variant   |
|                     | Vicarious Learning                  | 3         | Variant   |
|                     | Resource                            | 3         | Variant   |
|                     | Exposure to Information/Experiences | 2         | Rare      |
| Teachers/Counselors | Support/Encourage                   | 5         | Variant   |
|                     | Discourage                          | 2         | Rare      |
|                     | Changed Goals                       | 1         | Rare      |
|                     | Resource                            | 2         | Rare      |
|                     | Exposure to Information/Experiences | 8         | Typical   |
| Extended Family     | Support/Encourage                   | 3         | Variant   |
|                     | Vicarious Learning                  | 1         | Rare      |
|                     | Exposure to Information/Experiences | 1         | Rare      |
| Peers               | Vicarious Learning                  | 3         | Variant   |
| Project HOPE        | Support/Encourage                   | 3         | Variant   |
|                     | Changed Goals                       | 9         | Typical   |
|                     | Vicarious Learning                  | 2         | Rare      |
|                     | Exposure to Information/Experiences | 11        | General   |
| Experts             | Support/Encourage                   | 2         | Rare      |
|                     | Vicarious Learning                  | 1         | Rare      |
|                     | Exposure to Information/Experiences | 4         | Variant   |
| Famous Icons        | Vicarious Learning                  | 2         | Rare      |
| Unspecified Others  | Support/Encourage                   | 1         | Rare      |
|                     | Discourage                          | 5         | Variant   |

**Support and Encourage.** Within this category are student responses which express that others are helpful or influential to the students when they are actively supportive of the students and encourage them to pursue their goals. Below is a table that identifies the important others who students identify as supportive.

Table 8. Role of Others: Support and Encourage

| Role              | Individual or Group | Frequency | Specifier |
|-------------------|---------------------|-----------|-----------|
| Support/Encourage | Parents             | 11        | General   |
|                   | Siblings            | 4         | Variant   |
|                   | Teachers/Counselors | 5         | Variant   |
|                   | Extended Family     | 3         | Variant   |
|                   | Project HOPE        | 3         | Variant   |
|                   | Experts             | 2         | Rare      |
|                   | Unspecified Others  | 1         | Rare      |

As evident from this table, students are most commonly identifying parents as a source of support and encouragement in pursuing their desired futures. The following are examples of students' perceptions of parents' support and encouragement.

*I: Okay. Well can you tell me about a time or an example when you felt supported by someone in your career path? In pursuing your job?*

*Javier: I'll say my stepdad*

*I: Okay, do you have a specific example you can think of?*

*Javier: ...No.*

*I: No? Okay. So what does he do to make you feel supported?*

*Javier: He's there for me when I need him. So I can like... tell him, tells me to keep pursuing my dreams*

*I: Okay, wonderful. Can you think of any other times you felt supported?*

*Mía: When I talked to my mom about it I guess.*

*I: Okay, how does she support you?*

*Mía: She just says that it's a cool job and it sounds like me, so I should do what I want to do because you know, it's my life and I can be whatever I want to be.*

*I: Okay. Well can you tell me about a time when you felt supported in your career path?*

*Tomás: when my dad said I can pick out my own computer. Ya, that kind of opened like a door for me to experience it in a way.*

*I: Okay, okay. So how did that help you feel supported?*

*Tomás: Just basically uh... he has trust in me in ways-ish to deal with it, and ya.*

*I: Okay. So that he trusted you to pick it out felt really big. Okay. So does your dad generally support you in thinking about your computers career?*

*Tomás: Ya, he tells me if you really believe in it, just go make it happen. Just don't let anybody tell you differently. Just believe in what you believe in.*

In addition, students identify support from teachers and school counselors,

*I: No? Okay. Um, well can you tell me about a time when you felt supported by someone in your career path?*

**David:** *Um, one of those times when I'm, when someone is talking to me about me or my future and what job I'm gonna get, those questions about whether I will finish high school, like they don't think I'm gonna finish high school. But I don't know.*

**I:** *So, did you say you think you're gonna finish high school or you don't –*

**David:** *No, I'm gonna finish high school I'm pretty sure. They just ask me if I will finish high school, but I will, and I'll try to get good grades and like go to college and get scholarships and things.*

**I:** *Okay, and do you feel like people support you in doing that?*

**David:** *Um, the adults do, teachers, ya.*

as well as siblings,

**I:** *Okay. Can you think of anybody who could help you?*

**Victoria:** *Um ya, my family.*

**I:** *Okay, would you go to them in those situations?*

**Victoria:** *Ya.*

**I:** *Okay good. Anyone specifically?*

**Victoria:** *Probably my sisters*

extended family,

**I:** *Okay, so those are the kind of two things. Either you don't want to go to college or maybe you change your mind? Okay. Um, what do you like about the idea of being a veterinarian?*

**Sara:** *...and then my cousin, she wants to be one too, and then I told her that I wanted to be one too and she was like "yes, you can"*

and Project HOPE staff,

**I:** *Okay, alright. Well can you tell me about an example of a time when you felt supported by someone in thinking about your future job?*

**Mía:** *Um... Um... like Rochelle [facilitator]. I remember we were sitting down and we were just talking bout like what we wanted to be, and she was like supporting me and saying that it was cool and stuff and so I guess I would say that it inspired me that other people thought it was fun and that they would like to have that job too.*

**I:** *Okay, okay. Did she [facilitator] affect your ideas about your abilities at all? Or what you thought you could do?*

**Sergio:** *Um, a little bit.*

**I:** *A little bit, how so?*

**Sergio:** *She said that if I tried, I could do it, and stuff.*

The above examples elucidate the ways in which different individuals have been supportive to them. It is notable that students were not directly asked whether their parents (or any other specific party) were supportive; thus, all students in this study independently generated their parents as a major source of support and encouragement.

**Discourage.** This category is slightly different from other content areas of the data in that it includes student responses about both the presence and the absence of discouragement in their lives. Six of the eleven discussed discouragement; of these, one described his parents in a potential discouraging role, two discussed teachers, and the remaining four specifically articulated that no one had ever discouraged them. .

Table 9. Role of Others: Discourage

| Role       | Individual or Group | Frequency | Specifier |
|------------|---------------------|-----------|-----------|
| Discourage | Parents             | 1         | Rare      |
|            | Teachers/Counselors | 2         | Rare      |
|            | Unspecified Others* | 5         | Variant   |

Additionally, it is notable that while one student identified that his parents may discourage him in his future, he referred specifically to examples of when they may be disappointed in him if he did something wrong and that would feel discouraging to him. The content of this is important to note, as he is not expressing that his parents discourage him from his dreams, but rather that he may experience discouragement in himself if he disappoints them.

*I: Okay, great. Well what about the other end of the spectrum, a time when you felt really discouraged?*

*Javier: [pause] When I did something bad. Like, they'd probably be mad at me and make me feel down*

*I: Okay, who would?*

*Javier: My mom and my stepdad*

*I: Okay, well what's an example of... of doing something bad? I don't know what that means*

*Javier: I had brass knuckles on and the police, they pulled my brother over, and I had them on me. And they got me because I had those on me. And they ended up charging me with that.*

Two students identified teachers as discouragers:

**I:** *No? Okay. Have you ever had situations besides that one like in school or at a job that you felt discouraged?*

**Javier:** *[pause] Like here at school? When teachers like... like if you don't do your homework, they like start telling you stuff like you, like your brother has a bad reputation, and they think that you're like him. So they're gonna say that you're just gonna be just like your brother or something like that.*

**I:** *Okay. So you can feel discouraged when you feel like they just put you in that same box?*

**Javier:** *Ya*

**I:** *Okay. Can you tell me about a time when you felt discouraged in your career path?*

**David:** *Um... ya, it's like, when I was younger I wanted to become this thing but it was like really hard to do it, and teachers seemed like, thought that I couldn't make it because it was for like professionals in sports. Because being a team on sports is really hard to do, and the teachers said I was like... that it would be really hard to do if I wanted to make it in something.*

**I:** *Okay, so you wanted to be a professional athlete. In what sport?*

**David:** *Soccer.*

**I:** *But your teacher said....*

**David:** *Well one of my teachers seemed to think I couldn't make it, because they didn't see how good I was so they couldn't see me as a professional player.*

**I:** *Okay, so how did that make you feel?*

**David:** *Bad, because like... like I thought I would be making it because I play, I been playing for like a long time. Ya.*

Included in this category, along with potential discouragement from parents and teachers, are student responses stating that no one has ever discouraged them; this is important, given that of the six students that discussed discouragement in relation to others, four specifically responded that they had never been discouraged by someone else in regards to their career path. While this may seem different than the other areas included in this category, it is notable for the present study, especially given that one of the areas of interest was how much students experienced or identified potential barriers. Considering that discouragement from important others could potentially be anticipated to be a barrier, it is notable that of students who discussed discouragement, the majority addressed it in the absence of experiencing it.

**Changed Goals.** Within this category are student responses related to others who have specifically caused them to change their goals for the future. Ten of the eleven students had had some experience with an important other that caused them to change their goals.

Table 10. Role of Others: Changed Goals

| Role          | Individual or Group | Frequency | Specifier |
|---------------|---------------------|-----------|-----------|
| Changed Goals | Teachers/Counselors | 1         | Rare      |
|               | Project HOPE        | 8         | Typical   |

One of these was from a teacher in relation to the discouragement he experienced regarding a previous career of interest:

*David:* Well one of my teachers seemed to think I couldn't make it, because they didn't see how good I was so they couldn't see me as a professional player.

*I:* Okay, so how did that make you feel?

*David:* Bad, because like... like I thought I would be making it because I play, I been playing for like a long time. Ya.

*I:* Okay, so did that change your mind at all about it?

*David:* Kind of, but not really. Now it's like, when I get older, I think I don't want to be a soccer player no more, now I want like a different jobs that easier to get, and that gets, that gets paid good money.

The other eight endorsements of changed goals were after experiences in Project HOPE. It is relevant to note that students were specifically asked whether their career goals have changed as a result of Project HOPE.

*I:* Okay, great. So would you say that as a result of project HOPE your career goals have changed?

*Joaquín:* Ya sort of.

*I:* Okay, how?

*Joaquín:* I'm kind of like more interested in to audiology because it seemed pretty cool and I'm kind of like... in between now of like... either computer animations or audiology. So, yep.

*I:* And... so audiology... is new?

*Joaquín:* Ya, pretty much never heard of that before HOPE

*I:* Okay. So did you learn anything about yourself in the program?

*Victoria:* I learned, because I used to want to be like a cosmetologist or something like that but then I actually changed my mind and I want to do something that gots to do with helping people and like working in the hospital or

*helping with kids that have downs syndrome or something. Like it's more interesting and like, I don't know. I think it's interesting.*

**I:** *Okay, so overall, if you reflect, and we've obviously talked a lot about it here, how would you say Project HOPE affected you?*

**Mía:** *Um it really changed my view on careers. Like at first I had no idea, like I was at first I wanted to be this and then I wanted to be this and I guess just like looking for one thing and like researching it and seeing like if you liked it and stuff. I think that really helped and now I really want to achieve my goals and go to college and... try to work in the zoo place because I really like it.*

**I:** *Okay. And so have your career goals changed from doing project HOPE?*

**Luciana:** *Not a lot.*

**I:** *No? Okay. So before, I know we talked about this a little bit last time, but before Project HOPE what did you want to be?*

**Luciana:** *A model.*

**I:** *Okay, and now...?*

**Luciana:** *Still model. But then again, kind of into the business or nursing career.*

**Vicarious Learning.** Vicarious Learning refers to experiences that students have had wherein direct observation of the experiences of others have influenced their own career decision-making. This is different from the elements that help them to rule-in and rule-out careers in that this category is intended to elucidate the ways in which these students are learning from others' experiences and applying it to their own development (as opposed to the focus being on specific aspects of a job that affect student decision-making). Within this category, all eleven students were able to identify at least one experience of vicarious learning. As seen in the following table, they were significantly more likely to identify vicarious learning in regards to observing parents' experiences.

