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## After Hurricane Maria: Puerto Rican Migrants and Residential Segregation in the Orlando MSA

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AFTER HURRICANE MARIA: PUERTO RICAN  
MIGRANTS AND RESIDENTIAL SEGREGATION  
IN THE ORLANDO MSA

by

GABRIELLA OSPINA

A thesis submitted in partial fulfillment of the requirements  
for the degree of Bachelor of Science  
in the Department of Sociology  
in the College of Sciences  
at the University of Central Florida  
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## **ABSTRACT**

The paper presents analysis of the racial attitudes of residents in the Orlando Metropolitan Statistical Area (MSA) towards Puerto Rican migrants that have moved to the area as a result of Hurricane Maria and analyzes the effects these attitudes may have on racial residential segregation in Central Florida. As the state with the third largest population of Latinos, Florida's residential landscape continues to be uniquely formed by a diverse, and markedly Latino, population. Florida's location in relation to South American and Caribbean countries has made it an opportune destination for immigrants and refugees. Therefore, it came as no surprise that when Hurricane Maria hit Puerto Rico in late 2017, thousands of Puerto Ricans sought refuge in Florida. This thesis examines racial attitudes towards this group of Puerto Rican migrants and the ways in which they could potentially affect neighborhood demographics. The study proceeds by collecting survey responses from participants living in the Orlando areas being analyzed. The survey asks participants about their general views of Puerto Rican migrants, tests their knowledge of racial residential patterns in Orlando, and analyzes their neighborhood preferences.

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## LITERATURE REVIEW

For the past 40 years sociologists have been studying and tracking racial residential segregation in the United States. Many studies have analyzed the proportion of black and white populations in suburban and urban areas (Zubrinisky 2003; Massey and Denton 1993). Other studies focus on white and black racial attitudes and their influence on neighborhood preferences (Farley et al 1978; Zubrinisky and Bobo 1996; Krysan and Brader 2007). All studies arrive at the same conclusion: that racial residential segregation most certainly exists. What these studies have not focused on, apart from Zubrinisky and Bobo (1996) and Zubrinisky (2003), are the effects of residential segregation for Latinos. Studies that have included Latinos in their analysis of racial residential segregation have not included outcomes for individual Latino groups (Mexican, Cuban, Puerto Rican, etc.) (Iceland and Wilkes 2006; Squires and Kubrin 2005). Since the Latino population is racially and culturally diverse, different Latino groups merit a more individualized and focused analysis on racial attitudes and residential segregation. Thankfully, more recent literature has recognized the importance of analyzing various Latino groups separately, and each group has been found to have a different relationship with residential segregation (Welch and Sigelman 2000).

As the state with the third largest population of Latinos, Florida's residential landscape continues to be uniquely formed by a diverse, and markedly Latino, population (Stepler and Lopez 2016). Florida's location in relation to South American and Caribbean countries has made it an opportune destination for immigrants and refugees. Therefore, it came as no surprise that when Hurricane Maria hit Puerto Rico in late 2017, thousands of Puerto Ricans sought refuge in

Florida (Sutter and Hernandez 2018). The current study aims to further current literature on racial residential segregation by analyzing racial attitudes towards Puerto Ricans and how these attitudes affect current Florida residents' willingness to share a neighborhood with this group of Latinos.

### BACKGROUND ON HURRICANE MARIA

On September 19, 2017 Hurricane Maria ripped through the island of Puerto Rico. One week after the hurricane hit, Puerto Rico was left with 95 billion dollars of total damage, 90% of all homes damaged, 25 of its 69 hospitals non-operational, and all electricity distribution centers damaged, leaving 3.3 million people without power (Ahmed and Krupa 2017). At that time, it was estimated that it would take six months to restore power on the island (Ahmed and Krupa 2017). In reality, the Puerto Rico Electric Authority reported that they restored power to all clients that had been without electricity since Maria eleven months after Hurricane Maria, five months later than what was predicted (Santiago and Gallon 2018).

With 90% of homes destroyed (Ahmed and Krupa 2017), thousands of Puerto Ricans fled to the U.S. mainland. Although estimating an accurate number of how many Puerto Ricans have migrated has proven to be a difficult task (Echenique 2018), the Center for Puerto Rican Studies at the City University of New York conducted a study to provide estimates that are more reliable. In September of 2018, Hinojosa and Melendez released the findings of their study, one year after Hurricane Maria. The data from the study estimate that almost 160,000 Puerto Ricans migrated

to the U.S. mainland. This number is even higher than the amount of Puerto Ricans that migrated in the previous two years combined.

Although the Hinojosa and Melendez study does not specify which states Puerto Ricans migrated to after the hurricane, John D. Sutter and Sergio Hernandez (2018) with CNN Investigates used Federal Emergency Management Agency (FEMA) applications and address changes to track where Puerto Ricans were moving. Their data places Florida as the “top destination for Maria migrants,” with over 52% of FEMA applications. The data also show that the metropolitan area where the majority of these migrants reside is the Orlando-Kissimmee-Sanford Metropolitan Statistical Area (Orlando MSA).

#### STATISTICS ON PUERTO RICANS IN FLORIDA

In response to this recent influx of Puerto Ricans to Florida, Florida International University collected data on Puerto Ricans that moved to Florida and were living in Orlando, Tampa, Miami, and Fort Lauderdale (2018). The study consisted of 1,000 telephone interviews that collected substantial information including level of education, employment status, year of arrival, residence, reason for moving, and political views.

According to this study, 25.7% of Puerto Ricans moved to Florida between 2017 and 2018 and arrived mainly due to the damage caused by Hurricane Maria. Of that particular group of Puerto Ricans, 67.3% are college-educated, 52.9% have been able to get a job since arriving to Florida, and 35.2% are currently unemployed. Puerto Ricans that arrived due to Hurricane Maria are

more highly educated than those that arrived in previous years, although they also have a higher unemployment rate (most likely due to their more recent arrival).

From 2000 to 2014 the population of Puerto Ricans in Central Florida almost doubled, making them the fastest growing Latino group in Florida (Gutierrez 2016). Although Cubans have been the largest group of Latinos in Florida for several decades, it is estimated that by 2020 Puerto Ricans will surpass the Cuban population. The majority of Puerto Ricans live in 10 Florida counties. Three of the top five counties with the largest population of Puerto Ricans are located in Central Florida: Orange County, Osceola County, and Hillsborough County (Gutierrez 2016).

Reasons for Puerto Rican migration to Florida seem to be closely tied to family and job opportunities. Nearly half of respondents from FIU's 2018 study came to Florida with one or two family members. The majority of respondents reported that is "likely" or "very likely" that a family member will move to the U.S., and 77% report already having family in Florida before moving. The top three reasons for leaving Puerto Rico are due to "job opportunity," "searching for a higher quality of life," and the "precarious economic situation on the [island]." The next most common reasons were "family residing in the US" and "post hurricane."

Puerto Rico's ongoing economic crisis is the main reason for the emigration of Puerto Ricans to the U.S. mainland (Gutierrez 2016), and Puerto Ricans are moving to areas where they have family to support them (FIU 2018). Like most migration patterns have indicated in the past, this means that for an indefinite period of time, Puerto Ricans will continue to move to Central Florida, most likely Orange County (Gutierrez 2016).

Where Puerto Ricans are specifically migrating to in Central Florida is just as significant. Using data from the 2010 United States Census, Cable (2013) created a color-coded racial/ethnic dot map that places one dot for each person living in the U.S. according to their race or ethnicity. Green dots represent blacks, blue dots represent whites, orange dots represent Hispanics, and red dots represent Asians. The racial dot map makes the Orlando MSA look like a tri-colored flag with the colors green, blue, and orange. Most blacks are located on the west side of Orlando, Hispanics are located in the east, and whites occupy the space in-between them. For the most part, Asians are dispersed throughout the Orlando MSA, but appear more prominent in Southwest Orlando. The Hispanic population is also dense in areas south of Orlando, such as Kissimmee and Hunters Creek. Non-Hispanic whites occupy most of the area north of Orlando, such as Maitland and Longwood (Cable 2013).

Understanding the geographical distribution of race in the Orlando area is necessary when analyzing the impact of its increasing Puerto Rican population. Residential areas have a major effect on the health and economic prosperity of the people living there, and residential segregation is notorious for harboring hostile living environments for minority populations (Zubrinisky 2003; De la Roca, Ellen, and O'Regan 2013). This directly impacts the lives of Puerto Ricans.

### RESIDENTIAL SEGREGATION

De la Roca, Ellen and Steil (2017) noted “levels of Latino-white residential segregation have remained relatively steady, while levels of Latino isolation have risen” (129). This pattern is one

that deserves significant attention in the aftermath of Hurricane Maria. With thousands of Puerto Ricans having relocated to the Orlando MSA after the damage caused by the hurricane (Sutter and Hernandez 2018), how will they be received by current residents and how will this impact their relationship with residential segregation? To answer these questions, it is necessary to look at current and past trends in residential segregation as well as attitudes towards Latinos.

Residential segregation is the spatial separation of groups of people into different neighborhoods and areas. It is associated with a negative effect on health, economic status, and educational achievement of minority groups, and a positive effect on these factors for whites (Zubrinisky 2003; De la Roca, Ellen, and Steil 2017; De la Roca, Ellen, and O'Regan 2013). These patterns make residential segregation an essential component of analyzing the integration and outcome of Puerto Rican migrants.

Most studies on residential segregation have often treated Latinos as a single group. However, Latinos in the United States have very diverse ethnic and racial backgrounds. As a result, different Latino groups are affected differently by residential segregation (De la Roca, Ellen, and Steil 2017). De la Roca, Ellen, and Steil (2017) analyzed the effects of residential segregation on the socio-economic outcomes of several different Latino groups: Cuban, Mexican, South American, Central American, Puerto Rican, Dominican, and 'Other Hispanic.' Initially, they had reason to expect segregation would not have the same negative effects on Latinos as it does for African Americans. Instead, they found that Latinos had greater negative associations with segregation in regard to education and work. As levels of segregation increased, Latinos were less likely to have a job or be in school.

