mon han vew

# Analysis of the Barriers to Accurate Census Counts in California 

Samantha R. Fidel

California Polytechnic University, Pomona


#### Abstract

The United States Census is a population and housing count for the country taken every ten years. This is meant to count every person residing in the US, which the federal the government uses to determine how to allocate funds. Additionally, the census also determines the apportion of seats in the US House of Representatives and is used to define legislative districts. Because the Census is individually filled out, there leaves room for a large margin of error. Many people choose to not take part in filling out the census, or they are simply unaware of how or where to do so. The purpose of this study examines why miscounts and undercounts occur when gathering Census data, and why some groups are commonly missed as opposed to others. Those who do not typically partake in filling out the Census have been identified by past scholars as underrepresented communities, low-income families, and those of ethnic minority background. By interviewing employees and community-based organizations who do outreach regarding the census, the question this paper seeks to answer is what the challenges and barriers are these organizations experience when trying to gather accurate Census information.


## INTRODUCTION

Millions of people are being left out of the population in the United States every 10 years. What is going wrong? The United States Decennial Census has been used for a housing and population count of the country every 10 years since Thomas Jefferson oversaw the first one in 1790. The census plays a critical role in determining how many representatives we have in Congress, how districts are redrawn, and how federal funds are allocated to the different states and their counties. The questions asked in the census since 1790 have increasingly changed over the years. Scholars have always stated that there have been issues in gathering accurate information from marginalized groups and communities. More specifically, undercounts and miscounts have been predominantly shown to occur particularly within minority populations. This especially occurs with people of Hispanic backgrounds and those with immigrant statuses. However, United States Census counts are well known to have been compromised by differential undercounting of various populations (Kissam, 2017).

Census data is used for two main things in the political realm. First, it determines how much political representation a state gets. The bigger the population in a state, the more representatives the state gets in Congress. This can affect how many advocates one has in their area of residence
to speak on behalf of the city's needs. It can also affect what bills are being reviewed and taken into consideration in Congress. Secondly, the census is used to redraw districts such as state legislative, congressional, city, and county districts every ten years. Since the 1990s, issues have taken place around redistricting related to racially polarized voting, minority vote dilution, packing into districts, and the creation of ma-jority-minority districts (Despipio, Pinderhughes, Shaw, Travic, 2019). Since districts can be drawn in a variety of ways, different strategies can ultimately shape into majority- Democratic or majority-Republican districts. This would create opportunities for partisan parties, urban rural distribution, or even racial competition. Having these districts drawn with these factors in mind can frame the balance of political power in the legislatures for ten years until the next census count is taken. If the enumeration count of the census is not accurate, it can skew policy, representation, businesses, and money distribution for a whole decade.

Many people are unaware that the data retrieved from the census can also affect their lives and others directly. Census data is used to distribute over $\$ 675$ billion dollars to the states, which is directly dependent on population sizes. Consequently, the less the population counted in a state would lead to the less money that the state will receive in funding. This funding is used for infrastructure, public schools, public health, community centers, hospitals
and resources for general public use. For example, if a city is counted in the census for a population of 15,000 people but actually have 30,000 people residing in that city, there is going to be a shortage in resources available to the public. This shortage can affect the quality of Pre-K through 12 schools, public schools and universities, the pavement of roads, hospital wait times, after school programs for children, and much more. This city will then have to deal with the lack of funding for the next 10 years until the next census count is taken.

According to the US Census Bureau, the United States total population count in 2010 was $308,745,538$ (US Census Bureau, 2019). Of this total count, the Census Bureau estimated 16 million omissions. These omissions included miscounted people and those who could not be identified or verified due to the lack of enough information filled out (US Census Bureau, 2019). It is essential to note the gap between the number of people said to be residing in the United States and the estimated number of individuals being missed. This provides an approximation of how substantial our population is and how many individuals are roughly being left out. Based on past census reports, these gaps lead us to the question of why this trend occurs. This study will be analyzing two main questions: What are the challenges and barriers to gathering accurate census data? Which groups are impacted the most, and why?

This research confirmed previous scholars' research that marginalized groups are the biggest groups miscounted in the census. The study found that this occurs for three reasons, with the first being due to the large distrust in government. People are hesitant when filling out the census because of the personal questions asked and are worried about who their information might be shared with. This is most commonly seen amongst immigrant communities but is also apparent with anyone who does not trust the United States government as well. The second reason miscounts occur amongst marginalized groups are due to language barriers. Many people have limited English proficiencies, and the census does not offer the questionnaire in some languages. This limitation leads people to either not complete the census entirely or to fill it out incorrectly. Consequently, this leads to inconclusive responses and inaccurate data collected. Lastly, a handful of people do not complete the census simply because they are unaware of what it is and its importance. Many people who reside in the United States are unfortunately not informed about the census, leading there to be a lack of responses. This is especially salient in marginalized communities, where these groups tend to be living in poverty. As such, filling out the census is not one of their priorities.

This study will examine the flaws and reasons behind why there are imperfections when gathering accurate census information. This paper begins with a review of literature on what previous scholars have said regarding miscounts with the census. Next, the research design and method section will be addressed. This section will explain how the study was done and how data was collected. This study
gathers rich qualitative data using interviews as the methodology. Following the methods will be the findings section and analysis, describing what the study found. The paper will finish with a conclusion where the author will address what the study highlights, limitations of the study, recommendation policies, and suggestions for future researchers if this study were to continue.