Table 11. Role of Others: Vicarious Learning

| Role               | Individual or Group | Frequency | Specifier |
|--------------------|---------------------|-----------|-----------|
| Vicarious Learning | Parents             | 11        | General   |
|                    | Siblings            | 3         | Variant   |
|                    | Extended Family     | 1         | Rare      |
|                    | Peers               | 3         | Variant   |
|                    | Project HOPE        | 2         | Rare      |
|                    | Experts             | 1         | Rare      |
|                    | Famous Icons        | 2         | Rare      |

Predominantly, student endorsements of vicarious learning from parents consisted of students' willingness to engage in their parents' careers. For the most part, students articulated that they would not want to engage in their parents' careers; as stated previously, the specific content of the jobs that made them feel this way is found in the Factors that Affect Decision-Making domain. However, there were also more specified vicarious learning experiences:

**I:** *Okay, so you don't have a choice. Okay, so is there any other ways that he influences you?*

**Javier:** *He tells me about how he was like a drug dealer back then and how he's changed his life, and he wants me to like, not go through the same thing that he did*

**I:** *Ya, okay. So does that change how you think about things?*

**Javier:** *Uh-huh*

**I:** *How so?*

**Javier:** *Um cause like, if I was a drug dealer and I got caught, I would probably not be able to get certain jobs because of my record*

**I:** *Uhhuh, okay. Kind of makes you think you want to stay clean, keep on the up and up and avoid all that.*

**Javier:** *Ya*

**I:** *Okay. So who else influences you in thinking about jobs and your future?*

**Javier:** *Uh, my mom. She talks to me about education*

**I:** *Uhhuh, what does she say?*

**Javier:** *She's from Mexico and stuff, so she didn't get a really good education and so she tells me to take advantage of it*

**I:** *Okay, and how do you take advantage of it*

**Javier:** *Well, by going to school.*

**I:** *Okay, alright. Um... how do your parents talk about their jobs? What do they tell you about them?*

**Javier:** *To... do good in school cause sometimes they come home tired and they really like don't like, finish school and get a good job and you won't be like me. Have the struggles.*

**I:** *Okay, so one of the struggles is being tired. What are the other ones?*

**Javier:** *Like, parts of their body hurting*

**I:** *Okay, so what makes you think that you'll be able to do that?*

**Victoria:** *Um, because I think, I think what makes me know that I would be like, be able to get there is like... um... like go to like my parents, I'll put them as an example. They didn't go to school much and they don't have a very good job, so I think maybe I can like, you know... do something that would be better.*

**I:** *Okay, alright. Well how about your parents, what do they do for a living?*

**David:** *Like their jobs?*

**I:** *Ya.*

**David:** *well they're not really good jobs because they came from Mexico. But they both work at Tyson, but one makes more money than the other because they work longer and they do something harder. I don't know how much they get paid, but... ya, I don't know.*

**I:** *Okay, so they both work at Tyson, okay. Um... and you said one makes more than the other because they do a harder job, do you know what the job is?*

**David:** *No, alls I know is that sometimes Dad is the one who actually kills the pigs, so that makes it harder than the other one where you just cut the pieces.*

**I:** *Okay, are either of those jobs a job that maybe you'd be interested in?*

**David:** *No, they want me to become a better job, they say I should go to college and get a better job and get paid more.*

**I:** *Okay. So would you want to, first ask about your mom and then your dad, would you want to do the jobs that your mom does?*

**Luciana:** *Ya. [pause] I don't know, it seems like she's not, she's happy with what she does. She doesn't just do it for the money, she does it like, to make herself happy. And then, I'm not really with my dad, so I don't know how he is.*

Other endorsements of vicarious learning were in regards to interactions with other peers, family members, HOPE staff, and teachers during which the students were able to either discuss with or observe these others' experiences and relate them to the students' own perceptions and experiences. In addition, two students identified famous icons (specifically a model named Mimi Smalls and Bill Gates) who these students felt were influential in their experiences.

**Resource in Times of Need.** This category includes student comments regarding who they might go to for help or assistance if they ran into problems at some point in the future. Four

of the eleven students mentioned this, specifically citing parents, siblings, and teachers, at the frequencies seen below. These students identified that these individuals could be a resource in providing advice to fix or solve problems, help with finances (specifically siblings and parents), and helping with academic problems (specifically teachers).

Table 12. Role of Others: Resource in Times of Need

| Role                      | Individual or Group | Frequency | Specifier |
|---------------------------|---------------------|-----------|-----------|
| Resource in Times of Need | Parents             | 1         | Rare      |
|                           | Siblings            | 3         | Variant   |
|                           | Teachers/Counselors | 2         | Rare      |

**Exposure to Information and Experiences.** This category includes student responses regarding the extent to which important others in their lives have facilitated their learning and career development through providing information or creating experiences in which the students can learn more about their career options as well as the educational paths to access those careers. Within this category, all eleven students identified at least one important other who filled this role for them.

Table 13. Role of Others: Exposure to Information and Experiences

| Role                               | Individual or Group | Frequency | Specifier |
|------------------------------------|---------------------|-----------|-----------|
| Exposure to Information/Experience | Parents             | 5         | Variant   |
|                                    | Siblings            | 2         | Rare      |
|                                    | Teachers/Counselors | 8         | Typical   |
|                                    | Extended Family     | 1         | Rare      |
|                                    | Project HOPE        | 11        | General   |
|                                    | Experts             | 4         | Variant   |

As is evident from the distribution of responses, students were most likely to identify their teachers and Project HOPE staff as influential in providing exposure to the types of careers available as well as information and help on how the students can pursue those careers. The following are examples of student reflections on how teachers have been helpful.

*I: Okay so other people who are in the same area? Alright, anybody else?*

*Joaquín: Uh... teachers, I guess.*

*I: Ya, okay. How could they help you?*

**Joaquín:** *They can like, help you like give you advice about which classes to take so it will be like more experience in what that job is going to be like*

**I:** *Okay so they can kind of advise you about things that you want to learn if you want to do those things?*

**Joaquín:** *Ya*

**I:** *Okay. How about, you said people at school? What does that mean?*

**Luciana:** *Like the counselors.*

**I:** *Okay. How could they help you?*

**Luciana:** *By maybe researching and getting information on some stuff, by giving me advice?*

**I:** *Okay, what kind of advice?*

**Luciana:** *Like... um... I don't know. Just how to act, or... I don't know.*

**I:** *Okay. You said like getting you information, what kind of information?*

**Luciana:** *Like um... school information and like... the colleges and hm. Kind of um... like to focus on my high school career and how to be like my grades in high school and then so I can get a good career in college*

In addition, the following examples elucidate the ways in which students identify Project HOPE as a source of information and experiences related to and relevant to their career development. It is notable that students were specifically asked about the role of Project HOPE and what they learned; this information was not specifically elicited in regards to other individuals or groups. Thus, the fact that all eleven students identified Project HOPE is likely an artifact of both influential experiences as well as being directly asked about it.

**I:** *No? Okay. So, did Project HOPE help you think about or know more about jobs that you might like?*

**Sara:** *Ya.*

**I:** *Okay, how so?*

**Sara:** *Like they gave me um... more jobs and like the health careers so you don't just have to be like... you don't, like it gives you more, like... excitement or something like that? To do health careers, because some people might think it's long work and it's just gonna end up to be boring or something like that. But sometimes it turned out to be really fun. And you can do great things with your life, I guess.*

**I:** *Okay, you really want to do it so you will. Okay. Well tell me about something that made you get really inspired or excited about one of the jobs you're interested in*

**Joaquín:** *Uh, well when I went to the field trip and we went to the audiologist part, that was... that was pretty awesome. I don't know, I liked that one. And*

*then for computer animations, I don't know. Just like, all the new like... like pretty much like new video games, like... graphics and just look kind of... wow. Like really really really cool and real.*

**I:** *Ya! We had fun too. So I've asked you a lot of questions between last time and this time, obviously. Overall, how would you say that Project HOPE affected you?*

**Javier:** *It affected me, it got me thinking about joining the medical, like doing medical things when I'm older. That's... try a different job or something.*

**I:** *Okay. Any other ways that it affected you?*

**Javier:** *Um... I learned more about it. Now I know more.*

**I:** *Okay. Okay, so how do you think you can overcome that? If that happens?*

**Mía:** *If what happens?*

**I:** *That you become discouraged or don't like it as much*

**Mía:** *Um think about something else. After Project HOPE, it really made me think about what I wanted to be, because I wanted to be this and then I wanted to be that but I think just looking up things and knowing how much I would get paid and... it made me really want to because I knew about it. So... I found things that I liked.*

**I:** *okay, so did Project HOPE help you to know a little bit more about the kind of jobs that you like?*

**Tomás:** *Yes, a lot more.*

**I:** *Can you say more about that?*

**Tomás:** *Uh I didn't know if I'll like a particular job dealing with computers but it ended up being that it is because the outcome of it is extremely good, you make quite a bit of money a year from doing that job and it requires about 4 years of college and about \$16,000 just for the four year, which is a lot. But pretty much pretty good.*

**I:** *mmhmm, okay, alright. So how did Project HOPE help you think more about those things? [being in nursing or business instead of being a model]*

**Luciana:** *Because they gave us information about it? Not just oh, like... this is what they do, more like paying and different kinds of nurses that there are, and schooling. I was grateful.*

In addition to teachers and Project HOPE, students identified parents as sources of information and exposure to jobs and careers,

**I:** *Okay. Cool. So, when you think about that or think about like jobs you want to do someday, who would you say is your biggest influence?*

**Javier:** *On like, getting a job? I would say my stepdad*

**I:** *Okay, so what does he do for you?*

*Javier: Um, like. He persuades me to work and he wants me to like make money and stuff*

*I: Okay, so how does he persuade you?*

*Javier: By putting me to work when I don't want to.*

as well as experts or professionals,

*I: Okay, so can you tell me about a time specifically, you kind of already did, but tell me about a time specifically when you felt inspired about your dream.*

*Mía: Um a lot of times. Like the school programs where they'd have people come in and they'd just show you a bunch of animals and they would tell you about their job and like that they liked it and... and then um ,going to the zoo and seeing like, like as a child there'd be a tour guide and they'd just be talking about it and have all this knowledge about it and we would be so fanta- like fantasized about how they knew all this and how they got to interact with the animals, you know? So I guess that like inspired me.*

*I: Okay. So who influences you in thinking about different jobs?*

*David: Uh, just other police officers I guess. Because like, there's a couple days I seen police cars passing by with people.*

*I: Okay, have you talked to any police officers about –*

*David: No, I just thought that maybe one day, this policeman came down to the reading room and described his job like what he's gotta do and stuff.*

Finally, students identified other individuals such as siblings and extended family who predominantly provide information and advice about how to pursue their desired goals.