The Latino groups most negatively affected by residential segregation are Puerto Ricans and Dominicans, which is most likely due to the high amount of Puerto Ricans and Dominicans who identify as black (De la Roca, et al 2017). Over ten years before De la Roca and colleague's study, Welch and Sigelman (2000) reported that Puerto Ricans are more spatially segregated than Cubans and Mexicans. This establishes a long-term relationship between residential segregation and Puerto Ricans, one that will likely persist in the future.

### RACIAL ATTITUDES TOWARDS LATINOS

There have been useful studies that provide insight to the causes of racial segregation for Latinos by analyzing racial attitudes and stereotypes. A study by Dixon and Rosenbaum (2004) analyzed attitudes and stereotypes towards Latinos and blacks by testing contact, cultural, and group threat theories against one another. Contact theory predicts that when members of different races come into contact with one another and learn new information about other groups, positive racial attitudes are formed (Dixon and Rosenbaum 2004). A positive outcome of contact theory is centered around four factors: quantitative, status, role, and social atmosphere (Allport 1954).

*Quantitative* refers to the frequency, duration, number of persons involved, and variety of contact. *Status* refers to whether the minority member has inferior, equal, or superior status to the majority member. *Role* questions if the relationship between people is competitive or cooperative, and if it is subordinate and superordinate (e.g., employer to employee). *Social atmosphere* analyzes whether or not contact is voluntary and if the contact is real or artificial. In order for prejudice to be reduced, Allport (1954) claims that contact must occur between

majority and minority members of equal status that share a common goal. However, he warns that this type of contact is not usually effective in reducing negative stereotypes in people who have deeply rooted prejudice views.

Cultural theory provides an explanation for why contact theory may not always be effective.

Dixon and Rosenbaum (2004) define cultural theory as “the development of prejudice and stereotypes [through] a historical and cultural process” (262). These stereotypes and prejudiced ideas develop and express themselves differently according to the local culture and historical context in which it developed. These ideas then become normalized and cemented in that region’s culture, to the point that contact theory may not offer much of an opportunity to reverse negative stereotypes. Group threat theory is the idea that as the population of minorities in an area increases, the majority group develops prejudice and anti-minority stereotypes as a consequence of feeling threatened by a sizable presence of minorities.

For Latinos, contact in schools and in communities is most likely to decrease anti-Latino stereotypes among whites (Dixon and Rosenbaum 2004). Cultural theory is not supported when looking at Latino stereotypes. Although Dixon and Rosenbaum (2004) predicted a higher prevalence of negative views towards Latinos from whites in the West, they found no such evidence to support this. A lack of support for cultural theory provides reason to believe the image of Latinos is rooted in American culture and designated to a specific region, as it tends to be for blacks. Furthermore, Dixon and Rosenbaum (2004) did not find significant support for group threat theory between whites and Latinos. However, a study by Delorme (2013) seems to

offer evidence that indicates group threat theory is very much at play in the relationship between Latinos and whites.

Over the course of a two-year ethnographic study, Delerme (2013) documented the effects of the changing racial landscape of the Orlando-Kissimmee area. She analyzed the attitudes and opinions of non-Hispanic whites and Hispanics and discovered significant racial tension. When speaking with non-Hispanic whites, Delerme often witnessed blatant opposition to the use of Spanish in public areas. Given that Hispanics are a racially mixed group of people, Delerme theorized that the polarization between Hispanics and non-Hispanics revolves around the use of Spanish rather than physical differences. One person shared with Delerme that he responds to people speaking Spanish in front of him by declaring, “This is America, speak English” (73). When Delerme continued to inquire about why this mattered so much to him, he admitted that he felt “left-out” and was worried that the people speaking were talking negatively about him.

On a separate occasion, Delerme discussed language with a high school class in Osceola County. One student said, “It is not that we are afraid of Spanish, we are afraid of change” (Delerme 2013 p 89). Delerme defined this “change” as a reference to demographic and linguistic transformation in the area. This fear, coupled with the backlash from non-Hispanic whites concerning Spanish, is enough evidence to provide a plausible reason to believe that group threat theory does play a role in the social relationship between non-Hispanic whites and Latinos. If this is true, then a sudden rise in the Latino population in the Orlando MSA due to the influx of Puerto Ricans would increase tension between non-Hispanic whites and the Latino population.

## **HYPOTHESES**

- Whites will be the most uncomfortable with increasing levels of Puerto Ricans in neighborhoods, followed by Latinos, and finally blacks.
- Whites, Blacks, and Asians will underestimate the level of education of Puerto Rican migrants.
- Whites, Blacks, and Asians will underestimate the English proficiency of Puerto Rican migrants.

## METHODOLOGY

Farley and colleagues (1978) introduced a unique method for measuring attitudes towards residential segregation that revealed black and white attitudes towards neighborhood preferences overlooked by previous methodology. Farley et al (1978) designed five show cards depicting a neighborhood with fifteen houses. Each house was either white or black to indicate a white or black household. The show cards ranged from all white neighborhoods to all black neighborhoods. White and black respondents were asked different questions associated with these neighborhood show cards. Black respondents were asked to rank each neighborhood from most attractive to least attractive. Whites were asked to imagine they live in an all-white neighborhood, then shown each show card in order of least interracial to most interracial and asked how comfortable they would be in that neighborhood.

This methodology was then used by Zubrinsky and Bobo (1996), who updated the questions and adjusted the methodology to include Latinos and Asians in addition to whites and blacks. My proposed study applies the methodology of Farley et al (1978) and Zubrinsky and Bobo (1996) in order to offer comparable results to the previous findings on neighborhood preferences. However, there are differences in my research design that are necessary to highlight. The first difference is that my survey withholds the full intention of the study from participants by not informing them that the survey is measuring attitudes towards Puerto Rican migrants from Hurricane Maria. This is done with the intention of collecting responses that are as honest as possible. A complete explanation of the deceptive tactic used in the survey is detailed later in this paper.

A second difference is that Zubrinsky and Bobo (1996) studied the neighborhood preferences of different racial groups with one another. Instead, I analyze these social paradigms towards a specific Latino group. This is why my study does not collect attitudes and preferences between different racial groups. Instead, it collects the attitudes and preferences of different racial groups towards Puerto Rican migrants.

The final difference worth noting is that the questionnaire was completed through an online survey rather than in-person interviews. Since this is an undergraduate thesis with limited time and no funding I did not have the resources available to recruit enough participants for in-person interviews. An online survey that did not take long to complete was the most efficient way for me to gather as many complete responses as possible.

### SAMPLE RECRUITMENT AND CHARACTERISTICS

Participants were recruited by means of convenience sampling in conjunction with snowball sampling. This was done through social media and by directly emailing university students. On social media, a link to the survey along with a brief overview of the purpose for the study was shared publicly on my personal Facebook account. Participants of the study were encouraged to share the link with others they felt might fit the study characteristics. The main advantage to dispersing the link through social media is how quickly the survey can be made accessible to people. Another advantage was how the link was able to be distributed to other people by participants.

The second approach to gathering participants was completed through a learning management system at a public university in Central Florida. The system provides students with online access to course materials, university resources, and the opportunity to communicate directly with professors and classmates. Using my personal account with this online system, I emailed a link to the survey along with a brief overview of the purpose for the study to various student groups. The learning management system allows enrolled students access to professors and other students that are enrolled in the same courses and workshops. Therefore, I was able to distribute the link to students that were enrolled in the same classes as me which included students participating in Honors in the Major during spring 2019, and students that transferred to UCF in the fall of 2017.

Through these means of recruitment, I collected and analyzed 101 survey responses. I limited the participation of the survey to include only people living in the following Central Florida counties: Lake, Seminole, Orange, and Osceola. In this study, white and black racial groups refer to participants who do not identify as Hispanic or Latino. Table 1 details the gender, race, age, and counties of the survey responses being analyzed in this thesis. I collected a small sample of only three participants that identified as multi-racial. Since I was not able to collect any more responses from participants in this racial group, I did not include their responses in my analysis.

**Table 1 Characteristics of Respondents**

|        |        | # of Respondents | % of Total Sample |
|--------|--------|------------------|-------------------|
| Gender | Female | 63               | 62%               |

|                     |          |     |      |
|---------------------|----------|-----|------|
|                     | Male     | 35  | 35%  |
|                     | Other    | 3   | 3%   |
| Total within Gender |          | 101 | 100% |
| Race                | White    | 49  | 48%  |
|                     | Black    | 13  | 13%  |
|                     | Latino   | 33  | 33%  |
|                     | Asian    | 6   | 6%   |
| Total within Race   |          | 101 | 100% |
| Age                 | 18-24    | 67  | 66%  |
|                     | 25-34    | 17  | 17%  |
|                     | 35-44    | 5   | 5%   |
|                     | 45-54    | 7   | 7%   |
|                     | 55-64    | 5   | 5%   |
| Total within Age    |          | 101 | 100% |
| Counties            | Seminole | 31  | 31%  |

|                       |     |      |
|-----------------------|-----|------|
| Orange                | 64  | 63%  |
| Osceola               | 4   | 4%   |
| Lake                  | 2   | 2%   |
| Total within Counties | 101 | 100% |
| Total Sample Size     | 101 | 100% |

Overall, the sample consists mostly of participants 18-34 years-old living in Orange County or Seminole County. The reason for these characteristics is likely due to the convenience sampling method used to recruit participants for this study. By using my social media contacts and my university’s communication methods, the majority of participants are in my own age bracket and live near or around my university.

### RESEARCH DESIGN

Given the complexity of the survey design due to the neighborhood show cards, the survey was designed and distributed exclusively using Qualtrics, an online survey tool that can be used to distribute surveys and collect data. Gathering data through an online survey rather than in-person interviews provided more privacy for respondents and increased the likelihood of receiving more honest responses. Through Qualtrics, the surveys were easily completed on a computer, tablet, or

mobile device. Additionally, the survey was designed to be completed in under 15 minutes in order to reduce the occurrence of incomplete responses.

Using Qualtrics, I designed a survey that did not collect any names, phone numbers, emails, or other data that would identify the participant. The survey began by presenting the participant with a brief explanation of the purpose of the study. This section informed the participant that the full intention of the survey would be withheld from them until the end of the survey. By continuing with the survey, respondents indicate their consent to participate in the study.