## LITERATURE REVIEW

This section discusses the previous scholarship on the common barriers to gathering accurate census data and why these barriers occur. According to Wolter (1991), census errors can be categorized into two groups: omissions, or people who should have been counted but were not, and erroneous enumerations, or people who were counted but should not have been. Past scholars have primarily identified miscounts with the census to occur within marginalized groups. For the purposes of this paper, marginalized groups include any group that has been systematically isolated, treated as insignificant, or denied mainstream involvement in economic, political, or social related activities. In the United States, marginalized minority groups include non-white residents, specifically those of Hispanic, Black, and Asian ethnic backgrounds. Along with these groups, those that tend to be miscounted have also been identified as children ages zero to five, children in shared custody, renters, college students, the homeless or those without a stable home, and immigrants (Schwede, 2010). Despite efforts to count every person in the United States since 1940, the United States Census Bureau has routinely prepared formal estimates of those who are miscounted and undercounted. According to the data, it revealed that African Americans are more likely to be missed at a higher rate than non-African Americans (Wolter, 1991).

It is important to note that census questionnaires have greatly changed over the years, and the challenges that we have seen in more recent times may not have been the same challenges that were faced when census counts first began. Thus, the following literature review examines three topics. The first topic consists of what scholars have said in about census counts in the 20th century about who is being undercounted, and the reasons behind it. In this time frame, confusion of race and ethnicity questions are introduced. The second topic entails a review of how past censuses affected recent ones in the 21 st century, and what recent scholars have concluded about these censuses. Also discussed in this section is why there are some people are being undercounted but others that are being overcounted. The last topic in the literature review highlights the immigrant population since this population stuck out from what previous scholars have said as one of the hardest populations to count. Immigrant populations have always been exceptionally hard to count communities, so this seciton will address any unique challenges presented when counting the immigrant community in censuses.

Census Counts in the 20th Century

Past scholars have addressed miscounts to take place in the census due to issues relating to ethnicity, race, and socioeconomic status. Race was categorized drastically different in early censuses compared to more recent years. From the time period of 1940 to 1970, population totals for Mexican foreign-born and foreign parentage groups were listed according to a general policy followed by the Census Bureau (Hernandez, Estrada, \& Alvirez, 1973). This policy classified those of Mexican origin as white if they were not of American Indian or another non-white race. Consequently, this led to a majority of individuals of Mexican origin to be counted as white. This policy was seen more prominently in 1940 and 1950 censuses. Both the 1960 and 1970 census became slightly more extensive with the information available for more races. Even still, Hernandez, Estrada, and Alvirez (1973) identified that this further created the problem that census data was only partially reflective of the Mexican American population. Due to the confusing way the Census Bureau classified Mexican origin, the accuracy of the population and representation count was hard to classify.

Because of the limited choices of race and ethnicity listed in past censuses, it was severely difficult to identify individuals. It was not taken into account that there were people of mixed ancestry, or that are born in the United States but identify with a different race or origin. In 1970 specifically, it was actually seen that those of Central and South American origin had been overcounted in the census. This due to a misunderstanding of what the category, "Central or South American" meant, as some thought it was referring to the southern states in the United States (Hutchinson, 1984). This confusion resulted in a severe overcount, and the question related to Central or South American origin had been removed for the census in 1980. The 1980 census had much trouble with the number of respondents who answered questions on race and ethnicity incorrectly. The explanation for this was the difficulty to define what the questions around race and ethnicity were asking (Hahn, 1992). Phrases in the census such as, "origin or descent," were poorly understood by the respondents, and notions such as, "race and ethnicity," were not clearly distinguished from each other. The terminology used for race and ethnicity can also differ depending on segments of the population and the individual. For instance, Hahn (1992) gives the example of how almost $40 \%$ of people who classified themselves as Hispanic responded 'other' in the race category due to misunderstanding. This was true for many populations. If individuals do not see a
proper category to identify with, often they will leave the question blank or mark 'other.' Consequently, confusion was raised around these questions, not only for respondents but for analysts of the census as well.

It was also identified that miscounts occurred more frequently amongst those living in poverty. Hutchinson (1984) suggests that for any population group that is concentrated in a low-income neighborhood, the more prominent the problem is for systematic bias and error to occur. Consequently, undercounting is always severe here. This is seen commonly seen with the Hispanic population, as it is complicated by the high number of undocumented individuals. These immigrants are primarily from Mexico but were also seen from Central America and the Caribbean as well. This will be further discussed in turn.

Another factor contributing to undercounts has been identified as the lack of English knowledge. There are a variety of different languages spoken by the diverse populations in the United States, but only a limited number of languages offered by the Census Bureau. It can be difficult for these individuals to read, comprehend, or understand the questions the census is asking. This results in individuals not completing the census, leaving certain questions blank, or simply answering questions incorrectly. De La Puente (1993) gives the example of the Haitian population most prominent in Fort Lauderdale, Florida. These individuals had little to no education, low levels of employment rates, and were not often very literate in English. This led to a huge gap in the number of people who completed the census in this region. This was not only true for the Haitian population in Florida, but for many other populations in the United States of different ethnic backgrounds where English is not their main language of communication. Limited English proficiencies was a common barrier seen with the omissions of previous census counts in the United States.