**Connections to Experts/Professionals.** This category was only mentioned by one participant; this young woman identified that her mom has been influential in her career exploration and development by having connections to the modeling world.

*I: Okay. Alright, well can you tell me about a time when you felt supported by someone in your career path?*

*Luciana: Um... my mom, one time there was a model that was going to come to Iowa City and she was gonna take me to that, but at the end the model didn't even come. But she was gonna get me like... because she knows the owner of the place where she was gonna go and then she was gonna talk to the owner to let me in, and then to have me talk to the model.*

## **Role of the Self in Thinking and Planning the Future**

This domain consists of student expressions regarding how they see themselves and their own ability, volition, and choice as impacting their futures. Within this domain are five categories: I Can Do Positive Things to Impact my Future, I Have Qualities that Will Help Me, I Can Stay Out of Trouble, and I am My Own Motivator.

Table 14. Role of the Self in Thinking and Planning the Future

| Category                                     | Frequency | Specifier |
|--|-----------|-----------|
| I Can Do Positive Things to Impact my Future | 10        | General   |
| I Have Qualities that Will Help Me           | 6         | Typical   |
| I Can Stay Out of Trouble                    | 1         | Rare      |
| I am My Own Motivator                        | 4         | Variant   |

**I Can Do Positive Things to Impact my Future.** Ten of the eleven students identified that they could engage in positive or constructive behaviors that could impact their futures.

*I: Okay, well when you think about those things coming up, how does it make you feel? We have these inspirational things and these discouraging things. How does that make you feel overall about what you want to do?*

*Sara: Like... it makes me like, think that I could do it. Like I can overcome it, I just need to start saving money and probably am gonna have to start working and start learning more, and get like through high school right. And get good grades in high school.*

*I: Yeah? What makes you feel like you can do it?*

*Mariana: By... working hard and... and... to accomplish my goals.*

*I: Okay, so lots of hard work? What other things make you feel like you can get to where you want to be?*

*Mariana: Like... having good grades, and... doing activities and... yeah.*

*I: Very cool, so if you become discouraged...*

*Mía: I guess I'll just like, try to fix why I'm discouraged and if it's something little I mean I'm just gonna have to get over it because I really like this job. But then if it's something big, I mean if it's a really big problem, think about something else that doesn't have that big problem.*

Students identified predominantly that they anticipated needing to work hard to pursue their goals, but also noted that they wanted to make plans, earn money, and engage in problem-solving if concerns arose for them.

**I Have Qualities that Will Help Me.** Six of the eleven students stated that they believe they have specific characteristics or qualities that will benefit them as they attempt to pursue their goals. In contrast with the previous category, these responses do not refer to behaviors that the students can engage in, but rather internal attributes that they identify as helpful.

*I: Yeah? What makes you think that?*

*Alejandro: [pause] um... cause I really wanna do it, so...*

*I: Okay, so you're passionate about it?*

*Alejandro: Yeah.*

*I: Okay, what other things make you feel like you can do it?*

*Alejandro: [pause] Um... I'm smart, I'm active, I'm strong. I like to figure out things. Sometimes, it depends on whether I want to do it or not.*

*I: Okay. And is there anything from the outside world that could get in your way, or make it harder for you to do what you want to do?*

*Mía: Um... hm, I don't know. I'm very... stubborn [laughs] so if that's what I want... I would work my hardest to get it and I don't think there'd be anybody who can stop me from doing it if that's what, if I really wanted it. So I don't think so.*

Within this domain, it is notable that four of the six who identified internal attributes indicated that determination was an important characteristic that made them feel confident in their ability to achieve their goals.

**I Can Stay Out of Trouble.** One of the eleven students specifically stated that one of the ways that he could be an agent in pursuing and ensuring his future was by staying out of trouble. While this is a rare category, it is notable that this was particularly impactful for this student, and within the context of his other influences and experiences, appeared to be a major way that he felt he needed to put in effort to maximize his ability to achieve his goals.

*I: Okay. How are you going to stay away from that?*

*Javier: By... knowing what they're [his brothers] gonna do. And stay away from when they do something bad?*

*I: Good, how are you gonna keep that up?*

*Javier: By staying away from them, I just let them do their own thing and I do my own thing.*

In this case, the student is responding to what he thinks could prevent him, which is identified as getting into legal trouble or into drugs; as is evident from the quote above, he expresses that “staying away from them” and staying out of trouble is the best way to overcome potential setbacks.

**I am My Own Motivator.** Four of the eleven students specifically stated that as they think about their futures, they identify themselves as the primary motivators for and agents in achieving their goals.

*I: Nobody else? Okay. Who can help you get to where you want to be in the future. Who can help you become that detective?*

*Alejandro: Myself.*

*I: Okay, is there anybody that particularly encourages you to do that? [to learn more and research]*

*Mia: Um, like what do you mean?*

*I: Um, like anybody who really pushes you to like learn about it or think about it or...*

*Mia: Myself.*

### Non-Human Sources of Knowledge and Information

Ten of the eleven students in this study named non-human sources of information as they thought about where they got messages and information about careers. Of these responses, students overwhelmingly identify the internet as their main source of information and messages about jobs and careers.

Table 15. Non-Human Sources of Knowledge and Information

| Category   | Frequency | Specifier |
|------------|-----------|-----------|
| Books      | 2         | Rare      |
| Internet   | 9         | Typical   |
| Billboards | 1         | Rare      |
| TV Shows   | 4         | Variant   |
| Magazines  | 2         | Rare      |
| Newspaper  | 2         | Rare      |

In fact, in regards to books and billboards, students identified that these could be potential sources of information, but with the three responses associated with these categories, all the students stated that they had not utilized these resources before. As stated previously, given the directness of some of the responses within this domain, quotes from all categories will not be included as they do not provide information beyond the basic identification of an information source. Below are quotes responding to the categories of Internet and TV Shows, as these were most common and include student elaboration.

**Internet.** As stated, nine of the eleven students identified that they get information and messages about jobs and careers from the internet. However, as evidenced by the quotes below, some students identified utilizing the internet to gather information while others expressed an awareness that information could be found on the internet but did not identify engaging in internet searching around careers.

*I: Okay. You mentioned the internet, do you learn anything or get any information from the internet about jobs?*

*Sergio: Ya, sometimes.*

*I: Okay, what kind of information have you gotten?*

*Sergio: Uh, like I like to go on the army page and see like how much they get paid and like, um, how much like the, how long do you have to like be in the like training camp or whatever you want to call it, and what it takes to be, and like how you're, like how good your grades have to be in high school and stuff, so then you can join and stuff. So that's kinda like a little bit of information I guess.*

*I: Ya, ya, sounds like quite a bit of information about that. Okay, did that influence how you felt about going into the army at all?*

*Sergio: Um... a little bit, like... ya.*

*I: Okay, got it. So overall when you're learning about careers, where do you get messages about them?*

*Javier: The computer, like I look up stuff on the computer*

*I: What do you look up?*

*Javier: Like how to get there, what do I got to do, why I got to do like here in high school*

*I: Okay, what have you learned about that?*

**Javier:** *That you gotta graduate high school and that when you like, do your training, your training right there, so you're actually working and training at the same time*

**I:** *Okay, looking up information. Where could you find that?*

**David:** *The computer.*

**I:** *Okay, is that something you ever do? Look up stuff on the internet?*

**David:** *Oh no, not really. Sometimes, but I don't have a computer so I can't really use it all the time. So ya, even if I do use it, I don't use it for that, I just play something else or watch videos.*

**I:** *Okay, so if you have a chance to be on a computer, you don't usually use it for research,*

**David:** *[laughs] No.*

As evidenced by the final quote, it is important to note that while the internet is identified as a source of information, it cannot be assumed that all students in the study have regular access to the internet in order to access this information.

**TV.** Four of the eleven students in this study identified that they get information about careers from TV shows and commercials.

**I:** *Ya, like a time you were inspired to do what you want to do, or something made you really excited about that job and your future.*

**Alejandro:** *I just... Criminal Minds. Watching that.*

**I:** *Okay. What about that makes you feel like really excited and inspired?*

**Alejandro:** *Well the things they do. Um... [long pause] I guess I don't know.*

**I:** *Okay, so just watching that TV show?*

**Alejandro:** *Ya.*

**I:** *Okay, so you get messages from the internet. Where else?*

**Javier:** *People that talk about it, like on TV*

**I:** *Okay, any specific ones?*

**Javier:** *Like rappers on TV or DJs on TV talking about it*

**I:** *Okay, do you have a favorite?*

**Javier:** *Naw*

**I:** *No? You like all kinds?*

**Javier:** *Ya*

## **Things Learned in Project HOPE**

This domain contains specific content and information that students learned through the process of Project HOPE. Beneath this domain are three categories: Information Learned on the

Field Trip, Information about Careers – General, and Information about Healthcare. Any experiences or content that students learned which led them to alter their decision-making around careers or was highly influential to them in their perceptions of the futures and goals is sorted into other domains. This domain consists of specific information that the students articulated learning through the process of Project HOPE but that did not affect their goals or career decision-making. This domain helps to elucidate how Project HOPE may have been an educational experience for the students and while it does not address influence, may provide information about new knowledge that students have acquired as a part of this career exploration and development program.

Table 16. Things Learned in Project HOPE

| Category                              | Frequency | Specifier |
|---------------------------------------|-----------|-----------|
| Information about Healthcare          | 6         | Typical   |
| Information about Jobs – General      | 6         | Typical   |
| Information Learned on the Field Trip | 8         | Typical   |

**Information about Healthcare.** This category consists of content that students learned about healthcare as a general occupation field as well as about specific jobs within healthcare. Six of the eleven students articulated some pieces of information that they learned about healthcare through Project HOPE.

*I: Ya, okay. Great. Well anything else that you learned in Project HOPE?*

*Javier: There's a lot of things you can do, like in the medical health things. A lot of jobs.*

*I: Okay, is that something that you didn't know before we came in?*

*Javier: Not that much.*

*I: Alright so the first question is did you learn anything in Project HOPE?*

*Mía: Yes, I learned a lot of things. Um... I learned about how the language speakers, how they, what they do. I learned that they, like... work with um... students who didn't, like they have no way of speaking and stuff. And they help them communicate. And I didn't know that before like it was totally like I didn't know. And they also work with swallowing, which I thought was... weird. And um... I learned how people swallow, how it looked, and what they used to swallow. And I got to see how it looks when it goes down [laughs]. Um I also*

*learned about, I learned that there's this heart that they use that the hospital made to... I guess it's like a fake heart, and then you can use it as a real heart. I was surprised about that because I didn't know that that came out yet.*

**Information about Jobs – General.** Within this category are student responses related to what they learned about jobs and careers through the process of Project HOPE. While the previous category is in relation to specific information about healthcare careers, this category is focused on general information that they learned about jobs, including the types of tasks that are required in careers, awareness of salary of particular jobs, and increased awareness of the process of career decision-making and research. Six of the eleven students articulated that through Project HOPE, they learned general information about jobs and careers.