The first series of questions on the survey determined if a participant presented the necessary qualifications for the study. Questions such as which county they live in and their age determined whether or not they would be allowed to continue with the study. It was also required that participants answer basic demographic questions concerning race and ethnicity in order to properly categorize them in the show card section of the survey. Participants unwilling to provide this information for any reason were not allowed to continue with the survey.

Following the demographic and qualification section, I employed a method to deceive respondents from the intention of the study in order to increase the amount of honest responses.

The survey informed respondents that they would be answering questions about a randomly assigned racial outgroup, either black, American Indian or Alaska Native, Asian Indian, Mexican or Mexican Am., Puerto Rican, or Cuban, with an accompanying circumstance for migration, either “to pursue the American Dream,” “because of a natural disaster,” or “for work.” In reality, all participants answered questions about their neighborhood preferences pertaining to Puerto Ricans who arrived in Florida due to displacement from a natural disaster (PRNDs). Although it

would be useful to measure the attitudes of Florida residents towards all Puerto Ricans, this study only focuses on Puerto Rican migrants that are seeking refuge from a natural disaster. My intention in doing so is to obtain data that reflect attitudes towards Puerto Ricans that have migrated to Florida due to Hurricane Maria (PRHM), which is the ultimate goal of this research study. Throughout this thesis, “PRND” is used to refer to questions and answers from the survey. “PRHM” is used in the discussion and conclusion when reviewing the outcome of the survey.

Once the respondents had been “randomly assigned,” they answered a series of questions used to measure their general views of PRNDs. Respondents were asked a series of close-ended questions about what they believe to be the general level of education, knowledge of English, and likely occupations of PRNDs. These questions are based on data from the FIU 2018 study on Puerto Ricans in order to compare respondents’ answers with existing data.

The next section of the survey was very brief, but essential in testing whether the participant was aware or unaware of racial residential segregation. The respondents were asked to indicate which areas in Central Florida they believe PRNDs are *most likely* and *least likely* to live in. The options provided were Lake Mary, Dr. Phillips, Azalea Park, Kissimmee, and Pine Hills. These areas were selected because of their racial composition as reported on the University of Virginia’s racial dot map (Cable 2013). Lake Mary is a predominantly non-Hispanic white neighborhood, Dr. Phillips is predominantly white and Asian, Azalea Park and Kissimmee are predominantly Latino, and Pine Hills is predominantly black. By categorizing these cities into “most likely” and “least likely” to live in, participants demonstrate their general awareness of which racial groups live or do not live in certain places.

Following the questions measuring general views of PRNDs and knowledge of residential segregation, participants answered questions regarding the neighborhood show cards. When designing these show cards, Zubrinsky and Bobo (1996) shaded each home on a grayscale according to race. Since I am not measuring each group's attitude towards multiple different groups, I chose to deviate from Zubrinsky and Bobo's (1996) grayscale houses. Instead, the respondent's home was left blank regardless of race, and PRND households were colored green. The other houses in the neighborhood were also blank and not assigned a specified race. This was the only difference in the design of the show cards. Everything else about the design of the show cards remained the same as Zubrinsky and Bobo's (1996) study. A total of five show cards were used for all racial groups, each depicting a neighborhood of fifteen houses. The respondent's house was located at the center of the neighborhood and indicated by an "x" inside of it.

#### *White Respondents.*

For white respondents, the show card section began with a neighborhood without any green PRND households and were asked to imagine that they live there. There were no questions associated with this initial show card. Participants were then shown a second card with one green PRND house and told that this family has moved in to their neighborhood. They were asked if they would feel, "very comfortable," "somewhat comfortable," "somewhat uncomfortable," or "very uncomfortable" in this new setting. If respondents selected one of the first three options, they were shown the next show card with an increased ratio of green PRND houses. This

continued until a respondent selected “very uncomfortable” or until they reached the last show card. The final card presented was a majority PRND neighborhood: eight Puerto Rican households and seven blank households, including the respondent’s designated house. If at any point the respondent selected “very uncomfortable,” they were automatically skipped over the remainder of this series of questions and presented with the final neighborhood show card question. This method of questioning was developed by Zubrinsky and Bobo (1996) to test white flight by measuring the point at which whites would no longer feel comfortable in their neighborhood.

The final show card question measured the willingness of whites to move into these neighborhoods. Respondents were presented with all neighborhood show cards together and given the same scenario used in the Zubrinsky and Bobo (1996:357) study:

Suppose you have been looking for a house and have found a nice one you can afford. This house could be located in several different types of neighborhoods, as shown on these cards. Would you consider moving into any of these neighborhoods?

Respondents were instructed to select all that apply.

*Black, Latino, and Asian.*

These groups of respondents received a different group of show cards than white participants. They did not receive the same initial show card questioning that was used for white participants since it is not necessary to measure “white flight” in this group of participants. Instead, this section of the survey began by showing participants all five neighborhood show cards. Like

white respondents, each neighborhood had a different ratio of blank and PRND households ranging from a neighborhood with one green house to a neighborhood with all green houses surrounding the respondent's house.

When presented with these show cards, respondents were given a scenario in which "they have been looking for a house and found a nice one that they can afford" (Zubrinisky and Bobo 1996, p 358). They were then asked to rank the neighborhoods from most to least desirable. Following this question, all neighborhood show cards were once again presented to the respondent and they were asked to select which neighborhoods, if any, they would be not be willing to move into. The purpose of this question is to measure the respondent's willingness to enter this neighborhood.

At the end of the show card section, all participants (white and nonwhite) were provided an opportunity to explain their previous responses. This open-ended section allowed participants to express any personal opinions that influenced their survey responses. Once participants submitted the survey, they were informed of the full purpose of the study that was withheld from them initially and given the opportunity to withdraw their consent and participation from the study.

## **ANALYTIC STRATEGY**

All collected data were downloaded from Qualtrics as an Excel spreadsheet. Before analyzing the data, I removed any survey responses that did not meet the qualifications for the study or were incomplete. I also removed the data from any racial groups of three or less participants. Once the dataset was organized, I proceeded to analyze the results of the survey.

The initial step in analyzing the data was organizing the demographic questions. I calculated the number of respondents for each gender, age, race, ethnicity, and county. The rest of the survey responses were organized into racial categories. The responses for each question on the survey were categorized as white, Latino, black, and Asian.

The first section of the survey that measured the general views of PRNDs was analyzed by calculating the average responses of each racial group for each category in the question. Each racial group's responses were organized into separate tables that made it easy to compare results. The results to these questions are then used to compare the responses of each group to the known statistics for each question provided by FIU's study.

Questions that measured whether respondents were aware of racial residential segregation in the Orlando MSA area were ranked from most to least chosen. Since respondents were allowed to "select all that apply" for these questions, the number of times a city was chosen would be disproportionate to the sample size of the racial group. Therefore, these questions were analyzed by ranking, not percentage.

The next section of the survey pertaining to neighborhood preferences was analyzed using a similar approach as Zubrinsky and Bobo (1996). The first series of responses analyzed was from whites. For each neighborhood, I calculated the percentage of whites that selected, “very comfortable,” “somewhat comfortable,” “somewhat uncomfortable,” or “very uncomfortable,” as well the percentage of respondents that left this section blank. The final show card question regarding which neighborhoods respondents would be willing to move into was also analyzed by calculating what percentage of respondents selected each neighborhood show card.

The next data that were analyzed were the neighborhood show card responses from blacks, Latinos, and Asians. For the first show card question, the results for each neighborhood were organized into separate tables. Each table included how many times that neighborhood was ranked 1, 2, 3, 4, or 5 by each racial group, as well the overall percentage of each racial group that would rank each neighborhood. Finally, I consolidated the data into one table that provided a comparative analysis of the overall neighborhood desirability ranking for each racial group.

## SURVEY RESULTS

The survey results are outlined according to the three sections of the survey: general view of Puerto Rican migrants, knowledge of racial residential segregation, and neighborhood preferences. I would like to emphasize that this study was conducted as part of an undergraduate thesis study and should be interpreted as a more exploratory study and not one that can draw any definitive conclusions about a population using the data collected. Rather, this pilot study offers suggestive results that I hope will encourage further and more complete research into the topic.

### GENERAL VIEW OF PUERTO RICAN MIGRANTS

The three questions I used to measure participants' perceptions and knowledge of PRNDs pertain to education, English proficiency, and occupation. These variables were measured to collect data that could be compared to the results collected by FIU on Puerto Ricans in Florida. Each question in this section was designed using sliders in Qualtrics. On the survey, the respondent was instructed to distribute to each category a percentage of the amount of PRNDs they believe apply to that category. The percentages of all categories added together must equal 100%.

