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Education, Immigrants, Agriculture, Louisiana, Crawfish

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## Value of Education as Perceived by Mexican Immigrants and Caucasian American Citizens Employed in Agriculture in Louisiana

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### **Abstract**

Agriculture operations benefit from the employment of Mexican immigrants through government programs that supply workers to the industry. Therefore, many crawfish farm operations in Louisiana employ both U.S. citizen and Mexican immigrant labor to operate efficiently. The purpose of this study was to compare selected characteristics of farm workers as well as to explore values related to education, as sorted by citizenship and ethnicity. The results of this study indicated significant differences in Mexican immigrant and Caucasian U.S. citizen crawfish farmers' educational backgrounds and demographic characteristics, while finding that both groups held similar values about education. In general, the Mexican immigrant group was younger and had a lower overall educational attainment than the Caucasian U.S. citizens group. However, education was perceived as equally important by both groups. The results of this study can be used by extension services and other educational programs to direct future educational activities based on collected information related to educational values and perceptions of farm employees in Louisiana. These activities can enhance the value of educational programs that are meant to serve all populations.

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### Rationale

The southeastern United States has seen the most rapid growth of Mexican immigration in recent years; however, the widespread population of Mexican workers in agriculture remains understudied and has proven very difficult to reach for studies due to vulnerabilities of this population (Parrado, McQuiston, & Flippen, 2005). In the U.S. agricultural industry, 43.0% of hired farm workers are of Hispanic origin (Kandel,

2008). Within the agricultural industry in Louisiana, between 10 and 18% of farm employees are Mexicans who are permitted to immigrate under government visa programs (Garcia & Martinez, 2005).

Every year, people from Latin America, the leading source of legal immigration to the United States, choose to come to the U.S. seeking a better way of life through increased wages (as defined by the theory of human capital; Cuevas de Caissie,

2008). In addition, better education for their children is a goal for many immigrants from these countries (as defined by the assimilation theory; Cuevas de Caissie, 2008). The source of income for a majority of these immigrants is unknown (Cuevas de Caissie, 2008); however, Mexican immigrant workers can earn an income considerably higher compared to wages that could be earned through other means in their countries of origin (Cuevas de Caissie, 2008). In addition, the employment opportunities provided by government programs allow Mexican immigrant workers to work toward a greater goal: an improvement in the quality of life for their children by providing the financial means to obtain a meaningful educational background (Cuevas de Caissie, 2008). The educational success of children is influenced by the ideals of parents (Batalova & Lowell, 2007; Gaetono, 2007). Given that a large proportion of Mexican immigrants coming to the United States enter the workforce immediately as a stipulation of the government farm programs, educational success for Mexican immigrants is not viewed as a selfish goal, but an aspiration to be attained by their children (Farner et al., 2005). Vega and Sribney stated that as the population numbers continue to grow, the need and desire to learn English and, subsequently, higher standards of educational achievement have become increasingly important objectives for the Mexican population (2009).

The intention of this study was to gain an understanding of the values and perceived importance related to educational goals and achievement regarding the growing Mexican community, specifically in relation to Caucasian U.S. citizens who work in farm operations. The results of this study will help educators to design educationally centered programs that can positively influence the growing population

at a higher achievement rate. Due to the increasing average age of current farm managers and landowners, there is a need to assess the potential futures of farming operations and potential responses that would be deemed essential for assisting in transitions and maintaining agricultural stability.

Many of Louisiana's crawfish farm employees are Mexican immigrants. The families of these workers occasionally or eventually accompany these employees when they immigrate to the United States. Little information exists regarding the unique educational development needs of these employees and their families. This study was designed to compare the educational values held by Caucasian U.S. citizens with those of Mexican immigrants while also investigating the potential for employees to become long-term farm operation employees. On crawfish farms in Louisiana, workers identifying as "Mexican" are almost exclusively Mexican immigrants on work visas (not naturalized U.S. citizens), whereas workers identifying as "Anglo" are generally Caucasian U.S. citizens. This survey and accompanying research therefore use the terms "Mexican immigrant" and "Caucasian U.S. citizens" to describe these two populations. When citing federal statistics, which use the ethnic category "Hispanic," we consider these data relevant to our category "Mexican immigrants," since, in the 2008 Profile of Hired Farmworkers, 84% of Hispanic farmworkers surveyed were born in Mexican and almost 95% were of Mexican origin (Kandel, 2008).