*I: Okay, cool. What about when we were like, when we came here to the school to talk to you guys about stuff, did you learn anything then?*

*Tomás: Ya opened a lot of opportunities for, you made us check all the jobs and stuff like that*

*I: Okay so did you learn anything else from that part of it?*

*Tomás: Um... just uh. Mainly what type of jobs they are and how much school you need to be in that job*

*I: Okay. Did you learn anything about yourself in the program?*

*Tomás: Um, sort of yes and no.*

*I: Okay, what makes you say that?*

*Tomás: Uhhh just like some things were general and some things I found out how to, how much I need, how much it will cost for the four years, stuff like that.*

*I: Okay. Well tell me what else you learned from Project HOPE*

*Sara: Um, I learned that you don't have to take like one specific, like.... That one specific job has like many things for you to do, so you don't just have to be... I don't know how to explain it.*

*I: It's okay.*

*Sara: It's like, you'd be doing more things than you think you would be doing.*

*I: Okay, can you give an example of that?*

*Sara: Like, um... like the secretary or doctor, you think you'd just be working on like one person or something like that, or you wouldn't be, you'd just be sitting in a chair, but you wouldn't, for a secretary, like you would go get papers, and you would make copies and all that. And for like a doctor, you'd work on specific, like a lot of patients and not just one.*

*I: Okay, so there's multiple aspects to all these jobs? Okay. So how did you learn that through HOPE?*

*Sara: Um, like when you guys explained it, and when we had to like research one career, the career you wanted to do.*

*I: Mhmm, okay. Did you learn anything when you did your research?*

*Sara: Ya, of like the salary and what you have to go, what schooling do you have to go to. How much years in everything you need to know to get in.*

**Information Learned on the Field Trip.** This category consists of student responses about information that they learned on the field trip; specifically, this is information that students found interesting and discussed, but is largely indicative of experiences that they had on the field trip that have not been captured elsewhere. That is, these pieces of information exemplify memorable experiences that the students had on the field trip, but are not related specifically to careers or healthcare. For this reason, the information from this category can be found in the appendix; the data is relevant to HOPE experiences among students and therefore contextualizes their overall experience in the program, but is not specifically responsive to the purpose of the present study.

### **Evaluations and Comments on Project HOPE**

The final domain consists of evaluative responses regarding Project HOPE and students' experiences within the program. Within this domain are six categories: Likes, Dislikes, Suggestions for Changes/Additions/Improvement, What They Would Tell Parents, What They Would Tell 7<sup>th</sup> Graders, and How HOPE Could Help the Community.

Table 17. Evaluations and Comments on Project HOPE

| Category                                     | Frequency | Specifier |
|--|-----------|-----------|
| Likes  | 11        | General   |
| Dislikes                                     | 8         | Typical   |
| Suggestions                                  | 11        | General   |
| What They Would Tell Parents                 | 11        | General   |
| What They Would Tell 7 <sup>th</sup> Graders | 11        | General   |
| How HOPE Could Help the Community            | 10        | General   |

In regards to Likes, Dislikes, and Suggestions, these are specifically evaluative responses from students about Project HOPE as a program based on their experiences. Overall, the

students in this study generally stated that the program was fun, that they enjoyed the field trip, and that they wished that it was longer. In regards to What They Would Tell Parents and 7<sup>th</sup> Graders, student responses predominantly highlight areas that felt particularly important to them about the program or things that they particularly enjoyed or learned. Again, the information within this domain, and consequently these categories, pertains more to the context provided by Project HOPE and provides insight into some student perceptions of the program. This information is important to understand the impact of the program and thoughts about it, but pertains much more to Project HOPE as a program than it does to students' perceptions of their futures and the attainability of their goals, which is the purpose of the present study. Because of this, the data in this domain appears in an appendix but will not be significantly elaborated in this section.

## **Chapter 5: Discussion**

The population of Latino students is growing in the United States, and at present, Latino/a students are more likely than their peers to drop out of high school; furthermore, Latino/a students are dropping out of high school in Iowa at twice the rate of the national average (U.S. Census Bureau, 2012; NCES, 2012). In addition, Latino/a individuals experience higher rates of unemployment and lower wages (BLS, 2011). Based on these concerning facts regarding the career and vocational outlook for Latino/a identified individuals, the present study aimed to gain a greater understanding of Latino/a youth's perspectives on their career opportunities, expectations, perceived barriers, and resources in order to give voice to these students' experiences and concerns and build greater knowledge about their beliefs and goals. Findings will be presented by data domain in the following order: Future Goals and Beliefs, Worries about the Future, Factors that Affect Career Interest and Decision, Role of Others in Thinking and Planning the Future, Role of the Self in Thinking and Planning the Future, Non-Human Sources of Knowledge and Information, Things learned in Project HOPE, and Evaluations and Comments on Project HOPE. After these findings are discussed, limitations to the present study and suggestions for future research, in light of current findings, will be addressed.

### **Future Goals and Beliefs**

As is consistent with the goal propositions of SCCT, the results of the present study indicate that all students were able to identify a career that was of interest to them; in addition, seven of the eleven students specifically identified a healthcare career as of interest for their futures. The majority of the students in this study believed that these career goals were achievable, with only one student stating that he was not sure but thought that he could "maybe" achieve his goal. These findings, while encouraging, are in contrast to previous research

regarding Latino/a student beliefs about their futures; specifically, Yowell (2002) and Flores et al. (2008) found that Latino/a students did not believe they could achieve their goals. However, it is notable that within Yowell (2002) and Flores et al. (2008), the students were in high school, and thus, as Flores et al. (2008) suggested, it is possible that the age of the participants in this study is relevant to this finding. That is, the present study adds information that rural Latino/a middle school students see their goals as achievable, whereas by the time the students in the previous studies were in high school, they did not see their desired futures as attainable. While it is difficult to generalize between the studies of Flores et al. (2008) and Yowell (2002) and the present study, the juxtaposition of findings raises questions about the impact of interventions and programming on student beliefs, as well as the relevance of student age in Latino/a student perceptions of their futures.

As these students imagined their futures, nearly half said that their goals were at least partially based on living in a certain location, and three imagined that they would change jobs as a part of their career path. The students in the present study also reported future expectations of college or being in the workforce in ten years, and while they had difficulty projecting into the future abstractly, indicated that they hoped for education, career success, and a satisfying life in a nice place to live. Overall, these findings illustrate that students are thinking about their futures from multiple perspectives and setting goals for the future for career and thinking about location.

### **Worries about the Future**

Lent et al. (2000) proposed that perceived barriers were an expected part of career development within SCCT. Further studies found that barriers were relevant to students of different ages and ethnicities, including Latino/s (Jantzer et al., 2009; Gushue et al., 2011). While students in the present study were able to imagine their futures and believed them to be

attainable, they also expressed worries about potential barriers and problems that they may encounter or anticipate encountering. The observation or anticipation of these barriers has been shown in previous studies to have potential influences on rural students' beliefs in their ability to achieve positive outcomes from their education (Ali & McWhirter, 2006). The finding that students in this study experience or anticipate barriers to their desired futures is also consistent with previous studies indicating that Latino/a students may perceive more barriers than their white counterparts (McWhirter, 1997).

The most common category of worries in the present study was a concern about failing academically, or not being able to keep up with the demands of continuous schooling. This may be related to low self-efficacy, and in previous studies has been correlated with lower motivations to attend college (McWhirter, 1997) as well as overall lower career goals (Jackson et al., 2006). In addition, students worried about internal barriers such as changing their minds too much, imagining that the future will be very difficult, and having problems with personal effort and confidence that would impede their ability to reach their career and vocational goals.

In addition to concerns about effort and their own personal ability to persevere through difficulty in their futures, students also anticipated that external forces may be relevant and important to their future paths, and in fact may be problematic or impede them from being successful and reaching their goals. These worries included concerns about finances, locations (i.e., proximity to family), social life, life events, and fears about elements of their desired careers. Some concerns echo previous research; with regards to financial concerns and worries as perceived barriers both in the general population as well as specifically for Latino/a students (Lent et al., 2002; Dahling & Thompson, 2010; Jackson & Nutini, 2002; Hill, 2003). With regard to life events, previous data has shown that Latino/a students are at increased risk for teen

pregnancy and violent behaviors (Pew Hispanic Center, 2009). These risk factors help to put into context the findings of the current study, in which students articulated that worries about life events such as “getting into trouble,” “getting into drugs,” and “getting pregnant” as potential things that could be barriers to their futures. In addition to these life events, several students also worried about getting into accidents or being seriously physically hurt as possible impediments to their futures. It is possible that these concerns stemmed from students’ knowledge of the hazards of their parents’ (or members of their community’s) occupation. As mentioned previously, the majority of the parents in this community work in a meat packing plant. A study by Cai, Perry, Sorock, Hauser, Spanjuer, Mittleman, and Stentz (2005) utilized data from nationwide industrial injury reports, and found that individuals employed in meatpacking jobs had “one of the highest occupational laceration injury rates in the U.S.” (p. 403). Thus, students in the present study may be more exposed to parental injury on the job than would their counterparts whose parents are not employed in meatpacking; it is reasonable to speculate that this awareness may increase the level of concern about physical injury among students in this study.

Regarding social life, a couple of students in this study were concerned that over-focusing on their social life and pressures from social relationships could prevent them from being successful; while this may be an artifact of student experiences to date, it is also notable that peer pressure and social life balance is a part of the Project HOPE curriculum, and thus student responses may have been influenced by this material. As another layer of perceived barriers, a few students identified worries that they would not be able to find education or work in their desired locations and would then have to find transportation to get to work. Finally, some students were worried that there might be elements of their desired careers that they may not enjoy or would be difficult; these students were concerned that these areas could impede

their willingness or desire to pursue the career or engage in it successfully. While there is minimal data to support these as relevant concerns to a larger body of Latino/a students, these results indicate that there are multiple layers of concerns that the students in this study had about their futures, including not only financial concerns and self-efficacy concerns, but also awareness of logistical concerns and job-related activities that could affect their educational and vocational trajectories. Overall, the students in this study were aware of and concerned about internal processes, external life events, and problematic behaviors that could prevent them from achieving their goals.

### **Factors that Affect Career Interest and Decisions**

In addition to their desired futures and the barriers they perceived could impede them, students in this study were able to articulate factors that affected their career interest as well as their career decision-making. The data show that students were particularly prone to identify activities they enjoyed as helpful in moving them toward a career or area of interest; this appeared to be the most compelling reason why students in this study chose their areas of interest, which is consistent with previous research indicating that interest correlates with job and career choice (Holland, 1979; Lent & Brown, 2006; Smart, Feldman, & Ethington, 2006). Students were also willing to rule out or eliminate potential jobs based on areas of dislike. Again, this is consistent with the basis of all career counseling literature proposed originally by Frank Parsons (1909) that was initially described as the trait factor approach; this foundational work in career counseling and “vocational guidance” proposed that career choice was ideally made based on an understanding of the intersection of one’s personal interests and preferences with the world of work.

In addition, students identified that there were elements of the environment of certain careers that could affect career decision-making, such as the hours, working outdoors, and the physicality and safety of a job. Furthermore, students articulated an awareness of money as important to their career goals and interests, and a few also noted that the level of activity and stimulation (i.e., not wanting a “boring” job) was important to them in their future careers. These student responses correlate with the concept of person-environment fit (Holland, 1985), and are consistent with findings that multiple layers of fit with a work environment can affect career decision-making as well as career satisfaction (Kristof-Brown & Guay, 2011; Smart, Elton, & McLaughlin, 1986). For the students in this study, they are exhibiting multiple levels of awareness related to their personal interests, needs, and hopes from a future job.