Though it was obvious omissions were happening in census counts, it was hard to really know how many people were being missed. Following the 1940 census, the Census Bureau came up with a solution in order to approximate the number of miscounts occurred in the census. The Census Bureau refined a statistical technique known as the Demographic Analysis (DA). This technique was then used from 1940-2000 for approximating the number of undercounts. To do this, the DA uses administrative birth and death records along with the estimates of migrant counts in the United States during that decade and
compare it to the census population data information gathered. Williams (2009) put together a table of undercount rates each decade from 1940 through 2000. 1940 had the highest rate of undercounts with a total of $5.4 \%$ of the population, $8.4 \%$ being black, and $5.0 \%$ identified as non-black. Since 1940, the rate was moving at a decreasing level. The 1990 census was estimated to have a $1.65 \%$ of total population undercount, $5.52 \%$ being black and $1.08 \%$ being nonblack (Williams, 2009). Still, Williams again identifies in her report that minorities were amongst the hardest challenges to gain accurate counts of. Through this method previous scholars were able to identify which groups were being miscounted at high rates and were able to get an approximate number of how many miscounts took place each census year.

## Census Counts in the 21st Century

The history of how censuses used to be conducted affected the barriers seen in recent years. As seen above, people of color have always been disproportionately counted. This was said to be because of how, where, and whether to count certain groups are rooted in a history of slavery and annihilation (Nelson, 2019). She goes on to discuss how history confirms people are only counted in the population when it is politically or financially beneficial to do so. In the first decades of when census counts were being mandated, there were only a limited amount of race options listed. This was because initially the Census Bureau was only trying to identify whether or not an individual was black, and if they were a slave or not. In the first census count, it was decided to count slaves as $3 / 5$ th of a person (O'hare, 2019). Since then, categorizing race has continued to complicate the census, even as questions evolve every decade. Questions regarding race and ethnicity are still very confusing and limited in recent censuses. Because of the history around the census, there is a continued problem of minorities leaving questions blank entirely or responding incorrectly.

Reasons for omissions in more recent census counts can be correlated to the growing diversity in the United States and how one race answers are no longer sufficient. The new wave of immigrants coming from Asia and Latin America have added much cultural and phenotype diversity into the United States (Ellis, 2000). This is different from past populations of immigrants coming from European countries. Phenotype refers to the observable characteristics of an individual, such as skin, hair, and eye color. In the recent census recordings, scholars have identified inconsistencies. This is due to the high levels of intermarriage, racially mixed children, and the variations of mixed ancestry. Since 1997, people have been allowed to mark as many race categories as they feel apply (O'hare, 2019). Thus, starting with the 2000 census and on, these mixed ancestry individuals are usually categorized as "Race alone or in combination." The example O'hare (2019) gives is that if an individual marked both Black and White for a race in the census, they would then be categorized into either Black alone in combination or White
alone in combination. But, they would not be in the figures for solely Black alone or White alone. Population recordings are also deemed to be dependent on how a specific individual identifies themself. This means individuals could choose to identify more with one race over another or choose ethnic origin in comparison to multiple races. This causes a gray-area response from individuals, which may not be as reflective of the United States as projected. Data from the 2000 census approximated that about 3 percent of those who did complete the census did not fill out the question pertaining to race and ethnic background (Ellis, 2000).

With the 2000 census there was much more effort to increase response rates and lower the rate of undercounts. For example, the Census Bureau paid for advertising as part of outreach to inform the historically hard to reach communities. Despite the Census Bureau's extra effort to target predominantly African American and Hispanic communities, there was still a large undercount of African Americans (Terry, Schwede, King, Martinez, \& Hunter Childs, 2017). In the 2010 census, non-white groups were severely undercounted in comparison to the White alone population. The White alone population had an overcount of $0.8 \%$. In comparison, Native Hawaiian and Pacific Islander reported an undercount of $1.0 \%$, Hispanics had an undercount of $1.5 \%$, African Americans had an undercount of $2.5 \%$, and Native American or Alaskan Native reported an undercount of 4.9\% (O'hare, 2019). This shows that even in the United States' most recent census, minority groups are continuously amongst the population that are undercounted in comparison to whites.

It was also identified in the 2010 census that populations were difficult to count if they had atypical living circumstances, which were due to heterogeneous households and communities (Williams, 2009). Many of these households consisted of low-income persons, mixed racial and ethnic minorities, inner-city residents, and those with a lack of English proficiency. Atypical living conditions also include renters, those constantly moving from place to place, and the homeless population. It is hard for these groups to be counted in the census due to the high numbers of people living in one household or the constant moving between places. Furthermore, if one is homeless, they will not likely fill out the census. Terry, Schwede, King, Martinez, and Hunter Childs (2017) also conducted a study on the 2010 census to examine the factors contributing to inconsistent data reported and populations counted. They concluded five most contributing factors to the miscount of minority groups. These were popular themes that emerged with previous scholars evaluating both the 2000 and 2010 census. These factors found of enumeration error included difficulty assessing respondents, limited language proficiencies, and cultural issues. In addition, there is alarge distrust in government and concerns about confidentiality, and the mobility of people (especially around census day).