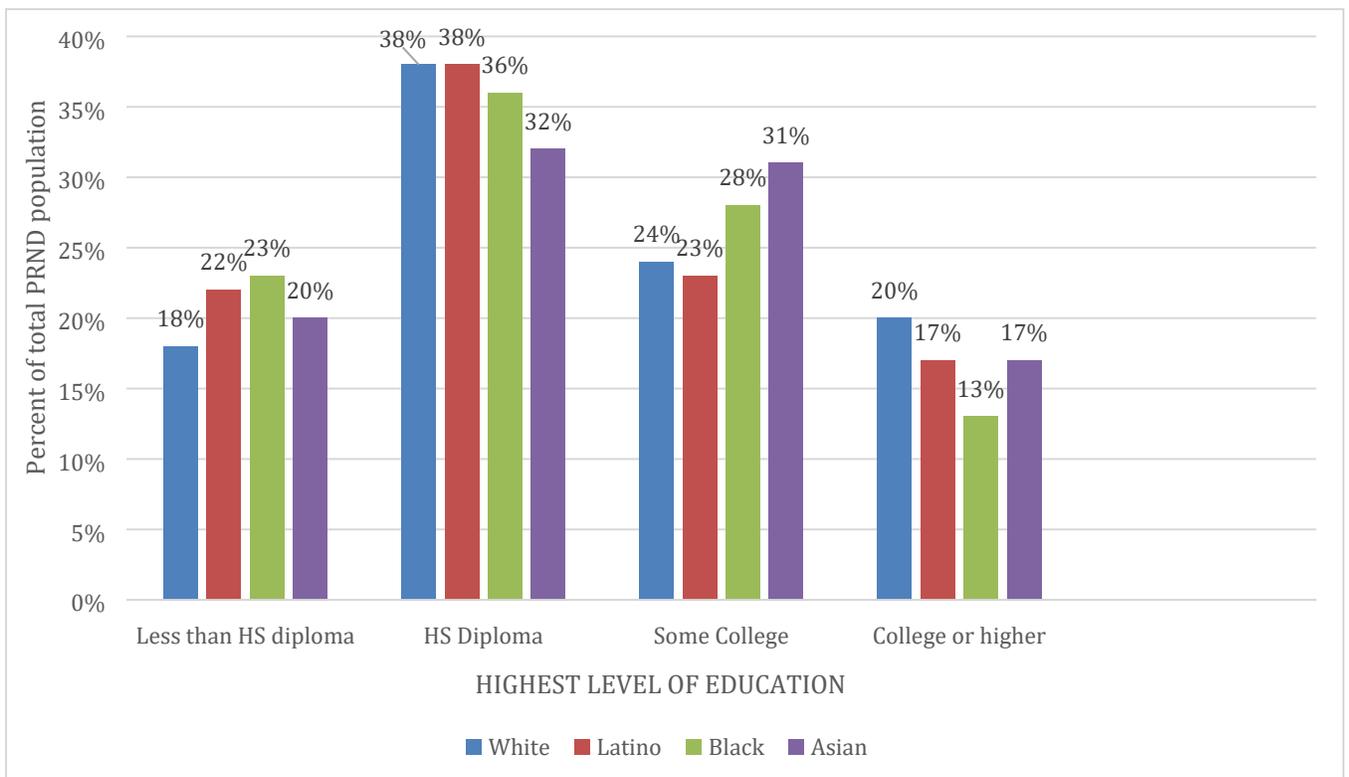
#### *Level of education.*

For level of education, participants were asked, "What do you think about the **average level of education of Puerto Ricans who migrated to the U.S. mainland after a natural disaster?**" They were given the following categories: "less than HS diploma," "HS diploma," "Some College,"

and “College +” and instructed to allocate a percentage of the population of PRNDs to each category. Figure 1 shows the percentages for each response by racial group.

Regarding education, all racial groups agree that the majority of PRNDs have at most a high school diploma. Whites allocated an average of 38% of PRNDs to “high school diploma.”

Latinos reported 38% in this same category, blacks reported 36%, and Asians reported 32%.



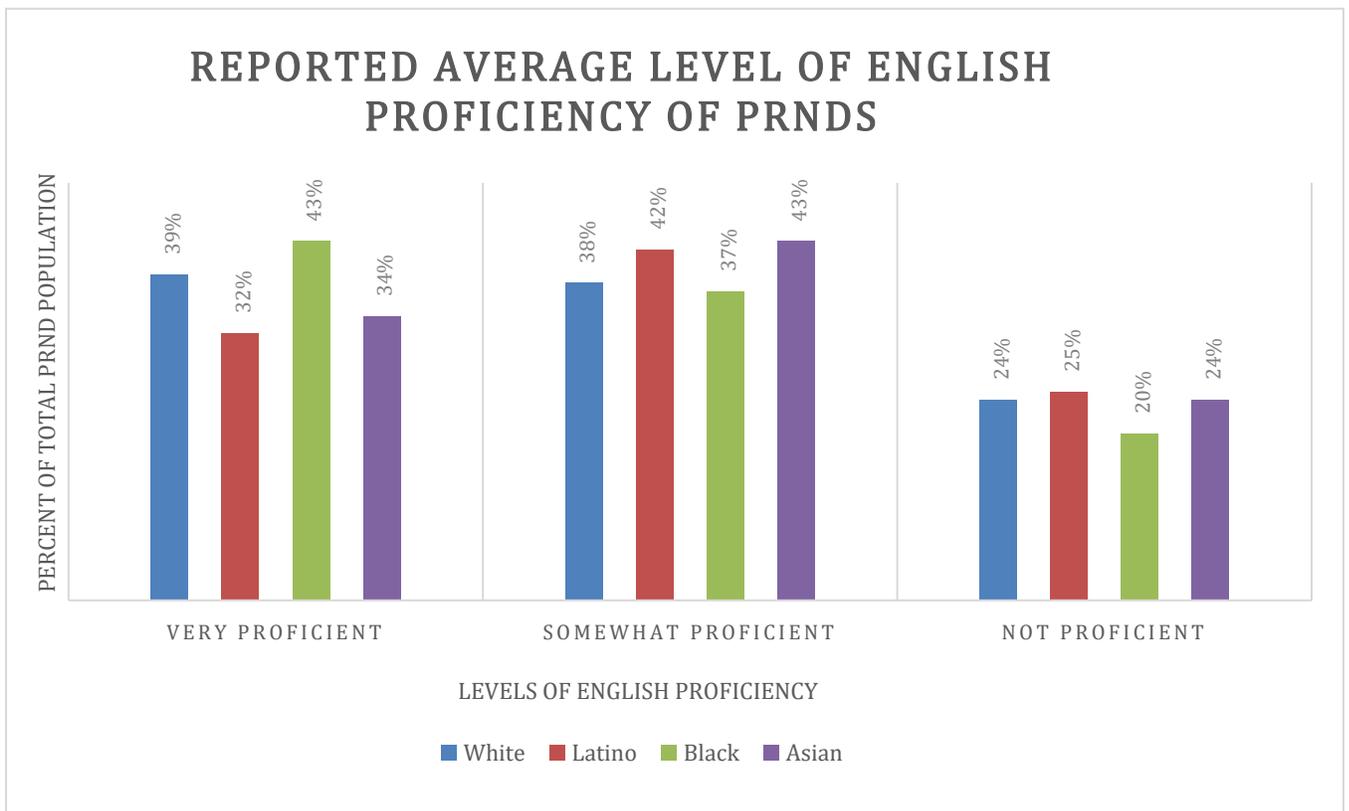
**Figure 1 Average level of education of PRNDs**

*English proficiency.*

For English proficiency, participants were asked, “What do you think is the **average level of English proficiency** of Puerto Ricans who migrated to the U.S. mainland after a natural

disaster?” They were given the following categories: “very proficient,” “somewhat proficient,” “not proficient” and instructed to allocate a percentage of the population of PRNDs to each category. Figure 2 shows participants’ responses by racial group.

All racial groups indicated that 25% or less of all PRNDs are “not proficient” in English. Whites and blacks indicated that a majority percentage of all PRNDs have a “very proficient” level of English. Latinos and Asians indicated that a majority percentage of all PRNDs have a “somewhat proficient” level of English.

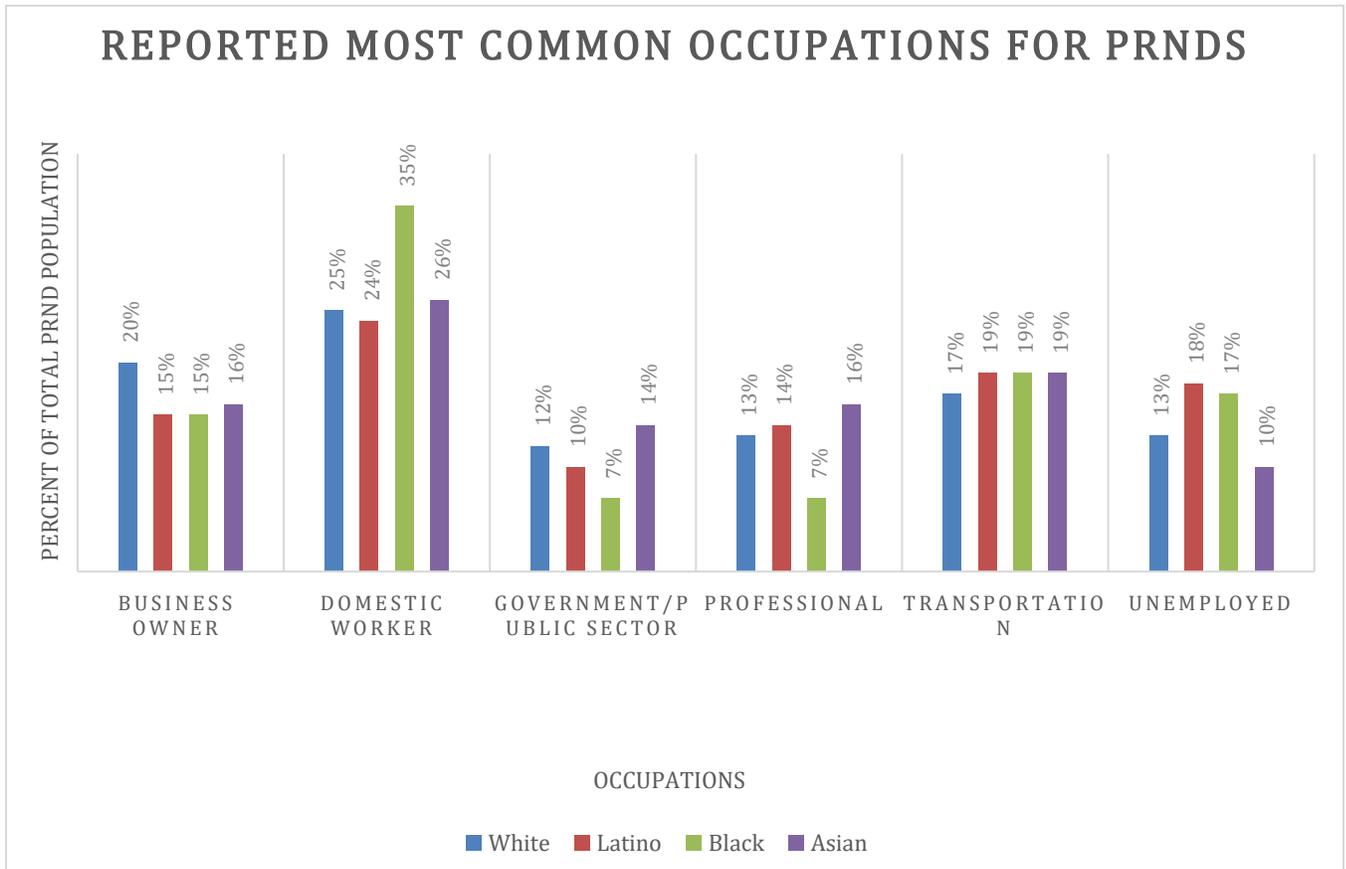


**Figure 2 Average level of English proficiency of PRNDs**

### *Occupation.*

The final question in this section asks participants, “What do you think are the **common areas of occupation** of Puerto Ricans who migrated to the U.S. mainland after a natural disaster?” They were given the following categories: “business owner,” “domestic worker,” “government or public sector,” “professional (lawyer, doctor, nurse, etc.),” “transportation (Lyft, Uber taxi, truck, etc.),” “unemployed” and instructed to allocate a percentage of the population of PRNDs to each category. Figure 3 details participants’ responses.