Finally, with regard to factors that affect job choice, nearly half the students in the present study discussed that they had a meaningful personal life experience which lead them to feel passionate or interested in a particular career. This information indicates that students are making sense of their experiences in a way that helps them to shape their future goals, and highlights the importance of personal experience, in addition to the influence of others (as will be seen in the following domain) in inspiring the students in this study to pursue a particular career. This is consistent with the SCCT acknowledgement of experiential learning factors as relevant to job choice and career decision-making; that is, while SCCT acknowledges the role that vicarious experience and learning can have on career development (which will be further described in later sections) the theory also acknowledges that personal and direct experiential learning is an important way that students begin creating their career ideas and goals (Lent, Brown, & Hackett, 1994).

Overall, the findings in this domain elucidate the factors that are important to the students in this study in ruling in and ruling out careers. Specifically, layers of person-environment fit and the importance of personal interest and skill in career choice appeared to be relevant to these students as they engaged what external factors affected their overall educational and career goals.

### **Role of Others in Thinking and Planning the Future**

One of the major areas of interest within the present study was student perceptions of important others in their lives and the roles that these individuals have within the students' career exploration and development. The students in this study identified many categories of others that they saw as important in their perceptions of their futures or relevant in their pursuit of their goals. While the content in these categories is chunked by the important other first and the role that each group of individuals has on the students, the information in the results chapter also elucidates the most common roles that important others played. The juxtaposition of these two means of exploring the data is intentional in order to provide both perspectives; that is, the information gathered provides data regarding the roles that others play in these students' lives, as well as provides data regarding specific groups of people and their comprehensive impact within the context of their relationship with the students. Within the results section, these data are stratified by type of influence, and then by the individual or group that was influential. Conversely, the following descriptions are organized by identifying the specific group of individuals in a particular relationship with the student, and then explore how this group of individuals is seen as helpful or influential to the students.

**Parents.** By far, students identified parents as a primary source of support as well as vicarious learning; that is, students feel that they are able to overcome their concerns and pursue their goals because they feel supported or encouraged by their parents, and feel that witnessing

and hearing about their parents' career and educational experiences has had an effect on their career decision-making. This is consistent with previous research demonstrating the relevance of vicarious learning from parents for student development, as well as the importance of parental support in career self-efficacy (Paa & McWhirter, 2000; Keller & Whiston, 2008; Turner & Lapan, 2002). As is true of much of the existing research, minimal investigations on the specific career-related interactions between Latino/a students and their parents exist currently. However, the findings in the present study correspond with the research of Flores and Obasi (2005) indicating that both support and vicarious learning from parents were important to Mexican-American youth. Not only were parents identified as sources of support and vicarious learning, nearly half of the students in this study identified that parents were important sources of information and experiences that were relevant to their career decision-making.

With specific regard to vicarious learning, it is notable that nearly all of the students in this study identified that they had either a parent or other family member (or sometimes multiple family members) who work at the meat-packing plant in their town. As stated, meatpacking jobs have shown to be one of the most at-risk job sites for injury, specifically laceration injury (Cai et al., 2005). Students in the present study appear to be getting information about the potential difficulties of working in the meatpacking plant, and appear to be dissuaded from that line of work; this is an interesting finding in contrast with previous research by Jordan et al. (2012) stating that Latino/a students in rural towns with a meatpacking plant may be less likely to pursue post-secondary education due to the availability and immediate access to work at the plant. In addition, Ali and Menke (2014) also contrasted this evidence from Jordan et al. (2012) in their finding that Latino/a students did not appear to be any less likely to graduate than their peers of other racial or ethnic identities. Thus, further research may be helpful in elucidating the

relationship between rural Latino/a students' experiences in meatpacking towns and the relationship, or lack of relationship, to likelihood of graduating high school.

Previous research has indicated that Latino/a individuals working at meatpacking plants have reported both positive (e.g., being paid well) and negative (e.g., racism, danger on the job) aspects of their vocational experiences (Dalla et al., 2005). This is consistent with findings in the present study; students expressed that they observed and were told about concerning areas of meatpacking jobs including lack of stimulation and physical labor. These specific areas will be further elucidated in the domain regarding Factors that Affect Job Interest; however, for the purposes of this domain, it is notable that parental vicarious learning with specific regard to the demands of a meatpacking job has been influential for the students in this study. Further research may be helpful in better understanding the impact of meatpacking plants, and parental influence and experiences in them, on Latino/a youth.

Overall, the students in this study reported receiving support and encouragement from parents, learning from their experiences, and identifying them as sources of important information and experiences with regards to careers and career decision-making. This is true both in general as well as with specific regard to experiences working in a meatpacking plant and the relevance of that context on students' understanding of jobs and the world of work.

**Siblings.** In addition to parents, over half of the students in the present study identified that siblings played a significant role in their career development and understanding. Siblings were identified as supportive, as well as sources of information, experiences, and vicarious learning. In addition, some students in this study identified that they would go to their siblings if they were having difficulty or were trying to sort through a problem situation with regards to their career or vocational development. While parents and teachers were named as resources in

this way (by one and two students, respectively), siblings were the most likely to be named as this type of resource more than others. There is some evidence of the role of siblings in career decision-making, specifically that sibling relationships and support were meaningful for individuals as they made career decisions, this evidence exists for urban college students (Schultheiss, Palma, Predragovich, & Glasscock, 2002) and high school students (Ali, McWhirter, & Chronister, 2005). Thus, there is some research that demonstrates sibling support is associated with career development of older students, but no studies have examined it in younger samples. Regardless, it is notable that several of the students in this study identify their siblings as serving multiple roles in their career development. Research on the relationships of Latino/a siblings has shown that while there is significant within-group variability, Latino/a siblings spent more time together than their white counterparts, and that these Latino/a siblings spent more time together than with parents or adult relatives (Updegraff, McHale, Whiteman, Thayer, & Delgado, 2005). This information highlights the potentially increased importance of sibling relationships for Latino/a students; thus, future research may continue to explore these relationships and further elucidate the ways in which siblings are influential to career decision-making, especially among Latino/a youth.

**Teachers and counselors.** The majority of students in this study also identified teachers and school counselors as having an important role in their career decision-making and development. The students predominantly identified teachers as exposing them to new information and experiences both with regard to specific jobs as well as more general information about education areas and skills that could apply to careers. In addition, about half of the students in this study identified teachers as sources of support or encouragement in their career paths and goals. This evidence corresponds to previous research by Metheny et al. (2008)

showing that teacher support is meaningful to students, and in fact was correlated with increased self-efficacy and outcome expectations. In addition to providing support, students in this study stated that teachers could be a resource in problem situations, and that teachers may be influential in changing student career goals.

Finally, two students in this study expressed that teachers had discouraged them from their dream jobs. In one case, a student identified that his goal was to be a professional soccer player, and that he felt discouraged by a teacher who told him that he couldn't make it; however, this teacher also expressed concern for the student in attempting to pursue that future. This is much different than the other expression of teacher discouragement found in this study, in which one student reported that when he does not perform well in school, he has been told that he will be "just like his brother" who has a "bad reputation" and who has gotten into trouble a lot. These are significantly different examples of teacher discouragement, but highlight important ways in which teachers' influence can affect students' perceptions of themselves and their futures. That is, in the first example, the teacher's discouragement appears to come from a place of caring, whereas in the second example, the student feels discouraged by perceptions of his behavior that he does not feel are congruent with how he sees himself or his future. In either case, it is apparent that these relatively brief interactions with teachers were memorable to these students in their beliefs about themselves and their futures. In the same way that teacher encouragement has been shown to increase student self-efficacy and outcome expectations (Metheny et al., 2008), teacher discouragement has the potential to decrease students' self-efficacy in pursuing their future career tasks (Lent et al., 1994). Student expressions of their discouraging experiences with teachers in conjunction with previous evidence could highlight an important area for future research.

**Extended family.** Three of the students in this study identified that extended family members were also important in their career development and decision-making. All three identified that extended family members, especially cousins, were important in supporting and encouraging the students. In addition, these extended family members were sources of vicarious learning and new information and experiences. Given some research regarding the cultural value of closeness and support among extended family within Latino/a individuals (Santiago-Rivera, 2003), these findings may be consistent with increased interaction with extended family and thus increased influence with regards to careers from these individuals. However, more investigation on the role of extended family and values around their perspectives will be important to more clearly delineate the role that extended family members play in the career development process of Latino youth. Given the overall message that extended family and cousins were important others in the students' career exploration and decision-making, further research may focus on how these relationships affect the career decision making process. In addition, given information regarding significant within-group variability among cultural groups, further research needs to be sensitive to the ways that cultural values may or may not be relevant to each student (Perry & Calhoun-Butts, 2012; Gushue, 2006).

**Peers.** Three of the students in this study identified peers as important in providing vicarious learning experiences. Specifically, students identified learning about work experiences from each other, learning about other students' academic performance, and learning about other students' goals in a way that influenced their own thoughts about their goals and futures. Previous research has shown the importance of peer relationships and specifically support on student career development and overcoming perceived barriers (Ali et al., 2005; Howard, 2010; Jackson & Nutini, 2002). Moreover, Ali et al. (2005) also found that peer support and learning

from peers vicariously was impactful on students' overall career development, and posited that "it is possible that siblings and peers are seen by lower SES youth as more accessible role models and perceived to be better sources of support and career information than their parents" (p. 53). Future studies may better address the role of peers among Latino/a students in regards to career development. In regards to this study, peers were important sources of information about what to expect from futures that the students in this study were able to integrate into how they perceived their own futures.

**Project HOPE.** All students in this study identified Project HOPE as influential on their career exploration, beliefs, development, and decision-making. This result should be interpreted in the context of a fairly recent administration of Project HOPE which specifically aims to help students with these areas in career development. In addition, while students were not prompted about other groups (i.e., other important others in this domain were generated by students), the students in this study were specifically asked about how Project HOPE affected them. In response to this, all students stated that HOPE exposed them to new information and experiences about careers. In addition, eight of the students in this study identified that they changed their overall career goals because of experiences in Project HOPE. Finally, some students identified that Project HOPE staff provided support, encouragement, and vicarious learning experiences which they found influential in how they think about their skills and their career development. In identifying vicarious learning experiences, students specifically recalled moments when the HOPE staff members shared their own personal stories and narratives around career goals, perseverance through difficulty, and how those experiences lead them to their current career path. In fact, this happened not only during the course of the program and was identified later in interviews, it also occurred during the course of the interviews; one student asked me (the

present author and interviewer) during the interview how I was able to “pursue my dream.” This was a meaningful moment for me as a researcher and HOPE staff member, but also highlights the degree to which students are seeking others’ personal experiences in order to help them shape their own beliefs about their futures.

These findings are important in illustrating the potential role of programs like Project HOPE; that is, while other domains highlight the specific information and content that students learned in Project HOPE, the data within this domain indicate that the influence of HOPE extended beyond providing information for these students. While these findings should not be overgeneralized given the relatively small scope of the present study, this data indicates that career exploration and development programs such as Project HOPE may be helpful in addressing student self-efficacy concerns and facilitating overall career development. This may be especially relevant within Latino/a populations, given that these students have specifically been shown to be at risk of educational or vocational barriers, and given that there may be increasing gaps in students’ goals and their beliefs about their ability to achieve them as they develop and age. Further programs such as Project HOPE as well as Making My Future Work (Perry & Calhoun-Butts, 2012) and others may promote self-efficacy, provide new experiences, and create relationships with students in which they can engage in vicarious learning and promote career development and exploration.