### **Purpose and Objectives**

The purpose of this study was to compare the educational values of Caucasian U.S. citizens and Mexican immigrants who are employed in farm operations in Louisiana, in order to assist

educational programs to better serve the communities. The objectives of the study were to:

- 1. Describe and compare the demographic and personal characteristics of Louisiana crawfish farm employees, contrasting Caucasian U.S. citizens or Mexican immigrants. The characteristics being compared are gender, ethnicity, age, and educational attainment.
- 2. Describe and compare the perceived value placed on education by Louisiana crawfish farm employees in general, whether Caucasian U.S. citizens or Mexican immigrants.
- 3. Describe and compare the value placed on education of children by Louisiana crawfish farm employees in general, whether Caucasian U.S. citizens or Mexican immigrants.

When considering poverty as a significant educational factor, it is important to consider that 21% of Mexican families in the U.S. with children under the age of 18 are defined as living in poverty (Hernandez et al., 2001). One educational outreach method to support these groups should be for educators and extension programs to set goals to bring multiple ethnic groups together, through educational opportunities for advanced leadership and employment in various industrial and agricultural sectors, in order to address the issue of poverty and educational success (Shihadeh & Barranco, 2010; Hernandez et al., 2001). Education for youth in today's society has been reported as multifaceted upon a diverse quality education (Kalogrides, 2009). The largest minority group in the U.S. is that derived from the Mexican population, and Zalaquett (2006) reports that by 2025, 25% of all students in the U.S. will be of Mexican

descent. Although the total number of students was reported as increasing, the dropout percentage rate for these students also increased with little effective response by educational entities (Abraham, 2002; Zalaquett, 2006). In fact, Zalaquett indicated that the dropout rate for students of Mexican origin surpassed that of any other ethnic group (2006).

Bennett noted that students overall would benefit when programs are in place that enhance learning quality across the curriculum, with multiple individual educational opportunities offered to respondents (2007). The primary problem with traditional education, according to Bennett (2007), was that the single direct education environments that school systems are using confine students inside classrooms and are not producing students that can adapt well into adult society, primarily because they are not taught in diverse environments. Therefore, programs must be created to address these issues within education and promote student interaction in order to increase student perception of the community outside of their immediate surroundings (Abraham, 2002; Ryan, 2010).

Support groups for educational enhancement and success are among the social support programs in education that allow students to create encouraging relationships within a school setting (Bennett, 2007). Such programs have proven to be successful in reducing potential dropout rates and increasing overall attendance in the public school settings and were established through the social cognitive theory approach to learning in order to enhance student perception, contributing to a sense of belonging in a diverse, yet assimilating society (Bennett, 2007; Stallones, 2009).

The educational practices implemented to combat student dropouts have been a primarily focused in urban areas

of the United States (Waxman, Padron, & Garcia, 2006). Waxman attributed many problems of educational reform to the following factors: lack of qualified teachers, lack of appropriate or effective teaching practices, and at-risk school environments. There has been and continues to be a need for a diverse set of classroom procedures that would assist with increasing student achievement and involvement (Fry, 2002; Waxman, 2006).

Waxman's study identified that bilingual education opportunities, effective practices that would offer culturally responsive instruction, cooperative learning, cognitively guided education, and technology enhanced instruction would offer program enhancements that would be beneficial to overall student learning (2006). Students who have been allowed to enroll in positive educational climates with diverse technological practices in terms of instruction as well as student guided objectives have ultimately proven much more successful than peers who have endured traditional direct teaching strategies and methods (Swortzel, 2006). These practices have not only been effective with students of Mexican origin, but with all student populations across the nation, without regard to ethnic group identification (Swortzel, 2006). When students have been allowed to participate in enhanced educational studies and settings, there has also been an overall correlated increase in student performance (Swortzel, 2006).

# Parental Involvement in Education and the Community

Some drawbacks do exist when Mexican immigrants attempt to maintain their own cultures while assimilating into the educational system in the United States (Ayon & Aisenberg, 2010; Ryan, 2010; Saracho, 2007). Gaetano (2007) indicated that there are culture differences in the

United States that may result in parents of Mexican children feeling apprehension regarding traditional school settings. As a result, schools reportedly perceive Mexican parents, at times, as uncaring when it comes to children's education, due to lack of communication (Ayon, 2010; Gaetano, 2007). Many factors may contribute to this low rate of parental activity in school settings, especially in agriculture-related communities (Gaetano, 2007). Reasons for lack of parental involvement include mistrust in school administration as well as language barriers that often exist between parents and school settings (Gaetano, 2007). However, studies have shown that there is a greater tie to family and importance place on the presentation of family character among Mexican families, compared to many other ethnic groups (Ayon, 2010; Kalogrides, 2009). Many Mexican immigrant family structures provide students with environments beneficial to their education. but this is related to parents' backgrounds and experiences in the educational environments in which they were raised (Ayon, 2010; Saracho, 2007). There are educational practices in place that allow for alternative means of educational material enhancement that can benefit a diverse group of students and enhance the overall quality of education received; however, educational systems should attempt to involve students as individuals as opposed to generalized groups (Solorzano, 2008).