Because the racial and ethnic makeup of the peop-
le residing in the United States is constantly fluid, the United States has become increasingly diverse. To have an accurate representation of the variety of individuals in the United States, one must understand the challenges involved with the diverse identities of these individuals. Without this understanding, the census will continue to be inaccurate and confusing for marginalized groups.

## Census Counts and Immigration

Rising immigration posed new and unique challenges to census counts. Immigrants are one of the biggest marginalized groups in the United States nowadays, but when they were first migrating to America the Census Bureau was unclear how to correctly count them. Regardless, this population continues to be one of the hardest groups to accurately count, as high numbers of immigrants are not counted at all in the census every 10 years. A report from the Pew Hispanic Research Center recorded that there were about 11.9 million unauthorized immigrants living in the United States. Furthermore, they concluded that immigrants made up $4 \%$ of the country's population
and $5.4 \%$ of the population in the workplace (Passel \& Cohn, 2009).

One of the main reasons immigrant communities have been hard to count in past censuses is due to the fluctuating numbers of migrants coming to the United States each year. A report done by Warren J. and Warren R. (2013) estimated that between 1990 and 2009, an approximate number of 15.7 million immigrants moved to the United States, but total population numbers only grew by 8.2 million. These numbers reveal a large number of immigrants that were overlooked. It is difficult to keep track of the numbers of the immigrant populations when they are being left out of census counts. Thus, a common explanation for immigrant populations being hard to count is the substantial fluidity in numbers seen every couple years.

The problems occurring by the patterns of population growth and change caused immigration and reapportionment to become more politically pressing issues. This led Congress to freeze immigration within politically defined national origins patterns. A change took place made for na-tive-born American citizens in the 1920 census: there were only two immigrants counted for every first or second-generation immigrant (Riche, 1999). Immigrants at this time had not only been predominantly of Hispanic origin, but also amongst those of Irish, Italian, German, and Asian descent as well. Due to this, it ended up having a negative effect on
the number of representatives each state got for their elected members of Congress. This shows how crucial it is for every individual living in the United States to be counted, despite immigration status, due to the accuracy of representation.

The United States soon got a large number of immigrants flowing in. After the 1960s, thousands of refugees from Cuba fled into the United States. Likewise, many from Vietnam came as well after 1975. After the Immigration Act of 1965 was passed, the number of immigrants also steadily increased with Latin American and Asian populations, surpassing European immigrants in the United States (Warren \& Passel,
1987). The census in 1980 included very different questions than those of more recent decades, incorporating immigrant status questions, country of birth, and year of immigration.

A unique reason why immigrants are also often miscounted is due to the large number of households. Nearly three-quarters of immigrant households consist of married or cohabiting couples with children, cohabiting couples without children, and other single adults with children (Passel \& Cohn, 2009). Thus, immigrants already have higher rates of larger households than non-immigrants. Frequently seen in low-income residence or poverty neighborhoods are multiple individuals that share a home together where their schedules allow them to be home at different times. De La Puente (1993) gives the example that if ten or more undocumented workers are living together in one household but their work schedules permit them to sleep and rest at different times of the day, not all of them would be in residence at the same time. This allows families to share households. Additionally, this would be referred to as an Ad Hoc household, where they are usually preserving their identity and are often not counted at all. This results in large data errors in the census population counts. Along with Ad Hoc households, complex households are commonly present as well. This is when multiple families are all living in one home for cheaper rent purposes. Furthermore, there is also the case of families that move around often and do not have one permanent place of residence. These individuals lack the knowledge of how to count in the case of a shared home or complex identifying family, and therefore risk not being counted altogether due to the mobility. Because the immigrant population tends to have larger households, the risk of them not being counted in the census is much higher.

The issue of immigrants not completing the census has always been prominent, but this problem recently increased due to the fear that the Census

Bureau will share their personal information with governmental agencies. This development is particularly a fear with the Mexican immigrant population, as at least 6.1 million of the Mexican immigrant population are unauthorized (Kissam, 2017). In 2018, President Trump and his
administration pushed for there to be a citizenship question on the upcoming 2020 census, which erupted great fear in the undocumented community. Though this decision was struck down in a supreme court case, the sense of fear had already been spread with this population. Consequently, this could lead to an even greater miscount of those with an undocumented status in the 2020 census. These individuals often assume the Census Bureau will be pairing with government agencies such as ICE for the purpose of deportation. Merely because of the talk around the citizenship question being posed, increased amounts of undercount will take place if the immigrant community choose to not participate in the 2020 census.