**Experts and guest speakers.** Over half of the students in this study identified that “experts” in their chosen field of study (sometimes in the form of guest speakers to their school) were influential to the students in exposing them to new information and experiences, supporting and encouraging them, and providing vicarious learning opportunities through the provision of information about their own career paths. As with Project HOPE staff, it is evident that students

are attempting to understand others' experiences as sources of information about careers as well as opportunities to understand how others have pursued specific career paths. This finding is consistent with research by Brown, Ryan Krane, Brecheisen, Castelino, Budisin, Miller, and Edens (2003) who, through meta-analyses, found that modeling from others regarding career development may be a key component within successful and meaningful career choice interventions. In this way, it is possible that school programs and external programs which utilize these modeling and vicarious learning components (such as bringing in class speakers or employing programs such as Project HOPE) may be increasingly effective in their ability to help students in making career choices.

**Famous icons.** Two students in the present study identified famous icons, including Bill Gates and Mimi Smalls; in both of these cases, students identified vicarious learning experiences by learning about the career and educational experiences of these individuals. In the case of Bill Gates, the student identified that the fact that he was able to drop out of school (which this student stated was "dumb" of him) but then persevere and become successful was influential to him. In regards to Mimi Smalls, who is a model, the student discussed that this woman was able to change her life from being "really bad" and being a "stripper" to becoming a successful model, which this student interpreted as evidence that she could also persevere if "something went wrong." These experiences indicate these students' awareness of potential barriers to their career goals, as is consistent with previous concerns stated by the students in this study as well as previous studies and information on Latino/a youth experiences and barriers (Pew Hispanic Center Report, 2009). Additionally, as stated previously, students are seeking models for how they may overcome these concerns which includes not only individuals that they come in direct

contact with, but also public figures who they feel they can relate to, and from whom they are internalizing information about persevering through barriers and difficulty.

**Unspecified others.** In addition to naming specific individuals who the students found influential, about half of the students in this study anticipated that other individuals could be influential on their career development. Specifically, nearly all of the students that articulated this felt that as yet unidentified others, or others in general, may discourage them as they attempt to pursue their goals. This finding is interesting, and no current literature was found on this particular area; however, it seems notable that even when students are not experiencing direct discouragement from others in their lives, they anticipate that they will be discouraged by unspecified others in the future. Further research regarding this may be particularly helpful in gaining more understanding of students' expectations regarding discouragement and the potential impact that this has on their thoughts of the future.

### **Role of the Self in Thinking and Planning the Future**

Previous data has indicated ways in which students think about their futures, ways they consider making decisions based on internal and external variables, and ways in which others in their lives may be influential as they attempt to move through their educational experiences and toward potential jobs and careers. The present domain identifies the students' perceptions of themselves and how they believe they can influence their own career development. Student articulations around their own attributes and experiences as relevant is consistent with previous research on the role of self-efficacy (Lent et al., 2002); the data within this domain may be labeled as expressions of positive or high self-efficacy. Future sections will further describe these findings in contrast with findings from Worries for the Future, which includes student expressions of barriers as well as low self-efficacy.

**I Can Do Positive Things to Impact my Future.** Nearly all of the students in this study identified that they felt able to do positive or helpful things in a way that could impact their ability to achieve their desired future. The content of this category is largely action-oriented, and identifies the ways in which students can act as their own resources both in the face of barriers and also generally. Students felt that they could persevere through difficulty, work hard, and improve their own financial standing through additional work. These findings relate to SCCT variables regarding anticipation of barriers as well as self-efficacy (Lent et al., 1994), as these students feel that they are capable of being active participants in their futures and taking action when and if necessary to increase the chances of them attaining their desired goals. With respect to the gap seen by previous researchers between what Latino/a youth desire from their futures and what they believe is attainable (Flores et al., 2008), the present category provides encouraging information that at least at present, the students in this study can recognize that they may encounter difficulty but also feel personal capable of exerting extra effort in the face of these difficulties. While further research would need to be done regarding the longitudinal nature of these attitudes and beliefs, it is notable that at this age, this gap does not yet appear to be in place.

**I Have Qualities that Will Help Me.** Students in this study also identified that they possessed internal qualities or characteristics, in addition to their ability to engage in specific behaviors, which could improve their ability to pursue their desired futures. These qualities included determination, passion, personal strength, intelligence, and even stubbornness; the majority of these student expressions came in response to questions regarding what things made them feel like they could achieve their goals. Given that this was a broad question, it seems

important to note that these internal attributes were independently generated by over half of the students as integral to their ability to be successful.

**I Can Stay Out of Trouble.** Only one of the students in this study identified that this was an important area for him as he considers his future. When asked how he could achieve his goals, his own beliefs about his ability to stay out of trouble and take a different path, despite the sometimes problematic influences of important others in his life, were most important to him considering his future. This young man's responses exemplify some contextual factors that may act as barriers for Latino/a students (Pew Hispanic Center Report, 2009), in addition to providing evidence for the ways that this student is making sense of his experiences and investing in himself despite external discouragement and barriers.

I had the opportunity to engage with this student throughout the process of Project HOPE, during which he appeared disengaged at times and off-task; however, his responses in the interview indicated that he actively attended to the information and was incorporating it into his own understanding of the world of work and himself. This was also the student who asked me within the interview about my personal experiences, and sought more information about how I was able to overcome any of my own life circumstances in order to achieve my dreams. These contrasting sets of observation and evidence regarding his investment and engagement, combined with his experiences being discouraged by others, provide a powerful picture of the ways in which important others in students' lives may make assumptions about students or not adequately account for the students' context and experience, especially when engaging with them around educational and career development.

**I am My Own Motivator.** When asked about who can help them to get where they need to be, several students in this study identified themselves as important motivators and agents in

their own experience. Students' belief in themselves and their own personal drive is what makes them feel that they can achieve what they would hope for in their futures. This self-direction appeared to be an important part of their career development for these students in addition to anticipating support or other influence from others in their lives.

### **Non-Human Sources of Knowledge and Information**

Students were asked where they get messages and information about their careers; in addition to gathering information from important others in their lives, students expressed accessing information from other areas. Predominantly, students identified the internet as a primary source for information in learning more about jobs; some students even accessed career information outside of Project HOPE based on sites that they had learned about through the program. Given the present use of technology, this finding makes sense in the current context of these students' experiences, at least within HOPE and at their schools. Moreover, students' use of the internet as a resource for information is consistent with the findings in a study of uses of the Internet in education; Lenhart, Simon, and Graziano (2011) found that within a survey of 754 middle- and high-school aged students, 94% had used the internet with school research, and a survey of their parents indicated that 52% had searched for jobs online. These data indicate that use of the internet may be a meaningful tool in education and career development. However, it is notable that at least one student in this study indicated that he did not have regular access to the internet and thus it was not available to him for career research on a regular basis. This is important, especially as the internet becomes more pervasive, as it is easy to make assumptions about student access. In a 2005 nationwide study of internet access, roughly 30% of the families surveyed had no internet access; moreover, in households with an annual income of \$20,000 per year, ~70% had no internet access (Savage & Waldman, 2005). Recognizing that the internet is

not yet a universal source of information that can be accessed by all participants is relevant both as a general reminder and with regard to career programming.

The next most common area where students learned about particular careers was on TV; students identified that watching particular TV shows (such as *Criminal Minds* for a student who wants to be a police officer) and seeing DJs, models, and other desired careers on TV was important to them in getting exposure to information about particular careers. Finally, students also identified other areas where they may get information and messages about careers (books, newspaper, magazines, billboards), but in these remaining categories, students largely expressed that they do not or would not access these resources if they needed information. It is notable that especially in regards to things like billboards and newspapers, students who expressed awareness of these noted that these may be places where you could find advertisements for work. While the present study did not follow up specifically on this area, the students' awareness of these resources may indicate some exposure to job searching in the form of reading the classifieds or calling employers based on mass advertisements for work. Further study on this area may help to gain more information about the kinds of job searching students in this population and at this age have witnessed or had exposure to.

### **Things Learned in Project HOPE**

Student experiences in Project HOPE are relevant to this study in illustrating the ways in which the students engaged the program and identify it as affecting their career development and exploration. In the previous domains, the influence of Project HOPE has been evident. In the case of this domain, students articulated specific information that they had learned through the process of the program. Overall, students identified Project HOPE as a learning experience. Specifically, students were able to identify that they learned about the content of healthcare

careers, about careers and career searching in general, and about general information as a part of their experience in Project HOPE. In regards to healthcare careers, it is notable that the intent of Project HOPE as a program is to help students, specifically those who identify as Latino/a, to better understand the careers that are available to them, especially careers related to healthcare. The students in this study reflected that HOPE was helpful in allowing them to learn more about the world of healthcare and the ways that it extends beyond just “doctors and nurses.” In addition, they identified that they were able to, through both classroom exercises as well as through the field trip, gather more information about what specific healthcare careers involve including education paths and on the job skills and tasks.

In regards to learning about careers in general, students identified that they learned information about how to search for jobs, as well as tasks, salaries, and general information associated with various occupations. In addition, students identified multiple things that they learned within Project HOPE specifically on the field trip. While a majority of this information is not directly related to careers that they are interested in, it is notable that the students articulated that the experiences that they had within the program were memorable and that they were able to take away new facts and information, even if it did not ultimately affect their career ideas (at least in a way that was discernable at the time of the interviews). Overall, the data in this domain indicate that students learned information about careers as well as other general knowledge as a part of Project HOPE. These findings are consistent with the findings of other career interventions indicating an increased level of knowledge as well as improved vocational skill self-efficacy (Ali et al., 2012; Fouad, 1995). Moreover, as consistent with findings from Perry and Calhoun-Butts (2012) and from the FICE program (Ali et al., 2012), students appear to be

making connections between the materials presented in the programs and their own lives and futures.

In Ali et al. (2014), which was a study of the outcomes of Project HOPE for students, it was found that student self-efficacy around math and science performance was increased, but students did not experience increased interest in healthcare fields. The present findings indicate that for at least some of the students in this study, their career goals were changed, specifically to healthcare careers, and specifically as a result of the program. That is, some students reported that through their learning, and especially through their exposure to new careers on the field trip, they changed their ideas or level of interest in healthcare careers. This information appears to somewhat contrast the previous findings by Ali et al. (2014); further research regarding the specific outcomes related to change in career aspirations following Project HOPE or other career programs may further elucidate this contrast.

### **Evaluations and Comments on Project HOPE**

Students were asked about their opinions of Project HOPE, including what they would do to change or improve it, what they liked about it, and how they see it as helpful. This information is useful in understanding how students experienced the career program that they did in the months prior to the interview. Students largely responded that they enjoyed the program, and appreciated the exposure to new careers and ideas. Some students appreciated that it got them out of science class, that they got to be out of school today for a field trip, and that they got to eat pizza. The main critique that students provided was that it was too short and that they wished it was longer so that they could have more time to explore the areas that were covered. Criticisms included having to walk on the field trip, having trouble finding information about their career of interest online, boring field trip experiences, and loud fellow group members. The

students felt that the program could be helpful to members of the larger community in getting exposure to new careers, and also felt that the next cohort of students could benefit from the program if given the opportunity. These responses indicate that the experience of Project HOPE was meaningful for the students in this study, and this evaluative information coupled with the influence of HOPE articulated in previous domains provides evidence that programs like HOPE may be both helpful and enjoyable for students.