Difficulties sometimes arise if students were accustomed to community based learning styles found in many ESL (English as a second language) programs, and were then assessed with alternative methods. They may not be able to succeed as well on paper-based assessments due to testing inability as opposed to lack of basic knowledge skills (Solorzano, 2008). These types of learning systems are found throughout community-based extension

services and allow adults to achieve and learn through alternative activities as opposed to traditional school methods (Chapa, 2006). This is especially important for the education of Mexican immigrant farm employees and their children who have become assimilated into the environment (Farner et al., 2005; Gonyea, 2010).

Not only do mainstream high school students have a stake in education, but also students who will enter the workforce or proceed into higher education and their parents, who may have different aspirations for their children to succeed (Goldenburg, Gallimore, Reese, & Garnier, 2001). One of those potential educational sectors as an educational and eventual career stepping stone is community college (O'Connor, 2009). Many times, there are Mexican immigrants who want to pursue an education, but are too old for high school and are hindered by the fact that many states do not allow four-year institutions to accept undocumented residents (Gaetano, 2007; Goldenburg, 2001). Community college offers many benefits of education without the expense of a university (O'Connor, 2009). There is a reported overrepresentation of Mexicans in community colleges, which shows evidence that education is perceived as important but may not be as easily accessible to the Mexican population as it is for other ethnic groups in terms of four-year universities (O'Connor, 2009).

Research has also indicated that Mexicans have a higher disadvantage in four-year universities than other students (O'Connor, 2009). There is a less likelihood that students of Mexican origin will complete their education with a bachelor's degree or higher, even if they are well educated in a school system (O'Connor, 2009). Several factors, according to O'Connor, play a role in student's inability

to achieve according to educational standards set by governing school system administration, but socioeconomic status plays an important role when referring to university achievement (2009). Many farm employees who indicate a primary reason for entering the United States is in search of better wages subsequently find themselves in a lower socioeconomic level setting. Many students need to work to help support families and cannot afford to spend the time in a full time university program; therefore, the students fail to complete a program and ultimately drop out or fall back to a community college that offers flexible scheduling (O'Connor, 2009). There is also the increasing rate of all students across the board using community college as a stepping-stone to a four-year university, but Mexicans fail to make that transition in many cases (O'Connor, 2009). This may be due to main outside influences associated with family or to new members of the community coming into the area and needing assistance by current residents (O'Connor, 2009).

Maldonado (2006) reported also an overall concern prevalent in the United States with regard to potential farm and construction worker shortages in the United States as a reason to continually allow these workers to be present; however, these Mexican populations should also have equal opportunities for educational advancement as their counterparts in society (Maldonado, 2006).

Studies have indicated education as being highly supported and respected by parents of Mexican students and youth; however, the need for an income in order to survive prevents Mexican family members from obtaining a higher education (community college or university) or allowing children to do so as well in many cases (Hurtado-Ortiz & Gauvain, 2007; Maldonado, 2006). Therefore, the

improvement needed in educational achievement may be hindered by the inability to obtain high enough paying jobs to support families and allow them to be more successful in the pursuit of educational and career goals (Maldonado, 2006). While observing and making recommendations in the sector of education, it is imperative to include a diversity of student achievement and encourage families encountered to pursue higher educational values (Gonya, 2010).

However, many families may see this as impossible as the cost of education continues to rise and the job market pay continues to remain the same (Saracho, 2007). Mexican students, according to Valencia and Johnson, also have higher aspirations for educational attainment than what is reportedly perceived by their Caucasian-American citizen counterparts (2006). However, the burden of acculturation and family support often will fall on the shoulders of younger generations (Hurtado-Ortiz). Valencia defined acculturation as the process of adapting to a culture as well as accepting those changes in terms of values and behaviors (2006). Valencia and Gonyea (2010) indicated that students who are able to accept the values of their new environment and assimilate tend to fare better in educational attainment and achieve the same or higher levels of employment and educational success as their counterparts who may hold to the family values of traditional Mexican lifestyles.