All racial groups indicated that the most common area of occupation for PRNDs is “domestic worker.” Latinos, blacks, and Asians indicated “transportation” as the second most common area of occupation for PRNDs while whites indicated “business worker.” Latinos and blacks indicated “government” and “professional” as the two least common areas of occupation for PRNDs while Asians and whites report the least common occupations as “government” and “unemployed.”



**Figure 3 Most common occupations for PRNDs**

### KNOWLEDGE OF RACIAL RESIDENTIAL SEGREGATION

To test whether participants were aware of racial residential differences in the Orlando MSA the survey asked participants two questions: “Which areas in Greater Orlando do you believe Puerto Ricans who migrated to the U.S. mainland after a natural disaster are *most* likely to live in?” and “Which areas in Greater Orlando do you believe Puerto Ricans who migrated to the U.S. mainland after a natural disaster are *least* likely to live in?” For each question, they were given

the following categories: “Lake Mary,” “Kissimmee,” “Azalea Park,” “Pine Hills,” “Dr. Phillips” and instructed to select all that apply. Across all racial groups, Kissimmee was ranked the most likely area for PRNDs to live in. All racial groups ranked Dr. Phillips as the least likely area for PRNDs to live in (see Table 1 and Table 2 for details).

These questions were framed in a way where I could measure which cities participants believed to have the greatest population of PRNDs. Since participants were asked to “select all that apply,” the data was organized according to which cities were selected the most by participants. I then took that data and ranked from first to third the cities most selected for each category by each racial group. Due to the small sample size, some cities were selected an equal amount of times. This can be observed in Tables 1 and 2 where one box in the table may list more than one city.

**Table 2**  
**Where PRNDs are most likely to live.**

| <i>Race</i>   | <i>First</i> | <i># of times selected</i> | <i>Second</i>                                    | <i># of times selected</i> | <i>Third</i> | <i># of times selected</i> |
|---------------|--------------|----------------------------|--------------------------------------------------|----------------------------|--------------|----------------------------|
| <i>White</i>  | Kissimmee    | 39                         | Pine Hills                                       | 21                         | Azalea Park  | 12                         |
| <i>Latino</i> | Kissimmee    | 30                         | Azalea Park                                      | 8                          | Lake Mary    | 6                          |
| <i>Black</i>  | Kissimmee    | 10                         | Azalea Park and Pine Hills                       | 2                          | Dr. Phillips | 1                          |
| <i>Asian</i>  | Kissimmee    | 4                          | Azalea Park, Pine Hills, Dr. Phillips, Lake Mary | 3                          | -            | -                          |

Note: Blacks selected Azalea Park and Pine Hills two times each as a most likely area to live. Asians selected Azalea Park, Pine Hills, Dr. Phillips, and Lake Mary three times each as a most likely area for PRNDs to live.

**Table 3**  
**Where PRNDs are least likely to live.**

| <i>Race</i>   | <i>First</i>             | <i># of times selected</i> | <i>Second</i> | <i># of times selected</i> | <i>Third</i> | <i># of times selected</i> |
|---------------|--------------------------|----------------------------|---------------|----------------------------|--------------|----------------------------|
| <i>White</i>  | Dr. Phillips             | 28                         | Lake Mary     | 27                         | Azalea Park  | 9                          |
| <i>Latino</i> | Lake Mary, Dr. Phillips  | 16                         | Pine Hills    | 6                          | Azalea Park  | 4                          |
| <i>Black</i>  | Dr. Phillips             | 8                          | Lake Mary     | 2                          | Kissimmee    | 2                          |
| <i>Asian</i>  | Dr. Phillips, Pine Hills | 2                          | Lake Mary     | 1                          | Azalea Park  | 0                          |

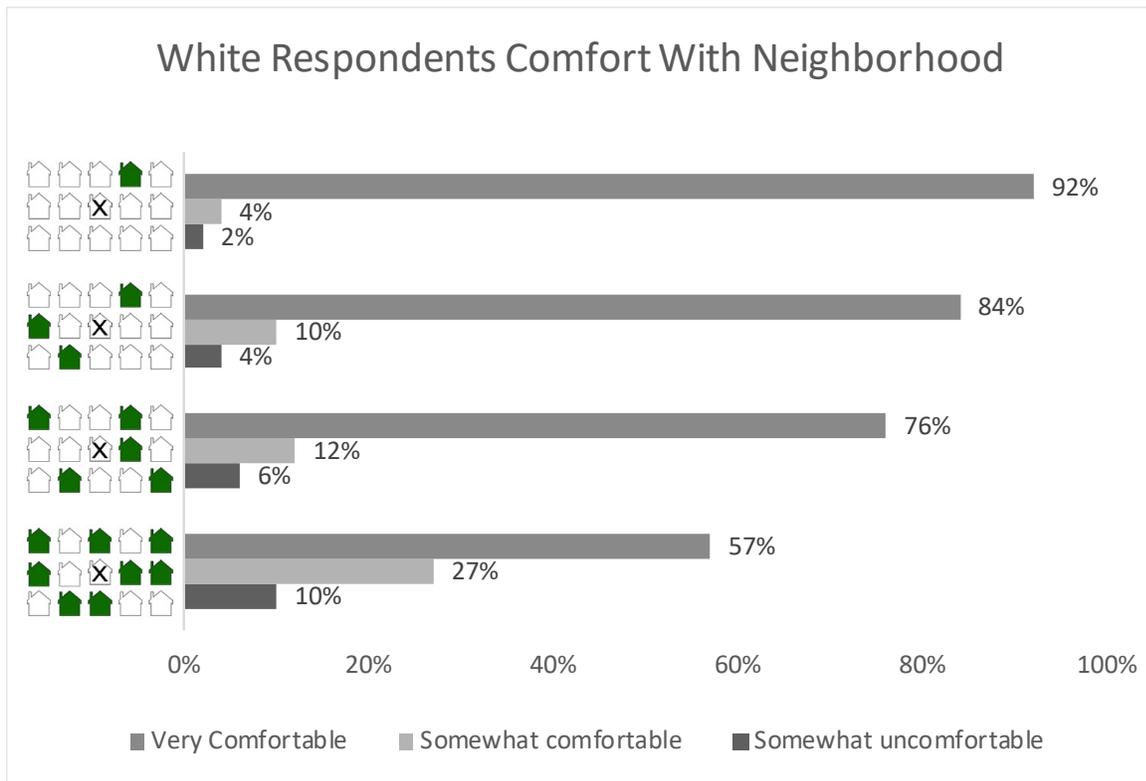
Note: Latinos selected both Lake Mary and Dr. Phillips sixteen times each as the least likely area for PRNDs to live. Asians selected both Dr. Phillips and Pine Hills two times each as the least likely area for PRNDs to live.

### NEIGHBORHOOD PREFERENCES

Neighborhood preferences were measured by using the show card method that was detailed in the research design section of this study. The original intention of this study was to collect data that could be compared to the previous study by Zubrinsky and Bobo (1996) that also analyzed neighborhood preferences among different races. However, due to convenience sampling and a small sample size, no direct and definitive comparisons can be made between the two sets of data. Therefore, the following results from the survey are in no way conclusive, but are instead suggestive of trends that should be investigated further.

*White preferences.*

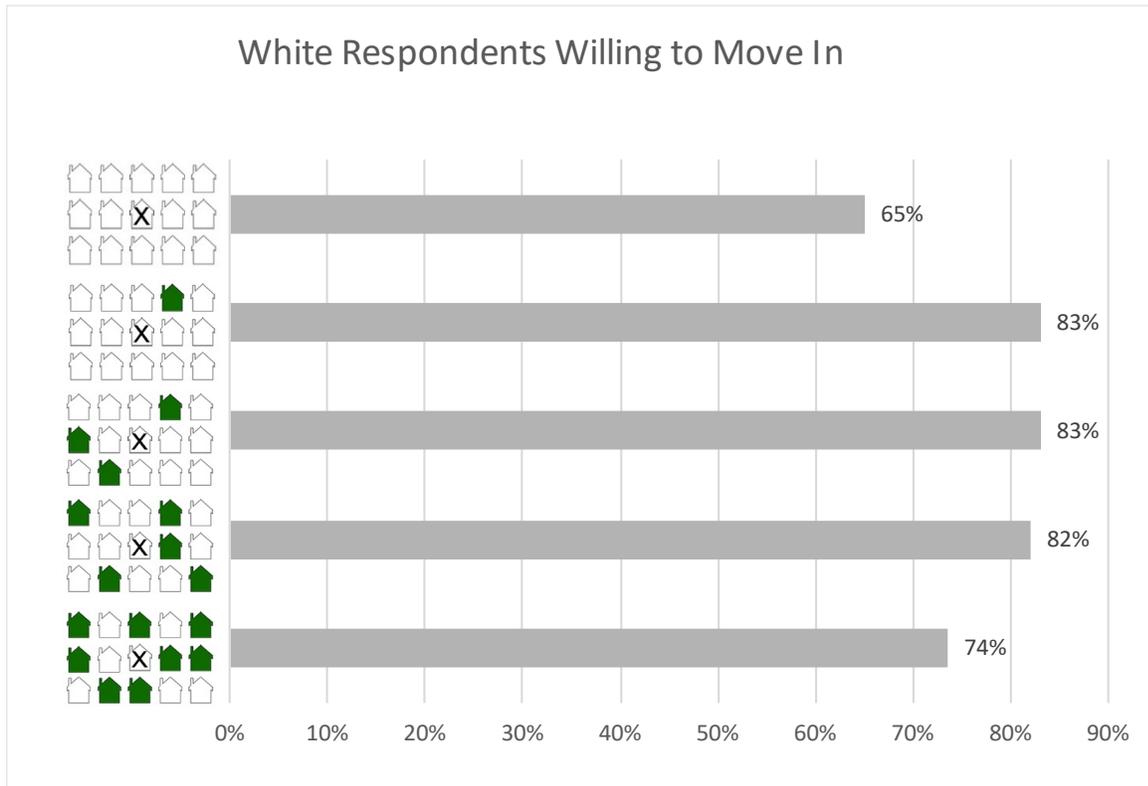
White participants first responded to the series of show cards that gradually increase the number of PRND houses in the neighborhood. Respondents were asked if they would feel, “very comfortable,” “somewhat comfortable,” “somewhat uncomfortable,” or “very uncomfortable” in each new setting. The results show that as the number of PRND houses in a neighborhood increase, the number of participants selecting “very comfortable” decreases. As the ratio of PRND houses increases, the number of white participants selecting “somewhat uncomfortable” also increases. Although the data shows that 92% whites from the study sample lean towards a neighborhood with only one PRND house, a majority of 57% of whites selected “very comfortable” in the neighborhood with the most amount of green PRND houses. Figure 4 shows the different levels of comfort whites reported for each neighborhood show card.