## Conclusion

The relationship between social marginality and census undercount has been demonstrated in many instances discussed above. Past and recent scholars recognize that ethnic minorities and immigrants are the core of the miscounted and undercounted population in the United States Census. These populations tend to mostly reside in lower socioeconomic neighborhoods or families and large households. In turn, this causes counts or miscounts to be higher due to confusion and lack of knowledge fill out the census. Exploring what factors contribute to undercounted communities is important for drawing effective strategies to decrease this problem. California has launched a statewide effort to try and ensure that miscounts with the census are limited as much as possible. This effort is also to gain a more accurate enumeration with the upcoming 2020 census. Furthermore, there are many administrative and community-based organizations in different regions, counties, and communities that California has to promote outreach in hard to count population areas. The goal of this study is to interview workers of these organizations in order to determine the challenges and barriers to gathering accurate census information. Additionally, the goal is to compare and contrast answers from the respondents and weed out any common themes. This study is timely relevant due to 2020 being a census year and due to the political climate our country is at today. The United States are arguably the most divided on critical issues currently than it has been in a while. Census data can potentially be used for political motives for the next ten years if people are not counted accurately. Since the immigration question on the 2020 census was proposed, it has caused great fear for the privacy of people's information. It has also imposed questions about confidentiality, and if their information will be used for alternative motives. This can potentially contribute to why miscounts might occur in the 2020 census. This study will hopefully contribute eye-opening solutions to the steps
we need to take as the state of California and as a country to prevent miscounts and omissions from happening this census year and for future census counts.

## RESEARCH DESIGN AND METHODOLOGY

The next section of this paper will discuss the research design methods used to examine the explanations of miscounts with the marginalized population. This paper utilizes qualitative methods to analyze why census miscounts are so prominent. As mentioned above, California enacted a statewide effort in order to ensure that an accurate enumeration count takes place with the upcoming 2020 census. The California Complete Count Office grouped the state's 58 counties into 10 regions based on hard to count populations. These employees and partner-organizations target communication and outreach efforts to help promote census counts. In addition, these organizations are
further broken down into sections based on region, county, and community-based organizations to tackle outreach efforts. This study will interview employees of the California Complete Count and the community-based organizations in order to gain different perspectives of factors that contribute to why miscounts happen with the census, from each of their first-hand experiences. The goal of this paper is to gather effective qualitative research that will contribute to understanding why there has been a systematic undercount of groups in California. The author started by reaching out by email to 10 community-based organizations and their California Census lead staff members. These email addresses were gathered from the California Census 2020 Official Website. Out of the 10 individuals that were contacted there were 7 respondents, equating to a $70 \%$ response rate. Due to distance and location barriers, over the phone interviews were conducted instead of in-person interviews. Each interview lasted approximately 30 minutes long. The interview consisted of 8 structured questions revolving around their organization's role in census counts and how they conduct communications efforts. Furthermore, questions were asked about what type of communities they target for outreach and why, any unique challenges they run into, and how it has possibly changed from previous years. Each interview was recorded and transcribed by the author by hand. By doing this, the author looked for recurring themes frequently mentioned by the respondents. These themes were based around what groups were historically hard to count and what explanations they gave as to why these miscounts usually occur. The questionnaire utilized for the interviews can be seen in Figure 1 below.

## FIGURE 1: Methodology questionnaire

1. What role do you and your organization play in census counts?
2. What are the challenges to accurate census data being gathered from your experience?
a. Has this changed over the years?
3. From your experience, who are the biggest groups not counted and why?
4. What are ways your organization tries to overcome those challenges?
5. What kinds of communities do you do census outreach in?
6. Are there any unique barriers in these communities?
7. What are the dangers of having inaccurate census counts?
8. What are goals you try and tackle when doing outreach for the Census years? This questionnaire was used as a guide for all seven interviews taken place for the methodology of this study.

There are many factors identified by previous scholars that have effects on groups being miscounted or undercounted. The commonality of these factors is found within low-income families, those facing housing issues or moving very often, and less educated individuals. Additionally, miscounts are particularly are seen the most with African Americans, Hispanic/Latinx communities, and other minority groups. From this, we can assume that those falling into these categories automatically have a lesser chance of participating in the census. Other common barriers are seen with language barriers and the low levels of education by marginalized groups. Research has shown that those of minority groups tend to have less education, and specifically pursue higher education at a much lesser rate in comparison to White individuals.

The author compared interview responses from the California organizations of the census to see if there were any recurring themes presented that aligned with what previous researchers have said. We can assume that there will be a similarity in the organizations targeting outreach in low-income communities, those of less education, and predominantly minority communities. However, there will also be a unique contribution from this study of the distinct barriers in California, since the state does have a high minority and immigrant population. The influential factors as to why there has been a systematic miscount with minority communities in California were found to be similar to what previous researchers have said.

When discussing the people who are not counted in the census, it is important to be aware that there is no way to fully gather an accurate number of how many people are actually being missed. There are some limitations to this study that are important to identify as well. Since the interviews will only take place on organizations in California, it is not appropriate to conclude that this will be an explanation as to why all miscounts happen in the entire population of the United States. Furthermore, since many organizations are often overwhelmed with their workloads, these interviews came from the California organizations and employees that responded to the emails when reached out to. Therefore, the interviews were not conducted in a complete randomized process. Ideally, we would want the most interviews conducted as possible because the more organizations interviewed equates to the more accuracy of the information concluded. Conversely, another limitation acknowledged is that there were only 7 respondents. Despite these limitations and even though we cannot compile an exact number of individuals
miscounted in California, this paper will still offer an explanation as to what some of the most recurring challenges are to gaining accurate census data in California. With 2020 being a census year, it is important to try and break the barriers presented from previous census counts. Although some explanations for miscounts will be given, they are certainly not the only reasons. The study will be identifying which facets commonly stick out the most from the interviews conducted. Additionally, the themes will be compared to explanations of scholarly authors who have previously studied the census. Lastly, the study will contribute a unique perspective on the barriers California has.