Perceived economic and educational barriers have primarily been reported from students with Mexican backgrounds and their parents; however, McWhirter (2007) assessed perceptions of both Mexican and their white counterparts with regard to post-secondary educational planning (Rodriguez-Brown, Li, & Albom, 1999). These vast differences between self-perceptions and expected aspirations for success may count

for many of the failures and incompletion in education observed in postsecondary schools (Rodriguez-Brown, 1999). It is imperative for educators and stakeholders to recognize this perception found in many Mexican youths and develop programs that will combat this perception and promote success in educational settings throughout the United States (Maldonado, 2006; McWhirter, 2007).

With the growing population and diversity in education, if educators fail to overcome the cultural biases and self-perception of discrimination in education, the educational system may fail to achieve in reaching potentially successful students without concerns related to documentation status and instead, create lifelong respectable learners as part of a common community (Alon & Tienda, 2007). Alon indicated that using high school grades of students not only is measuring cognitive ability but also ambition (2007).

### Sample

A random cluster sample was used for this study. The random cluster sample was taken from the population of Louisiana crawfish farm employees (N = 4,844). Cochran's sample-size formula (1977) was used to determine the appropriate sample size required for the study. Since it had been estimated that there were four workers per crawfish farm, it was estimated that responses would be needed from approximately 30 crawfish farms (4 \* 30 =120, which was 1 more than the minimum 119 required). Because the expected voluntary participation rate was expected to be as low as 65%, the researcher randomly selected 47 crawfish farming operations from the database for the sample population since a 65% participation rate from the 47 operations was expected to produce approximately 30 operations that would voluntarily participate.

### Instrumentation

The employee surveys were offered in Spanish as well as English in order to overcome any language barriers that could exist among the tested population. A panel of extension aquaculture professionals examined the instrument for face and construct validity. Two pilot tests were conducted. After completing two pilot tests with the instrument, it was deemed valid as a result of a visual analysis of the completed questionnaires and as a result of the reliability assessment conducted on each scale in the instrument.

### **Data Collection**

Utilizing the crawfish operation distribution list, phone calls were made to operations managers/owners in order to obtain support from the industry prior to survey administration. In order to increase response rate and to ensure the minimal sample size was acquired, the researcher arranged to travel to crawfish farm operations to administer surveys to potential respondents. This method was deemed as the best way to obtain data from vulnerable populations who may not have access to Internet or regular postal mail service (Dillman et al., 2009). The data was collected through personal contact of farm workers, and participation was deemed voluntary by respondents. The respondents were assured that the collected information would remain confidentiality.

### **Findings**

Almost all respondents in the study were male (97.7%, n = 127), while 3.2% (n = 3) were female. Respondents were also asked to identify their gender for the study as *Anglo*, *Mexican*, *African American*, *Asian*, or *Other*. Of the respondents, 79.2% (n = 103) self-identified as Anglo, 18.5% (n = 103)

= 24) as Mexican, and 2.3% (n = 3) as African American.

The ages of respondents ranged from 19 years to 52 years. The mean age for the population of crawfish farm employees in Louisiana participating in the study was 34.42 years (SD = 6.50). The respondents were asked to indicate the number of years they had been working on a crawfish farm in Louisiana. The mean number of years the respondents reported they had been working on a crawfish farm was 8.43 (SD = 6.13). The most frequently reported number of years working on a crawfish farm was reported as 10 (n = 19, 15.0%). Less than one-fourth of the respondents (n = 28, 22.0%) indicated that they had 2 years or less experience working as a crawfish farm employee.

The respondents indicated their level of educational attainment by selecting one of the following options: less than middle school attendance, attended middle or high school, high school diploma or graduate equivalency diploma (GED), associate degree from a community or technical college, or a bachelor's or graduate degree. The total number of respondents reporting having earned a high school diploma or GED was 82 (63.1%); this was the most frequently reported category of educational attainment. The two categories with the smallest number of respondents were those respondents who reported they had a bachelor's degree or higher (n = 6, 4.6%) as well as those who indicated they had less than a middle school education (n = 7, 5.4%).

Inferential *t*-tests were used to compare the age of the crawfish farm employees by ethnicity. The Caucasian crawfish farm employees were significantly older (M = 35.68, SD = 6.28) than the Mexican employees (M = 29.00, SD = 4.28) (t (125) = 4.94, p < .001). The Cohen's d coefficient was 1.24, which indicates that a

large difference existed between the ages of the Caucasian(M = 35.68, SD = 6.28) and Mexican crawfish farm workers (M = 29.00, SD = 4.28).