**Figure 4 Results of neighborhood comfort levels for whites.**

Figure 5 shows the results of the final neighborhood show card question in which white respondents were asked which neighborhoods they would be willing to move into. According to the data, 83% of white participants are willing to move into a neighborhood with one or three PRND houses and 82% are willing to move into a neighborhood with five PRND houses. The percentage of whites willing to move into a neighborhood decreases to 74% when the neighborhood is majority PRND and decreases even more to 65% in a neighborhood without any PRND houses. The data presented indicates that white participants are least fond of all-white neighborhoods and prefer more diversity. However, they still seem to prefer neighborhoods

where they are not the minority since the second-least popular neighborhood was the last show card that had more PRND houses than blank houses.



**Figure 5 Results of neighborhoods whites are willing to move into.**

*Latino, Black, and Asian Preferences.*

It is important to note that in this section of the survey, two Latino respondents did not complete these questions. Therefore, the statistics on Latino respondents will be based off a sample size of 31. As previously mentioned in the research design, Latino, black, and Asian respondents received a different group of show cards than white participants. These neighborhood show card questions began by showing participants all five neighborhood show cards, each neighborhood

with varying degrees of blank and PRND houses. Participants were then asked to rank the neighborhoods from one to five, one being most desirable and five being least desirable.

Latinos, and Asians reported the neighborhood with seven green PRND houses as most desirable, and the neighborhood with a majority of ten green houses as second most desirable. Blacks reported the neighborhood with one green PRND house as most desirable, and the neighborhood with two PRND houses as second most desirable.

For blacks and Asians, the least desirable neighborhood is one with all PRND houses surrounding their home. Latinos indicate the neighborhood with only one PRND house as least desirable. Figure 6 shows each racial group's ranking of desirability of the neighborhood show cards. Some of the rankings include two show cards which means both show cards were ranked with equal desirability.



Figure 6 Desirability of neighborhoods

## **DISCUSSION**

### GENERAL VIEW OF PUERTO RICAN MIGRANTS

Since the purpose of the survey is to study racial attitudes towards Puerto Ricans who migrated due to Hurricane Maria (PRHM), I will only reference PRHMs instead of PRNDs in the discussion. As previously mentioned, one section of the survey that measured the general views of respondents towards PRHMs was designed alongside data gathered in an FIU study published in 2018. According to the FIU study, Puerto Ricans who left Puerto Rico mainly as a result of the impact of Hurricane Maria are among the most highly educated Puerto Ricans that have migrated to the mainland U.S. A total of 67.3% of Puerto Ricans that moved between 2017 and 2018 were either enrolled or graduated from a university. A total of 7.4% were either enrolled in or completed a graduate degree. This means that 74.7% of PRs that have moved to Florida in the past year have completed some college or higher. All racial groups estimated that less than 50% of PRHMs achieved some college or higher. Instead, each racial group attributed a majority percentage to earning high school diplomas, indicating a lower general view of the education level of PRHMs than the one this group actually presents.

Another comparison between this study's data and the data from FIU's study pertains to English proficiency. When respondents were asked about the average level of English proficiency of PRHMs, whites and blacks indicated "very proficient" as the most common level of English in this group. Latinos and Asians indicated "somewhat proficient" as the most common level of English. Whites, blacks, Latinos, and Asians predicted that 20-25% of PRHMs are "not proficient" in English. This last statistic closely resembles the results found in FIU's study,

which found that about 17% of Puerto Ricans say that not speaking English is the principle problem facing Puerto Ricans (FIU 2018:16).

The last question participants were asked regarding general views of PRHMs was in reference to occupation. All racial groups placed domestic worker as the most common job among PRHMs. However, of the 271 Puerto Ricans from the FIU study that moved to Florida between 2017 and 2018 only one person reported employment in “domestic work, childcare.” That’s less than 1% of Puerto Ricans that moved to Florida during the era of Hurricane Maria.

Latinos, blacks, and Asians reported 19% of PRHMs to be employed in transportation. This is not too far from a statistic from FIU’s study which shows that 11% of Puerto Rican migrants from 2017-2018 reported employment in transportation. Unfortunately, this is as far as the comparison can go between this study and FIU’s study.

### KNOWLEDGE OF RESIDENTIAL SEGREGATION

This section was created to test whether participants in the survey were aware of the racial residential patterns in Orlando. The results were, for the most part, as I expected them to be. Kissimmee was the most selected city across all racial groups as a “most likely area” for PRHMs to live in. Kissimmee is located in the south region of the Orlando MSA. It has a large and growing Latino population that has shaped the way businesses operate and advertise in the area (Delerme 2013).

The area most selected as the “least likely area” for PRHMs to live in varied slightly among racial groups. While all racial groups placed Dr. Phillips as a highly unlikely area for PRHMs to live in, Latino respondents selected Lake Mary as being an equally unlikely area for PRHMs to live in as Dr. Phillips. Asians selected both Pine Hills and Dr. Phillips as the least likely areas for PRHMs.

As mentioned earlier in the methodology section, by referring to the Virginia racial dot map (Cable 2013) we see that Dr. Phillips, Lake Mary, and Pine Hills are all areas with low population densities of Latinos. This map also shows us that Kissimmee and Azalea Park have high concentrations of Latinos. For the most part, participants selected rather accurately where PRHMs are likely to live and where they are not likely to live. This demonstrates that the participants hold a general understanding of the racial residential patterns of the Orlando MSA. This is an important understanding to have when analyzing neighborhood preferences.

### NEIGHBORHOOD PREFERENCES

Moving on to the neighborhood show card section, while the data may point towards some similarities and differences with the findings from Zubrinsky and Bobo’s study (1996), it is important to note a limitation from the study that impacts any comparisons. I did not specify in the questionnaire which race or races the blank houses in each neighborhood show card represented. Therefore, there is no way to verify what respondents assumed to be the racial makeup of the other houses. When designing the survey, I thought that by leaving the houses blank respondents would naturally assume the racial make-up of their own neighborhoods.

However, the open-ended section of the survey revealed that there was some confusion or misunderstanding about the racial representation of the blank houses. Another limitation is the sample characteristics. Most respondents are from a university campus and its surrounding area, and between the ages of 18-24. These characteristics would likely contribute to a sample with more progressive views than a wider more inclusive sample (Wodtke 2012). Regardless, I will be going over the data collected that suggests certain findings.

Perhaps the most noteworthy pattern is the neighborhood preferences of whites. As the number of PRHM houses increase, the comfort level of whites decreases. However, most whites (57%) are still “very comfortable” in majority Puerto Rican neighborhoods. I reiterate the limitation from my study regarding sample characteristics. Since many survey participants are from a university campus and within a certain age bracket, the results are more likely to reflect more progressive views on race (Wodtke 2012).

The final show card question presented to white respondents provides insight into which areas in the Orlando MSA whites would be likely to move to. We can do this by using data from the previous questions asking where PRHMs are most and least likely to live in. White participants demonstrated a general knowledge of where Latinos are located in the Orlando MSA. By combining this data and the data demonstrating willingness to move into a neighborhood, the data suggests that whites would be willing to move into Orlando areas that have a high, but not majority, population of PRHMs.

Some of the results from the survey appear to depart from Zubrinsky and Bobo’s findings (1996), such as black neighborhood preferences. Blacks ranked the neighborhood with the least

amount of Puerto Ricans as most desirable and the neighborhood with the most amount of Puerto Ricans as least desirable. As the number of green PRHM houses would increase, desirability would decrease. The most probable explanation for this is the small sample size of black respondents. While it is possible that the data may suggest a change in neighborhood preferences among the black population, the sample size is simply far too small to make any solid generalizations or conclusions with the data. However, this does invite more research to explore current black neighborhood preferences.

### OPEN-ENDED RESPONSES

The final data collected was the open-ended responses. Since this is qualitative data that I could not mold into a graph or table, I did not review it in the survey results section. Instead, I would like to discuss the ways in which these open-ended responses influenced my analysis of the study.

The open-ended response was the final section in the survey immediately following the neighborhood show cards and read, "If you would like to, please provide an explanation for your previous answers concerning neighborhood choices." This was optional for participants to respond to, and I collected thirty-three responses. It was through these responses that I was able to see some of the limitations of my study and gain a better understanding of how participants were interpreting the survey.