### **Overall Findings**

The results of this study indicate that overall, students in this study are not experiencing gaps in what they desire from their futures and what they believe they can achieve, in contrast to previous studies (Flores et al., 2008). In addition, students are able to anticipate potential barriers to their futures including external life events and internal motivation and effort concerns, but were also able to articulate that they feel that they have adequate resources and important others who make them feel that they can achieve it and who they can go to for help as they pursue their goals. The fact that the present study was situated in the context of a recent career program is relevant as well, and thus the content and influence of this program were integrated into the interviews in order to capture the effect that Project HOPE had on student career beliefs and development. In general, it appears that students in this study perceive and anticipate barriers, have identifiable and reliable resources, and ultimately believe that their future goals are attainable based on both their external help as well as their internal resources.

In regards to SCCT, many of the findings can be described within the variables in this theory. That is, students' experiences with career related material, awareness of others' experiences, and both their worries and confidence about their own personal abilities may be conceptualized as self-efficacy. In addition, as these students consider their desired futures and

anticipate what those futures might look like, it is consistent with literature and theory regarding the role of outcome expectations as a part of career development. In addition, specific attention to perceived barriers and contextual factors as relevant to student learning and beliefs about their educational and career futures was found to be a part of these students' experiences, and also is conceptualized within SCCT (Lent et al., 2000). Overall, these findings support previous theory regarding career development and the relevance of self-efficacy, outcome expectations, goals, and resources and barriers.

**Local influences in rural Iowa.** The present study did not directly address the relevance of the local meatpacking plant as a part of the students' career understanding. However, many students in this study articulated some vicarious learning from others who were employed in jobs at the meatpacking plant; while students were not specifically asked about this, many students stated that the result of their parents' and relatives' experiences was that students were even more pushed to consider other options or pursue different goals. This is somewhat contrasting with previous evidence showing that students in towns with meatpacking plants were less likely to graduate high school due to the immediate availability of jobs (Jordan et al., 2012); however, given that these students are in middle school currently, it remains to be seen (and would require further and future research) to determine whether the present findings are still relevant and true for these students as they enter into and proceed through high school. For the present, it appears that the presence of the meatpacking plant in the town of the students in the present study has functioned in such a way as to encourage these young students to pursue other avenues and work hard to have different career options and potential futures.

**Impact of Project HOPE.** The role of Project HOPE appears to be multifaceted for the students in this study; these students identified that HOPE helped them to learn new information,

gain new experiences on a college campus, access information related to careers, make career decisions, and feel increasingly able to pursue their goals. While the present study was not designed to specifically address the impact of HOPE or evaluate its effectiveness, understanding the role of Project HOPE on these students' career development was a vital part of the context that the students brought to the interviews. Given the findings in this study, even in the absence of pre-program interviews to compare students' post-program perceptions with, it appears that continued programming and efforts created for this population may be helpful and useful for students in their career exploration and development. In addition to the implementation of these programs, more directed program evaluation studies could help to better understand the underlying mechanisms that are useful in these programs and work to maximize the effectiveness. Studies such as Brown et al.'s 2003 meta-analysis regarding important career choice program ingredients are helpful, but further investigation of specific programs could help further elucidate what works, and perhaps equally important, for whom these programs work.

### **Implications for Career Interventions**

The intent of Project HOPE and the present study is to make contributions to the academic community regarding the career development of the students in this study, but also to use the research process in a way that benefits the participants and community directly. The results of this study indicate that students appreciated this perspective and were able to articulate that they felt Project HOPE was helpful to them as well as could be helpful to their community in providing additional support and information around careers. Given these findings, it appears that students are able to engage in the program in a way that felt meaningful and learn something about themselves and their options; in addition, they were able to engage in providing feedback to the program in a way that they believed would maximize program effectiveness in other

communities and with other groups. This level of engagement with the students simultaneously provided information that can contribute to an academic understanding of the career beliefs and experiences of rural Latino/a middle school students and provided some service to the students who participated that may allow them to participate in their lives, contexts, and futures differently.

More specifically, the present study found that students engaged in direct and vicarious learning both within their personal lives (friends, parents, family) as well as within Project HOPE. Students connected their experiences in the program, and especially their experiences on the field trip, as significantly influential to their overall goals. This is evident in students' new career goals or ideas that come directly from their field trip experience; that is, more than one student decided as a direct result of a field trip to audiology and speech pathology that they may be interested in becoming speech pathologists. In regards to vicarious learning, students were able to learn from their Project HOPE facilitators, and specifically identified that it was impactful when their facilitators were able to share their own experiences and difficulties with the students. For future career programming, these results indicate that providing students with experiential opportunities to engage with professionals and do career-related tasks may be impactful in helping students make connections and generate new hypotheses about careers of interest. In addition, future programs may stress to facilitators the importance of creating meaningful relationships with students, being transparent about their career-related experiences, and allowing students to ask questions about various educational paths in ways that facilitate students' conceptualizations of career from a relational framework. These suggestions are consistent with vicarious learning through SCCT (Lent et al., 1994).

The present study also found that parents, and awareness of parent jobs and job conditions, was impactful for the students. Students also identified parents as a major source of support and influence overall in their educational and career development. These findings may provide some compelling reason for including parents and primary support systems within the career intervention program. Future programs may consider involving parents to participate with the students in aspects of the programming, or inviting parents to be co-facilitators in the implementation of the program, in order to foster continued involvement of parents in the career development process.

In addition to the influence of important others, the internet was also found to be a useful tool and source of information for students in the present study. While it is clear that not all students will have access to the internet at home (Savage & Waldman, 2005), school access to the internet, and recognition that both the students in this study and students nationwide utilize the internet for educational and career purposes (Lenhart et al., 2001) may provide compelling reason for the integration of internet-based activities within career programming.

Finally, although previous research and interventions have focused on high school-aged students (Perry, 2012; Perry & Calhoun-Butts, 2012; Ali et al., 2012) the present data along with the data from Fouad (1995) demonstrate the potential effectiveness of career programming for middle school students. The participants in this study were able to engage in meaningful consideration of their futures, as evidenced by the data presented on future goals and expectations, actively participated in experiential activities in which they were able to translate information into their own perceptions of their futures, and were considering both long-term future options and short-term future expectations (e.g., which classes to take in high school). This evidence suggests that continued programming with middle school students may be

effective in helping students generate their future options; while there is no direct evidence to support the idea that this may minimize the perceived gap between goals and expectations of achievement (as seen in Yowell, 2002; Flores et al., 2008) further study of earlier interventions with longitudinal data could be important for career development programming in the future.

### **Limitations**

The present study is not without limitations. The interviews were conducted by the present author; however, the present author was also the lead facilitator for the in-class Project HOPE programming. Thus, it is possible that students responded in more favorable ways about the program as well as their career development based on previous interactions with the interviewer and some potential expectations of what the interviewer would want to hear. While the present researcher believes that having built this relationship with these students may also have improved their candidness or comfort in responding, it is important to note the ways in which this prior relationship may have affected student responses and the overall findings.

In addition, given that there were no interviews conducted prior to the implementation of Project HOPE, it is difficult to know how much of these students' responses regarding career development and exploration existed prior to the program, and which areas were directly affected by or introduced by the program. As previously stated, this is why information about Project HOPE is integrated throughout the data, but given that no baseline was taken prior to the program, it is important to generalize findings with caution given that the context of Project HOPE and that experience may have significantly affected student beliefs and responses.

While the structured interview format elicited responses from students, it is notable that students often needed to be prompted to provide more description or elaboration on their answers. However, given developmental expectations, this is likely an expected outcome of

semi-structured interviews with this age group. With regard to developmental tasks at early adolescence, Erikson (1959) believed that “during adolescence, an individual struggles with the issues of how to ‘be oneself’ and how to ‘share oneself with another’” (p. 179). As these students are beginning the process of understanding themselves, as well as learning how to articulate that with another, they may also be developmentally at the early stages of beginning to engage in greater abstract thinking and non-concrete reasoning, as theorized by Piaget (1971) and evidenced by neuroscience (Yurgelin-Todd, 2007). Given that the students in this study, and specifically from this age group, may be at the early stages of identity development as well as metacognition and abstraction, the brief and more concrete responding is likely consistent with their developmental level. To account for this, future studies may employ other methods of gathering data from middle school-aged students to facilitate greater elaboration or elicit more robust responses, such as prompts, scenarios, or activities that may start a conversation around the research questions. This phenomenon of brief, concrete, and succinct responses from the students in this study also contributed to the omission of the traditional core ideas step within CQR methodology. Based on these experiences, it may be useful to future qualitative researchers who endeavor to collect data from children to not only consider alternate or innovative means of data collection, but also consider modifications to data analysis to most accurately capture and depict student responses.

The present study did not specifically address the role of culture, ethnic identity, or level of acculturation as a part of the inquiry around student career beliefs and development. However, based on previous studies (Ojeda et al., 2011; Gushue, 2006), further research on this area could help to better capture students’ experiences around career development and decision-making.

### **Suggestions for Future Research**

Included in the prior sections are several areas of potential further research based on the findings in this study. Overall, it is notable that this study is one of few regarding this population; thus, much more research is needed on rural, Latino/a, middle school students. While this is true in regards to the national statistics and increase, it is especially true in regards to the local Iowa statistics and information that is known about this population of individuals (NCES, 2012). In addition to general needs for further research with this population, there are more specific needs that may be addressed by further research.

First, further research on children who grow up in towns with meatpacking plants may help to further elucidate the impact on students. Previous research has highlighted the potential for altered educational beliefs based on the immediate availability of meatpacking plants (Jordan et al., ), while the present research indicates that students may have negative attitudes and concerns related to working in the meatpacking industry based on the physicality, monotony, and potential danger of the work. Continued research within this area may better explore the contextual variables and impact on students' educational and career attitudes based on their exposure to, awareness of, and access to meatpacking jobs.

Second, further research may be beneficial in more directly assessing the role of culture, ethnic identity, and potential discrimination on the educational and career attitudes of rural Latino/a students. While the present study did not directly address this, previous studies have indicated that for youth of color, discrimination is a salient factor in career development and expectations (Jackson & Nutini, 2002). Furthermore, studies more specifically on Latino/a populations have found that levels of culture and acculturation may impact students' beliefs and understanding of the educational and vocational systems within the United States (Flores et al.,

2008). Future research may address the salience of these cultural factors among the specific population of this study (i.e., rural Latino/a middle school-aged students) as well as with regard to the intersection of cultural and familial beliefs about work within a meatpacking town.

Third, the Pew Hispanic Center Report (2009) findings that Latino/a students may be more likely to experience teen pregnancy, or engage in violent behaviors. Evidence from the present study suggests the salience of these anticipated potential barriers, and thus further research could explore the impact of these experiences, the use of preventative interventions, and the overall perceived connection between these behaviors and Latino/a students' educational and career goals.

Fourth, continued participatory action research studies in which students may be involved both as participants and agents of the research, as well as continued qualitative research, may be meaningful in continuing to allow students to have a voice in the research process, and may improve the possibility of engaging with cultural and contextual factors that are specific to some of these rural and Latino/a communities. While reliable and valid measures of career variables (e.g., barriers, self-efficacy, outcome expectations) exist and are also highly beneficial, the present study demonstrates the potential utility of qualitative research in capturing the experiences of students as situated within their immediate context, and may be an added layer to promote understanding of nuanced influences and relevant variables.