## FINDINGS AND ANALYSIS

This section of the thesis will address the findings from the interviews. Additionally, it will identify common reasons for miscounts in the census and reoccurring themes for why a miscount might take place in the California census. Furthermore, it will provide an insight into the efforts these individuals and organizations are doing to try and prevent miscounts from happening. To provide explanations behind what groups are counted less than others, the author was in contact with multiple employees of the California Complete Count Office and community-based organizations that specifically do outreach in hard to count populations. They were asked questions regarding the role they play in census counts, which groups and communities are harder for them to reach out to, what challenges they face, and what they do to overcome these challenges.

In analyzing challenges to gathering accurate census data, we first need to know which populations are harder to count than others. From the interviews conducted, these marginalized populations that were identified as hard to count consist of minority groups including Latinos, African Americas, Asian Americans and Pacific Islanders, and Native Americans. Along with minority groups, those typically not counted were identified from the interviewees as populations such as the homeless population, those who live in rural areas, farmworkers, young children (ages zero to five), people with disabilities, refugees, and especially immigrants. All of these groups identified affirmed the research done by previous scholars that marginalized groups are the ones being missed and hardest to count. Now that we've identified which groups historically tend to be harder to count than others, the question we now examine is why this occurs within these groups. From the interviews conducted, the author has pulled three main reoccurring themes for explanations as to why miscounts occur when gathering census data: 1) distrust in government, 2) language barriers, and 3) lack of education and knowledge around the census. These themes will be discussed in turn. Figure 2 below illustrates how frequently these three barriers were brought up in conversation from all of the respondents.


As seen above, this bar graph shows how many times these key phrases were mentioned in conversation from the interviews conducted. The discussion around the lack of education and awareness about the census was the highest area of focus for the respondents. This is important to highlight because it demonstrates how much outreach is needed. Moreover, it indicates how there are barriers for not only getting people to fill out the census, but for educating them first about what it is and why it is important as well. The distrust in government appeared at a close runner up, as it was frequently mentioned and tied with how many times immigrant groups were mentioned. This is important to note because the respondents made sure to highlight that these groups are exceptionally hard to count communities. Lastly, even though language barriers were mentioned by every respondent, it was not as prominent as the other two themes surfaced in conversation. Below summarizes what the respondents said about each barrier
identified. Following is an additional discussion about what can be done to decrease these barriers.

## Distrust in the Government

The people of the United States have always questioned whether or not they trust the government to decide what is best for them. Despite the census, people are hesitant when giving away their personal information. Thus, there is already a barrier of mistrust without the topic of the census. When adding the census into the conversation, the barrier of trust heightens, and fear becomes present in sharing personal information. Filling out the census contains very personal and specific information about individuals and families. This raises questions about what the government is going to do with their information. For these individuals, fear takes over because there is no certainty that their information will not be used for alternative motives. In more recent times with the current administration in office, the levels of distrust and fear have dramatically increased within American society today. One of the respondents highlighted how a reason for hesitation comes from census questions being seen as an invasion of personal privacy. When a random person comes knocking at your door, asking you to fill out personal information about yourself and your family, of course it is going to raise suspicions of why they need your information and what
those people will do with it. This respondent stated:
A lot of people don't trust the government and ask why do you need my information, who are you are why are you contacting me, especially when going door to door and calling people on the phone, and a lot of times people ask how we got their phone numbers. So, it's just a lot of small issues like that (interview with author, 2020).

The lack of trust and fear people have in government is particularly salient with immigrant communities. These communities are exceedingly hard to count because of the substantial fear posed of what the government will do with their personal information, and who they will be sharing their information with. All respondents stressed how the immigrant community is exceptionally hard to count as their fear has definitely increased over the years, more recently with the proposal of the citizenship question on the 2020 census. One of the respondents mentioned how hard it was for the immigrant community to put their status on the line for a questionnaire, speaking specifically about the Latinx immigrant communities. He stated:

Folks are afraid, many times, to share information with the government, and specifically the immigrant community of Latinos are particularly afraid of sharing their information with the government. They are afraid of confidentiality and afraid that that data will be used in any way against them, so that's the huge uphill battle that we are facing. And even now with the Trump administration attempting to put in the citizenship question, many of the Latino communities still think the citizenship question is on there, so that adds another layer of the challenge (interview with author, 2020).

The respondent continues on to mention how the immigrant community does not just consist of those within the Latino population, as these immigrant communities are expanding across several different ethnic groups in the United States today. The large distrust in government was a frequent barrier mentioned by those interviewed that contribute to why some groups may hesitate when filling out the census. All of the respondents mentioned how it is difficult to have conversations with these individuals around the census because of the fear instilled and distrust in the government. Language Barriers

Additionally, limited English proficiency is another contributing factor as to why some people do not participate in filling out the census, leading to high numbers of miscounts. There are only a number of languages that the census will be offered in, therefore limiting the opportunity amongst certain minority groups to participate. Repercussions of this include people filling out the census form incorrectly, which leads to inconclusive responses or leave people to not fill out the census form altogether. It is no surprise that some states, cities, and counties have more racial diversity than others. In the United States as a whole, Hispanic residents make up about $18 \%$ of the population, African American make up about $13 \%$, and Asian residen-
nts make up about $6 \%$ (Frey, 2018). As a nation, minority populations are very underrepresented in the United States. However, in some places such as in California, Texas, or South Carolina, there are substantial minority populations that are important to be counted for. One of the purposes of census data is to collect the ethnic makeup of the United States, but this is challenging to accomplish with the limited languages offered in census forms. We need to take into account the diverse makeup of the people in the United States. One of the respondents highlights while this can affect a state as a whole, it can also affect certain cities directly at higher measures. They stated:

The census form is not going to be available in Cambodian or Vietnamese, or a lot of other Asian languages. So that is problematic for Cambodians who live in Long Beach, or the Vietnamese who live in Orange County (interview with author, 2020).