The Chi-Square test of independent distribution indicated that the ethnicity of crawfish farm workers was not distributed independently of their reported level of education ( $\chi^2 = 11.37$ , df = 2, p = .003). The *phi* coefficient for this analysis was .30, which indicates that there was a moderate association between ethnicity and education level of crawfish farm workers. The Caucasian crawfish farm workers had a moderately higher level of education than the Mexican workers.

The Cronbach's *alpha* for the scale was .90, which indicates that the scale possessed exemplary reliability according to the standards published by Robinson et al. (1991). The highest rated item was the importance of educational achievement, which was rated as highly important by the respondents (M = 3.58, SD = .54). The lowest rated item was the importance of education in their career, which was rated as important (M = 3.06, SD = .83). The scale mean was 3.39 (SD = .65), which indicated that the respondents perceived that education in general was important to them. Inferential *t*-tests were used to compare the scale mean for Value Placed on Education in General by ethnicity. There was no significant difference found in the Value Placed on Education in General by ethnicity (t(124) = .336, p = .738).

The highest rated item was the importance of children completing high school, which was rated as highly important by the respondents (M = 3.68, SD = .50). The lowest rated item was the importance of children completing a bachelor's degree, which was rated as important by the respondents (M = 3.29, SD = .77). The scale mean was 3.49 (SD = .61), which indicates that the respondents perceived that their

children's education was important to them. Inferential t-tests were used to compare the scale mean for Value Placed on Children's Education by ethnicity. There was no significant difference found in the Value Placed on Children's Education by ethnicity (t(124) = .520, p = .604).

### **Conclusions and Recommendations**

### Mexican Immigrants Are Younger and Have Lower Educational Attainment than Caucasian U.S. Citizens Working on Farms

Kandel reported that a large percentage of the Mexican population entering the United States lack education when compared to the Caucasian U.S. citizen population in similar industries (2004). This study confirms Kandel's findings and conclusions that many Mexican migrants come to the United States with limited education. Kandel (2004) also reported a correlation between educational achievement and poverty gaps found among ethnic groups. The findings from this study support the conclusions related to educational attainment when compared to Mexican crawfish farm workers in Louisiana.

## Both Mexicans and Caucasian U.S. Citizens Working in Farm Operations View Education in General as Important

Vega and Sribney (2009) stated that educational achievement has grown as an important factor of accomplishment for Mexican workers in the United States. In addition, as the gap related to education is realized, both ethnic groups should view educational achievement as equally important (Altschul, Oysermann, & Bybee, 2008). This study supports the conclusions that as populations work with each other, the ideals related to education will become more closely related as a definition of the

Assimilation Theory (Johnson & Marchi, 2009).

## Both Mexicans and Caucasian U.S. Citizens Working on Farm oOperations View Their Children's Education as Important

This educational importance found in the study supports conclusions stated by Batalova and Lowell (2007), who indicated that the educational success of children is directly influenced by the ideals of parents. Also, Vega and Sribney indicated that educational success has continually grown as a primary objective for Mexican migrants (2009). Results from this study support the high importance placed on education in general and the high importance placed on their children's education by both ethnic groups.

Recommendations are most applicable for educational institutions and extension services as they strive to improve programs that are designed to reach populations of farm workers as well as to address the gaps found between Mexicans and U.S. Anglos in relation to educational attainment and income. Educational faculty should increase program outreach that would include newly developing regions that are including more Mexicans as a growing population (Hobbs, 2004). Educational programs could also be used to increase program awareness and increase participation and assimilation rates in regions where ethnic segregation voluntarily occurs due to mutual misconceptions between cultures and ethnic groups, where educational values are concerned (Martinez-Espinoza, 2003).

With an increased interest related to diversity in educational settings and the growing number of Mexicans moving into rural regions as permanent residents, it is important for educational programs to reach out to this growing population and encourage more involvement among Mexican immigrant workers as well as younger workers who may come into management within crawfish farm operations (Remble, 2010). Also, working with the current Caucasian U.S. citizen employees to encourage cooperation among all workers could develop programs that would encourage a higher perception of importance of farm workers who may perceive immigrant workers as job threatening as opposed to a potential source for expanding workforce.

If educational entities were to encourage the growing populations of Mexican farm workers to be included in educational programs, a potential leadership group in the crawfish farm industry could rise from this population that is currently defined as vulnerable (Mazonni et al., 2007). In order for educational entities to respond to the growing population of Mexicans in many rural areas, including Louisiana, it is important to provide services to this population. By offering educational services, the rate of assimilation in these regions can be increased.

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