Fifth, and finally, the present study demonstrates the potential impact of career programming on student educational and career development and beliefs. The previous section highlights some of the potential suggestions for future career interventions. Increased career programming for students from all communities, but perhaps particularly those in underserved communities, or from underrepresented groups, such as the rural Latino/a students in this study,

could be meaningful in promoting new understanding of the world of work. Moreover, given the potential gender differences found in Ali et al. (2014) regarding career ideas and differential effectiveness and outcomes between genders, further research on the impact of career programming in general as well as stratified by different identities and variables may provide valuable further information on the impact of preventative career development programming and interventions.

While all of these areas are relevant and important in terms of general information gathering, the present study also highlights the practicality of these findings in their potential utilization in programming and outreach that may more directly impact Latino/a students' career exploration, experiences, and beliefs. Thus, the present researcher believes, based on critical psychology and social justice initiatives, that research which addresses the needs of this population – from their own perspective – and aims to make research an active intervention in constructing social change is an important direction for helping professions, and career and vocational psychology, to move toward as this body of research progresses.

## Appendix A

### Social Cognitive Career Theory

This section will first address the concepts related to SCCT as providing the framework for understanding career development, how resources and barriers may be a part of career development in various populations, and how those concepts may be defined. After establishing the role of SCCT, resources, and barriers as a part of career development, as well as the relevance of these in various aspects of career development, more specific research regarding career development will be addressed.

Self-efficacy is a central tenet of SCCT and the most widely investigated variable. Gainor (2005) compiled a historical account of self-efficacy as a part of career and vocational psychology throughout the past 25 years. Self-efficacy (SCCT; Lent, Brown, & Hackett, 1994), is comprised of “four types of learning experiences: prior personal performance accomplishments, vicarious learning, social persuasion, and physiological and emotional states” (Gainor, 2005, p. 161). As a concept, self-efficacy has been used broadly; however, it has had a particularly important place in the world of vocational psychology. As Gainor notes, the application of self-efficacy began with Hackett and Betz (1981), years before it would emerge as a part of SCCT in 1994 (Lent et al., 1994). Since that time, it has only grown in popularity, especially in terms of the research dedicated to better understanding the construct with a wide variety of populations. However, there has also been interest and application of the construct within psychological practice. To that end, there have been programs constructed specifically to better understand *and* to help to improve student self-efficacy and outcome expectations in various populations (e.g., McWhirter, Rasheed, & Crothers, 2000).

In order to incorporate findings such as these, SCCT also includes the relevance of specific variables related to student experience and education as important factors that may affect

a students' sense of self-efficacy and outcome expectations, and thus their career decision-making. Within SCCT, these variables include verbal persuasion, vicarious learning experiences, and personal performance accomplishments (Lent et al., 1994). Encouragement and verbal persuasion by important others, as well as having the opportunity to observe others involved in career-related activities (and other vicarious learning experiences) can be impactful for students in feeling more comfortable and informed regarding career decision-making. These contextual and environmental factors and experiences can help students to feel more informed and equipped to set goals for themselves in regards to their desired future careers (Lent et al., 1994). Finally, personal performance accomplishments, students' self-efficacy and outcome expectations may be significantly affected by the students' ability to engage in career-related activities that allow them to feel successful (Lent et al., 1994). Thus, students' internal abilities about what they can achieve, as well as outside experiences, influences, and barriers, may have an effect on their overall career development and decision-making.

In an article by Lent, Brown, and Hackett (2000), the authors updated SCCT to address the role of contextual variables, especially barriers and supports, in the model, especially as a complementary avenue to self-efficacy and outcome expectations. Lent et al., (2000) distinguish between "objective and perceived aspects of the environment" (p. 31). The meaning of this distinction is to recognize elements about an environment that are objective, "such as economic conditions, parental behaviors, and peer influences" (p. 31) but also to recognize that there is a perceptual component to it as well in that any given person may respond differently to an environment. Thus, in understanding how barriers may affect students in their future career goals, it is important to understand and balance the importance of both the "objective" reality as it exists for the student as well as how the student interacts and responds to that reality.

As an overall conceptualization of SCCT, Lent, Brown, and Hackett (2000) state that “it is posited that people are less likely to translate their career interests into goals, and their goals into actions, when they perceive their efforts to be impeded by adverse environmental factors (e.g., insurmountable barriers, inadequate support systems)” (p. 38). In this way, Lent et al. (2000) postulate that these aspects of the environment may be relevant either as a part of the process of moving through different career ideas and coming across these barriers, or it may be more determinative of career ideas by way of aspects of the person’s identity that are present even prior to engaging in career exploration and choices (e.g., family influence). In either case, it is important to note that Lent et al. (2000) see barriers as affecting self-efficacy and outcome expectations, but also understand these environmental influences and factors as relevant as separate constructs (i.e., which influence career decision-making on their own, and not necessarily only by way of self-efficacy or outcome expectations) that may affect career decision-making at various levels. Thus, resources and barriers are an integral part of SCCT according to the original theorists. According to this model, these environmental forces are relevant in influencing not only student perceptions of external forces that act upon them, but also beliefs about internal and personal abilities that may affect their futures.

As evident, SCCT is a valuable means of theorizing student career development by accounting for internal factors, contextual factors, and personal experiences. The following section will delineate research related to SCCT variables, both internal and external, on various populations.

### **Social Cognitive Career Theory – Research Support**

There is a significant body of research to support SCCT variables as relevant to the career development, behaviors, and planning for multiple populations. This includes evidence of

relevance for adolescents (Rogers & Creed, 2010); evidence for the presence and identification of supports and barriers to career development and attainment (Lent et al., 2002; Dahling & Thompson, 2010; Lindley, 2005); evidence regarding the relevance of parental support for student career development (Keller & Whiston, 2008; Turner & Lapan, 2002); and evidence regarding the importance of teacher support (Metheny, McWhirter, & O'Neil, 2008). While these studies provide important evidence regarding the SCCT model as a way of conceptualizing student career development, it is notable that all of these studies had a sample of predominantly Caucasian-identified students, most of whom were high school or college level (with the exception of Turner and Lapan, 2002, and Keller and Whiston, 2008, whose samples were middle school students). Thus, the results of these studies provide valuable information on the SCCT model, but may not be generalizable to the students in the present study.

## **Appendix B**

### **Project HOPE**

Project HOPE, as stated, was originally designed as an intervention to increase awareness of healthcare careers among Latino/a youth. Because of this, the content focuses specifically on healthcare careers, and emphasizes the importance of both math and science as important ingredients in pursuing, obtaining, and maintaining healthcare careers.

The program has gone through several revisions in response to student feedback, facilitator observations, and modifications based on the needs of the population and/or school being served. At present, it consists of a five-session intervention model followed by a single-session hands-on exploration of healthcare careers. The model is based out of the scientific method, with each session of the program being tied to a step in the scientific method. Below is the progression of the program:

Session 1: Theme: Ask a Question to Investigate: Where do I fit in the World of Work?

Activity: Introduction and Jeopardy Game

Artifact: Holland Grid (Completed in Week 2)

Session 2: Theme: Do Background Research on your Question; Construct a Hypothesis

Activity: Holland “Party”

Artifact: Completed Holland Grid and Career Hypothesis

Session 3: Theme: Anticipate Problems and Brainstorm Solutions

Activity: Game of LIFE: Barriers and Resources

Artifact: Choice of props and milestones based on LIFE Game; 3 Resources

Session 4: Theme: Collect Data, Analyze the Findings

Activity: Gathering data on your Healthcare Job and Filling Out an Application

Artifact: Application Materials

Session 5: Theme: Report your Results

Activity: Creating a Poster Presentation of Your Results Using Artifacts

OR

Activity: Attending a Mock Interview

Session 6: Experiment Hands-On!

During session 1, the activities are intended to open a conversation about the types of information that the students will be learning throughout the program, orient them to the content

within healthcare careers, and build awareness of the importance of math and science within those careers.

Session 2 uses this orientation as a basis for having students think about their own skills and preferences that may be applied to healthcare careers; this is done through a “Holland Party” as inspired by the Holland Code system (Holland, 1973). During this activity, students rate their preferences based on descriptions of the various Holland Codes, and then attend posters where they learn more about each code as well as perform an activity that consists of processes consistent with that particular code. After they are able to participate in these activities, they re-rank their Holland Codes based on their preferences on the activities; then, there is a discussion with facilitators about their preferences, how they understand them, how they may have changed, and what possible healthcare careers may be related to that code. Students then create a hypothesis of a related healthcare career that they may be interested in.

Session 3 then asks the students to consider, now that they have hypothesized a possible job of interest, what things may go wrong along the way to pursuing that job, as well as the resources that they can access to overcome these issues. In order to do this, students participate in a game that simulates the board game “LIFE”; they are given scenarios which involve different dilemmas (e.g., choosing whether to and when to get help on homework, choosing whether to study or do social activities) and experience the different career paths that can happen based on these decisions. The intent of the game is not only to relate to students’ regular concerns and possible barriers, but also to engage them in an active discussion of what they can do to overcome these barriers and who they can turn to for help if they should find themselves in these types of situations.

During session 4, students return to the career hypothesis they have constructed and collect data regarding the job. This data collection takes the form of a job application, on which students are asked to research things such as education required, skills required, average salaries, etc. Students also comment on previous work experience, what they like or dislike about the job, and whether or not they believe they could work in that job.

During session 5, the students report all of the data from their career experiment by engaging in a poster presentation. The poster presentation is a compilation of the information from each of the activities (listed above as “artifacts”) as well as any other information, data, or materials that the student would like to include. This activity is intended to simulate real-life activities within healthcare careers, as well as to give students a chance to utilize and personalize the knowledge that they have gained throughout the program.

Finally, during the last session, students are brought to the University campus to attend simulations of various types of healthcare careers.

**Appendix C**  
**Interview Protocol 1**

1. What is your dream job? What do you like about it?
2. Who is your biggest influence in your career decision-making?
3. Who can help you get to where you want to be in your future?
4. Where do you get messages about careers?
5. What do your parents do?
  - a. Do you want to do that?
  - b. Why/Why not?
6. Tell me about a time when you felt supported by someone in your career path.
7. Tell me about a time when you felt discouraged in your career path.
8. Tell me where you would like to be in 10 years.
  - a. Do you think you will get there?
  - b. Why/Why not?
9. Tell me about a time when you felt inspired about your dream job.
10. Tell me about something you're worried might prevent you from getting your dream job.

## Interview Protocol 2

1. What did you learn from the HOPE in Iowa program? About yourself?
2. What would you tell the current 7<sup>th</sup> graders about the HOPE program and what they might be doing next year?
3. How do you think programs like HOPE could do a better job at helping kids to understand healthcare careers?
4. How did HOPE help you to know what kind of jobs you like? Have your career goals changed?
5. Did you talk to your parents about any of the things you learned in the HOPE in Iowa program? If you could tell them only one thing about the program, what would it be and why?
6. Could programs like HOPE help people in your community? How?
7. What was it like to work with your group leader? How did she affect your ideas about careers and your abilities?
8. What did you like and dislike about HOPE? What would you change about HOPE? How could we have helped *you* more?
9. What else do you have to say about the HOPE in Iowa program? How did it affect you?

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