## Lack of Education and Awareness

Many people who reside in the United States are not unfortunately informed about the census. In addition, they are unaware of its importance, what it is used for, and what could happen potentially if there are large miscounts that take place. This is the last common barrier mentioned when conducting interviews, especially when speaking about minorities and marginalized communities. These populations tend to be amongst the groups that are not politically involved as much. Therefore, this decreases their chances of knowing what the census is and completing it. One respondent touched on the Latino communities in particular, stating:

When you look at the Latino populations across the state, we are the ones living in poverty, we're experiencing really big gaps in education and healthcare, so part of the reason we are so invested in the census is because of this understanding that when you fill out the piece of paper and say who you are, in exchange you get money back for schools, for hospitals, for roads-but there is also the political representation piece. California has 53 members in the United States House of Representatives, and every single bill is super political, and every single vote is close. When you think about the next ten years and what Congress is going to be voting on, it could be the next DREAM act or it could be the next affordable care act, so we need to make sure that as Latino's we have people advocating on our behalf (interview with author, 2020).

These dangers of not completing the census are often things that people are unaware of. Dangers are often looked at from a macro level, and not how it can direct individuals directly. The respondent continues on to discuss how the lack of education around the census also pertains to the fact that census counts only happen once every ten years. Many individuals often forget about it or are uneducated of what the census is because of the huge year gap in between. One of the respondents emphasized this, stating:

One of the biggest challenges is the fact that this only happens once every ten years. People forget what the census is, or don't know, and don't understand that it is written in the US Constitution (interview with
author, 2020).
The lack of education around the census is arguably the most prominent contributing factor to people not filling out the census. Many are unaware that the federal government uses census data to distribute over $\$ 675$ billion in funds to the states. The states then take this money and distribute it to their counties and cities. Therefore, the
more population counted in a region would equate to the more funding brought into the state, its cities, and its communities. Another respondent discussed ways he tries to educate his community about the census. When asking people what they care about in their communities, the responses from people are all similar. They usually include answers such as having evenly paved roads, a good education system for their children, after school program options, the healthcare available for them, and communal resources for the public to utilize. These are all things that funding from the census can aid with that many people do not recognize. Often times it is hard to grab the attention of
individuals who don't seem to care about the census. When this is the case, some respondents spoke about how they come up with unique ways to reach these communities. One respondent mentions how they outreach and educate people in terms of comfortability, or in a way that's personal to each person they are communicating with. He stated:

If I'm coming to your door and I look like you, I'm familiar with you, I understand the area or where you're coming from. I live in Inglewood, but I grew up in the Crenshaw district. We don't really have any hospitals over here or the best healthcare system, so even though you may not think of it (the census), it is something that is very important for the area that we live in. If you care about the healthcare system and you care about not waiting two hours before you are seen in the hospital, this is the time for you to do the census...it's something that is very simple but can help out in such a beneficial way. It brings in millions of dollars into our community (interview with author, 2020).

Of people who lack education around the census, lower-income families and people living in poverty were identified to be amongst this group as one of the harder to count populations. These include renters, people who are housing insecure, the homeless population, and people moving from place to place without a stable home. If there is not a stable place that one identifies as home, it is often more difficult for these individuals to fill out the census due to permanent residence questions. There is no way to accurately count every person living without a home, either on the streets, in and out housing facilities, or even living out of a vehicle. According to data in 2017, 23.6\% of Latinos lived in poverty in California, $17.6 \%$ of African A-
merican, and $16 \%$ of Asian Americans (Public Policy Institute of California, 2017). In comparison, $12.5 \%$ of Whites were living in poverty. If these groups of people do not have a stable home to live in, the chance of them filling out the census is very slim. Filling out the census may be unclear for these groups of people, and the priority for filling out the census is not likely to top their list. One of the respondents spoke about how hard it was for this population to be
counted, stating:

When you look at the grand scheme of things, you know, why is it so hard to count particular people, I would say people living in poverty. That would suggest that either you're homeless, moving from place to place, or your housing situation is not stable. So how can you fill out the census and say that you live here, when you really don't? (interview with author, 2020).

## Discussion

The results of this thesis particularly focus on the causes for why groups are missed in census counts, specifically in California, and which groups these are. When analyzing the three barriers (distrust in government, language barriers, and lack of education and awareness around the census), the one that stands out the most is the lack of education and awareness around the census. This was previously shown in Figure 2 as well, as this is the barrier that the respondents highlighted the most.