Of the thirty-three responses, twenty expressed absolutely no issues living in a neighborhood with Puerto Rican migrants. This group of respondents would typically include other factors that

they considered more important in determining whether or not to live in a neighborhood. One participant wrote, “I don't really care who my neighbors are, just that the neighborhood, as a whole, is safe.” Another response read, “It doesn't matter to me what ethnic group lives in my neighborhood. All that matters is that the neighborhood and house are nice.” Other responses that expressed no issues living with Puerto Rican migrants stressed the importance some participants placed on living in diverse neighborhoods. One respondent wrote, “Although I am a white person, I look for places of diversity. This is what I grew up with and what I would want to be surrounded by. Environmental racism is a big concern and I don't want to be someone who condones that behavior.” Another participant shared, “I enjoy a diverse neighborhood [that] welcomes all types of people regardless of race.”

The remaining responses either did not make sense (i.e. the participant misunderstood the purpose of the open-ended response) or expressed slight hesitation or an unwillingness to live with Puerto Rican migrants. One respondent expressed, “Most people from Puerto Rico that I have encountered are very friendly, so that doesn't bother me. I do think about the price of the neighborhood, which may be low income. The only reason I believe it may be low income is due to people looking for just a place to stay during the event.” I believe this response is very important. It demonstrates that at least one person from the survey views Puerto Rican migrants as temporary residents of a neighborhood. The reality is that Puerto Ricans have been migrating to Florida for many years in search of better job opportunities and economic stability (Gutierrez 2016), and most Puerto Rican migrants do not plan on moving back to Puerto Rico any time soon (FIU 2018).

One participant that expressed discomfort in living with Puerto Rican migrants wrote, “A racially similar community would seam [sic] to harmonize more seamlessly and lead to less crime.”

## CONCLUSION AND LIMITATIONS

An important limitation to highlight from this study is the small sample size. These sample sizes become even smaller when the data are divided into racial groups. Another limitation is the recruitment method used. While there is no way of confirming exactly how many participants attend or are employed by the University of Central Florida, due to convenience sampling using the methods described earlier in “sample recruitment,” it is very likely that majority of participants are affiliated to UCF in some way. A small sample size combined with convenience sampling would make drawing any definitive conclusions from the data collected erroneous.

Additionally, the open-ended response section revealed that some participants misunderstood exactly what some of the questions were asking. One participant wrote, “...as a white person, I do not think I'd feel comfortable moving into an entirely white/segregated neighborhood...” This points out a major limitation from the study that I cited earlier in my discussion. I did not specify in the questionnaire which race or races the blank houses in each neighborhood show card represented. When designing the survey, I thought that by leaving the houses blank respondents would naturally assume the racial make-up of their own neighborhoods. The response by this participant shows that I should have stated the racial make-up of the neighborhood show cards.

Another limitation these open-ended responses showed me was other factors that influence the decision to move into a neighborhood. Several participants shared that while they do not prioritize the racial make up of a neighborhood, they do prioritize safety and the area's income bracket. While I did include in the survey question that the house they would move into is nice and affordable, some responses seemed to indicate that the participant did not catch that detail. I

find this to be one of the limitations of online surveys. In-person interviews offer the ability to clarify misunderstandings and answer any questions the participants may have.

While the limitations and nature of the study do not allow me to draw any definitive conclusions about the general neighborhood preferences and racial attitudes of Orlando MSA residents, I can draw conclusions about my experience with research as an undergraduate thesis student.

Focusing on this topic for the past year was both challenging and stimulating. I found it was not so much researching the topic that presented the most difficulty but formulating a survey that participants would understand and engage in, as well interpreting the results. There were many times when I was reviewing data that I realized I should have designed a question differently or included something I did not find necessary before distributing the survey.

These limitations aside, the data collected from this study are intriguing and invite further research. The group of Puerto Rican migrants analyzed in this study is restricted to those who moved to Florida due to Hurricane Maria. However, the reality is that every year Puerto Ricans continue to migrate to Florida in large numbers, specifically the Orlando MSA, in search of job opportunities. This shows that Puerto Rican migration to Florida is a topic that will only continue to grow in importance when discussing racial residential segregation and residential patterns in this area.

Future research on this topic should focus on generating a much larger sample size. I would highly suggest researchers analyze how other Latino groups (Dominican, Colombian, Mexican, etc.) view the growing population of Puerto Rican migrants. Had I been able to collect a greater sample size, I would have included an analysis of different Latino group responses. This

suggestion serves as a reminder that not all Latino groups are cut from the same cloth. Latinos are racially and culturally diverse and different groups have different relationships with residential segregation (De la Roca, Ellen, and Steil 2017).

**APPENDIX A:  
IRB APPROVAL LETTER**



UNIVERSITY OF CENTRAL FLORIDA

**Institutional Review Board**

FWA00000351  
IRB00001138  
Office of Research  
12201 Research Parkway  
Orlando, FL 32826-3246

EXEMPTION DETERMINATION

March 5, 2019

Dear Jonathan Cox:

On 3/5/2019, the IRB determined the following submission to be human subjects research that is exempt from regulation:

|                 |                                                     |
|-----------------|-----------------------------------------------------|
| Type of Review: | Initial Study, Exempt Category                      |
| Title:          | Residential Segregation in the Greater Orlando Area |
| Investigator:   | Jonathan Cox                                        |
| IRB ID:         | STUDY00000169                                       |
| Funding:        | None                                                |
| Grant ID:       | None                                                |

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made, and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request so that IRB records will be accurate.

If you have any questions, please contact the UCF IRB at 407-823-2901 or [irb@ucf.edu](mailto:irb@ucf.edu). Please include your project title and IRB number in all correspondence with this office.

Sincerely,

Kamille Chaparro  
Designated Reviewer

**APPENDIX B:  
QUALTRICS SURVEY**

# Racial Residential Segregation in the Greater Orlando Area

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Start of Block: Demographic Component

Q53 **Title of Project:** Residential Segregation in Greater Orlando Area

**Principal Investigator:** Jonathan Cox

**Other Investigators:** Gabriella Ospina

You are being invited to take part in a research study. Whether you take part is up to you.

The purpose of this research is to understand perceptions of residential segregation in the Greater Orlando Area. The entirety of the survey will be conducted online. Participation in this study involves providing your honest opinion and understanding of the questions presented.

This survey will take 5-10 minutes to complete.

Your participation in this study is voluntary. You are free to withdraw your consent and

discontinue participation in this study at any time without prejudice or penalty. Your decision to participate or not participate in this study will in no way affect your relationship with UCF, including continued enrollment, grades, employment or your relationship with the individuals who may have an interest in this study.

There will be no identifiable private information collected for this survey.

You must be 18 years of age or older to take part in this research study. Parts of this study are being concealed from you in this explanation of Research or you are not being told about the true nature of this study at the start. You will be given full details at the end of your participation in the study. By clicking below you are providing your consent to participate in this survey.

**Study contact for questions about the study or to report a problem:** If you have questions, concerns, or complaints: Gabriella Ospina, Undergraduate Student, Department of Sociology, College of Sciences, by email at [gabriellaospina@knights.ucf.edu](mailto:gabriellaospina@knights.ucf.edu); or Dr. Jonathan Cox, Assistant Professor, Department of Sociology, College of Sciences, by email at [jonathan.cox@ucf.edu](mailto:jonathan.cox@ucf.edu).

**IRB contact about your rights in this study or to report a complaint:** If you have questions about your rights as a research participant, or have concerns about the conduct of this study, please contact Institutional Review Board (IRB), University of Central Florida, Office of Research, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901, or email [irb@ucf.edu](mailto:irb@ucf.edu).

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Page Break

Q48 Which Central Florida county do you live in?

Orange County (1)

Lake County (2)

Osceola County (3)

Seminole County (4)

I do not live in any of these counties (5)

*Skip To: End of Survey If Which Central Florida county do you live in? = I do not live in any of these counties*

---

Q2 What is your age?

▼ Under 18 (1) ... 75 or older (8)

*Skip To: End of Survey If What is your age? = Under 18*

---

Q3 What is your gender?

Male (1)

Female (2)

Other (please specify) (3) \_\_\_\_\_

-----

Q51 Are you of Hispanic, Latino, or Spanish origin?

No (1)

Yes, Mexican, Mexican American (2)

Yes, Puerto Rican (3)

Yes, Cuban (4)

Yes, another Hispanic, Latino, or Spanish origin (please specify, i.e. Argentinean, Colombian, Dominican, and so on). (5)

---

Q52 What is your race?

White (1)

Black or African American (you may specify origin if desired, e.g. Jamaican or Nigerian)

(2) \_\_\_\_\_

American Indian or Alaska Native (please name enrolled/principal tribe (3)

\_\_\_\_\_

Asian, Native Hawaiian, or Pacific Islander (please specify ethnic group, e.g. Chinese, Native Hawaiian, Asian Indian, Vietnamese, Korean, Fijian, Tongan) (4)

\_\_\_\_\_

Some Other Race (please specify) (5)

\_\_\_\_\_

Multiracial (please specify) (6)

\_\_\_\_\_

End of Block: Demographic Component

---

Start of Block: Deception Component

Q7 You will now be given a hypothetical scenario. Each scenario has two main components: a racial or ethnic group and an accompanying circumstance.

Possible racial or ethnic group:

White Mexican Cuban Puerto Rican Black African American Asian Indian  
Native American

Possible accompanying circumstance: Pursuing the American Dream Because of a  
natural disaster For work (relocated by company or employer)

Both components will be randomly assigned to you.

*Click the arrow below to receive your randomly assigned scenario.*

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Page Break

Q8 Your assigned racial or ethnic group: **Puerto Rican**

Your assigned accompanying circumstance: **Because of a natural disaster**

Your assigned scenario: **Puerto Ricans migrate to the United States mainland after a natural disaster.**

End of Block: Deception Component

---

Start of Block: General Knowledge Questions

Q9

Your assigned scenario: **Puerto Ricans migrate to the United States mainland after a natural disaster.**

Imagine that the scenario you have been randomly assigned is a real-life situation, and respond to each of the following questions while thinking about this particular group.



Q10 What do you think about the **average level of education** of Puerto Ricans who migrated to the U.S. mainland after a natural disaster? Use the sliders below to indicate roughly what percentage of the entire group you would allocate to each the following levels of education. The total across each category should add up to 100%.

\_\_\_\_\_ Less than a high school diploma (1)

\_\_\_\_\_ High school diploma (2)

\_\_\_\_\_ Some college (3)

\_\_\_\_\_ College degree or beyond (4)



Q11 What do you think is the **average level of English proficiency** of Puerto Ricans who migrated to the U.S. mainland after a natural disaster? Use the sliders below to indicate roughly what percentage of the entire group you would allocate to each the following levels of proficiency. The total across each category should add up to 100%.

\_\_\_\_\_ Very proficient (1)

\_\_\_\_\_ Somewhat proficient (2)

\_\_\_\_\_ Not proficient (3)



Q12 What do you think are the **common areas of occupation** of Puerto Ricans who migrated to the U.S. mainland after a natural disaster? Use the sliders below to indicate roughly what percentage of the entire group you would allocate to each the following areas of occupation. The total across each category should add up to 100%.

\_\_\_\_\_ Business Owner (1)

\_\_\_\_\_ Domestic Worker (2)

\_\_\_\_\_ Government or Public Sector (3)

\_\_\_\_\_ Professional (Lawyer, Doctor, Nurse, etc.) (4)

\_\_\_\_\_ Transportation (Lyft, Uber, taxi, truck, etc.) (5)

\_\_\_\_\_ Unemployed (6)

End of Block: General Knowledge Questions

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Start of Block: Residential Areas

Q13 Which areas in Greater Orlando do you believe Puerto Ricans who migrated to the U.S. mainland after a natural disaster are *most* likely to live in? Select all that apply.

- Lake Mary (1)
- Azalea Park (2)
- Kissimmee (3)
- Dr. Phillips (4)
- Pine Hills (5)

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Page Break

Q14 Which areas in Greater Orlando do you believe Puerto Ricans who migrated to the U.S. mainland after a natural disaster are *least* likely to live in? Select all that apply.

- Lake Mary (1)
- Azalea Park (2)
- Kissimmee (3)
- Dr. Phillips (4)
- Pine Hills (5)

End of Block: Residential Areas

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Start of Block: White Respondent Show Cards

*Display This Question:*

*If Are you of Hispanic, Latino, or Spanish origin? = No*

*And What is your race? = White*

Q15 For the following questions, green houses indicate households of Puerto Rican families who migrated to the U.S. mainland after a natural disaster. Blank houses represent households of your race and ethnic group.

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*Display This Question:*

*If Are you of Hispanic, Latino, or Spanish origin? = No*

*And What is your race? = White*

Q16 Imagine that you live in the following neighborhood where your home is indicated by an

"X":

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Page Break

*Display This Question:*

*If Are you of Hispanic, Latino, or Spanish origin? = No*

*And What is your race? = White*

Q17 Now imagine one Puerto Rican family who migrated to the U.S. mainland after a natural disaster (represented by a green house) moves into your neighborhood:

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*Display This Question:*

*If Are you of Hispanic, Latino, or Spanish origin? = No*

*And What is your race? = White*

Q18 Would you feel:

- Very comfortable (1)
- Somewhat comfortable (2)
- Somewhat uncomfortable (3)
- Very uncomfortable (4)

*Skip To: Q25 If Would you feel: = Very uncomfortable*

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Page Break

*Display This Question:*

*If Are you of Hispanic, Latino, or Spanish origin? = No*

*And What is your race? = White*

Q19 Now imagine three Puerto Rican families who migrated to the U.S. mainland after a natural disaster moved into your neighborhood:

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*Display This Question:*

*If Are you of Hispanic, Latino, or Spanish origin? = No*

*And What is your race? = White*

Q20 Would you feel:

- Very comfortable (1)
- Somewhat comfortable (2)
- Somewhat uncomfortable (3)
- Very uncomfortable (4)

*Skip To: Q25 If Would you feel: = Very uncomfortable*

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Page Break

*Display This Question:*

*If Are you of Hispanic, Latino, or Spanish origin? = No*

*And What is your race? = White*

Q21 Now imagine five Puerto Rican families who migrated to the U.S. mainland after a natural disaster moved into your neighborhood:

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*Display This Question:*

*If Are you of Hispanic, Latino, or Spanish origin? = No*

*And What is your race? = White*

Q22 Would you feel:

- Very comfortable (1)
- Somewhat comfortable (2)
- Somewhat uncomfortable (3)
- Very uncomfortable (4)

*Skip To: Q25 If Would you feel: = Very uncomfortable*

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Page Break

*Display This Question:*

*If Are you of Hispanic, Latino, or Spanish origin? = No*

*And What is your race? = White*

Q23 Now imagine eight Puerto Rican families who migrated to the U.S. mainland after a natural disaster moved into your neighborhood:

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*Display This Question:*

*If Are you of Hispanic, Latino, or Spanish origin? = No*

*And What is your race? = White*

Q24 Would you feel:

- Very comfortable (1)
- Somewhat comfortable (2)
- Somewhat uncomfortable (3)
- Very uncomfortable (4)

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Page Break

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*Display This Question:*

*If Are you of Hispanic, Latino, or Spanish origin? = No*

*And What is your race? = White*



Q25 Suppose you have been looking for a house and have found a nice one you can afford. This house could be located in several different types of neighborhoods, as shown on these cards. Would you consider moving into any of these neighborhoods? Select all that apply.

A (1)

B (2)

C (3)

D (4)

E (5)

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Page Break

*Display This Question:*

*If Are you of Hispanic, Latino, or Spanish origin? = No*

*And What is your race? = White*

Q26 If you would like to, please provide an explanation for your previous answers concerning neighborhood choices.

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Page Break

*Display This Question:*

*If Are you of Hispanic, Latino, or Spanish origin? = No*

*And What is your race? = White*

Q32 For the study entitled: “Residential Segregation in the Greater Orlando

Area”

Dear Participant, During this study, you were asked to provide your honest opinion and understanding of the questions presented. You were told that the purpose of the study was to understand perceptions of residential segregation in the Greater Orlando Area. The actual purpose of the study was to document any attitudes towards Puerto Ricans who migrated to Central Florida as a result of Hurricane Maria and the effects of this on residential segregation in the Greater Orlando Area. We did not tell you everything about the purpose of the study to avoid any biased and censored answers. In doing so, the study is more likely to succeed in collecting honest and reliable data. You are reminded that your original consent document included the following information: Your participation in this study is voluntary. You are free to withdraw your consent and discontinue participation in this study at any time without prejudice or penalty. Your decision to participate or not participate in this study will in no way affect your relationship with UCF, including continued enrollment, grades, employment or your relationship with the individuals who may have an interest in this study. If you have any concerns about your participation or the data you provided in light of this disclosure, please discuss this with us. We will be happy to provide any information we can to help answer questions you have about this study. The responses in this study are de-identified and cannot be linked to you. Study contact for questions about the study or to report a problem: If you have questions, concerns, or

complaints or think the research has hurt contact: Gabriella Ospina, Undergraduate Student, Department of Sociology, College of Sciences, by email at [gabriellaospina@knights.ucf.edu](mailto:gabriellaospina@knights.ucf.edu); or Dr. Jonathan Cox, Assistant Professor, Department of Sociology, College of Sciences, by email at [jonathan.cox@ucf.edu](mailto:jonathan.cox@ucf.edu). IRB contact about your rights in the study or to report a complaint: Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901. Please again accept our appreciation for your participation in this study.

*Skip To: End of Survey If For the study entitled: "Residential Segregation in the Greater Orlando Area" ...() Is Displayed*

End of Block: White Respondent Show Cards

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Start of Block: Black, Latino, and Asian Respondent Show Cards

Q27 For the following questions, green houses indicate households of Puerto Rican families who migrated to the U.S. mainland after a natural disaster. Blank houses represent households of your race and ethnic group.

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Q28 Imagine that you have been looking for a house and have found a nice one that you can afford. This house, which is indicated by an “X” could be located in any of the following neighborhoods. Arrange these neighborhoods in order from 1 to 5, 1 being most desirable and 5 being least desirable.

\_\_\_\_\_ Image: Other res 1 (1)

\_\_\_\_\_ Image: Other res 2 (2)

\_\_\_\_\_ Image: Other res 7 (3)

\_\_\_\_\_ Image: Other res 10 (4)

\_\_\_\_\_ Image: Other res 14 (5)

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Page Break



Q29 Are there any neighborhoods you simply would not want to move into? Select all that apply.

A (1)

B (2)

C (3)

D (4)

E (5)



Page Break

Q30 If you would like to, please provide an explanation for your previous answers concerning neighborhood choices.

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Q31 For the study entitled: “Residential Segregation in the Greater Orlando Area”

Dear Participant,

During this study, you were asked to provide your honest opinion and understanding of the questions presented. You were told that the purpose of the study was to understand perceptions of residential segregation in the Greater Orlando Area. The actual purpose of the study was to document any attitudes towards Puerto Ricans who migrated to Central Florida as a result of Hurricane Maria and the effects of this on residential segregation in the Greater Orlando Area. We did not tell you everything about the purpose of the study to avoid any biased and censored answers. In doing so, the study is more likely to succeed in collecting honest and

reliable data. You are reminded that your original consent document included the following information: Your participation in this study is voluntary. You are free to withdraw your consent and discontinue participation in this study at any time without prejudice or penalty. Your decision to participate or not participate in this study will in no way affect your relationship with UCF, including continued enrollment, grades, employment or your relationship with the individuals who may have an interest in this study. If you have any concerns about your participation or the data you provided in light of this disclosure, please discuss this with us. We will be happy to provide any information we can to help answer questions you have about this study. The responses in this study are de-identified and cannot be linked to you. **Study contact for questions about the study or to report a problem:** If you have questions, concerns, or complaints or think the research has hurt contact: *Gabriella Ospina, Undergraduate Student, Department of Sociology, College of Sciences, by email at [gabriellaospina@knights.ucf.edu](mailto:gabriellaospina@knights.ucf.edu); or Dr. Jonathan Cox, Assistant Professor, Department of Sociology, College of Sciences, by email at [jonathan.cox@ucf.edu](mailto:jonathan.cox@ucf.edu).* **IRB contact about your rights in the study or to report a complaint:** Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901. Please again accept our appreciation for your participation in this study.

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