The implication that can be concluded from this study is that with more emphasis and focus on educating people on the details around the census, the other two barriers would minimize as well. The large mistrust of the government that many people have would likely reduce if there was more awareness surfaced on Title 13. Title 13 of the United States Code not only protects peoples' rights, but also enforces that the Census Bureau is not allowed to share any personal information with government agencies (US Census Bureau, 2020). Secondly, though the census is only offered in 13 languages, if there was more awareness around the census there would be more utilization of the 59 non-English language guides provided through the Census Bureau website. Moreover, if individuals are unable to do so or do not have access to the language guides, they would still able to reach out to census workers for further support. More conversation around the census would lead to more awareness of steps that individuals can take if language barriers are present.

In an effort to minimize these barriers, two potential policy ideas are proposed by the author: 1) mandatory education taught in regard to the census, and 2) a demand for more diversity amongst Census Bureau employees. Because every child is required to attend K - 12 education in the United States, a short educational course on what the census is should be mandated into high school government classes. In effect, everyone would be taught the importance and impact of the census. Through this course, individuals would be taught in primary education about how the census is used, how Title 13 protects confidentiality, and what the potential consequences are if there is not an accurate population count in the United States. Lastly, the Census Bureau should expand their employee base to reflect the diversity of the United States. Doing this would increase the trust within the American people and fear would likely diminish. We saw this occur with the respondent who mentioned he outreaches to communities in terms of comfortability and is able
to relate to them. Likewise, if those working for the Census Bureau have the ability to speak a variety of different languages and look like those they are targeting in outreach, the comfortability levels will likely increase. Thus, it would lead to higher response rates. In turn, focusing on awareness and education with the census will help decrease language barriers and increase trust amongst the American people. Future scholars studying the topic of miscounts and undercounts in the census should consider this information when doing further research.

## CONCLUSION

This study highlights the gap between reasons miscounts occur, specifically with marginalized groups in California, and reasons why they occur. The question this paper sought to answer had two parts: What are the challenges and barriers to gathering accurate census data? Which groups are the most impacted and why? The results from this research affirmed previous scholars' research that marginalized groups are the hardest to count in the census. Additionally, this study contributed reasoning behind why miscounts occur in California. For the purpose of the paper, marginalized groups missed included those of ethnic minority backgrounds, people living in poverty, people who are housing insecure, farmworkers, young children (ages zero to five), people with disabilities, those with limited English proficiencies, and the immigrant community. Utilizing qualitative methods, these marginalized groups were found to be highly miscounted in the census due to 3 main reasons.

The first barrier to gathering accurate census data is the lack of trust that the American people have in the United States government. Many are skeptical about sharing their personal information through answering questions of the census, and this is especially true for individuals in the immigrant community. These groups are in fear of their status being shared with government agencies for alternative purposes other than to count them in the population. The second barrier found in this study is the language barrier. The census form is only offered in 12 non-English languages. This can result in inconclusive responses from those with limited English proficiencies, as it leads groups to not fill out the census altogether or lead individuals to fill out the census incorrectly. Finally, the last barrier gathered from this study is the lack of education and awareness around the census. Because the census count is only taken once every ten years, some may not know what the census is and why it is so important. The census is not something mentioned in day to day conversation, leaving room for much unawareness of what the census is and its direct impact on states and communities. The lack of knowledge and awareness is especially seen amongst marginalized groups, and more particularly seen with those living in poverty or face housing insecurities. This barrier was seen to have the largest number of ramifications. If more action was taken to try and break this barrier then the other two barriers would minimize as well.

It is important to note the limitations of this study
as well. Since there was only a $70 \%$ response rate, the sample size was relatively small. Furthermore, the respondents were drawn from the California Complete Count website. Due to this, the process was not a completely randomized one and was based on who responded when contacted. Despite these limitations, this study is still essential because it contributes to the conversation around census miscounts in California. More specifically, it emphasizes why there needs to be more education and outreach efforts in order for there to be higher response rates. Moving forward, if research were to continue on this topic, future researchers might consider interviewing employees and organizations from different states throughout the
country. Doing so would contract a more general assessment of why miscounts happen in the United States as a whole. It is also suggested that future scholars do fieldwork and conduct surveys in historically hard to count communities. This would provide a wider perspective of why some individuals personally do not participate in the census.

Unless there is an effort to reduce these barriers, there will continue to be individuals, families, groups, and communities left out of census counts in the United States. From this study, we've concluded there to be a substantial level of miscounts due to the distrust in government, language barriers, and most importantly not enough knowledge or awareness around the census. Moving forward, along with the two policy recommendations suggested, there needs to be a continuous push for conversation and awareness around the census. The census is something that can impact states, counties, cities, and families directly for a whole decade. In the words of one of the interview respondents, we need as many individuals in the United States as possible to become a "Census Champion."

## References

De La Puente, M. (1993). "Using Ethnography to Ex plain why People are Missed or Erroneously In cluded by the Census: Evidence from Small Area Ethnographic Studies" US Census Bureau, Center for Survey Methods Research. Retrieved from https://www.census.gov/srd/papers/pdf/mdp95 01.pdf

Despipio, L. Pinderhughes, D. Shaw, T. \& Travic, T. (2019) Uneven Roads: An introduction to US Ra cial and Ethnic Politics, second edition. Sage Publications.
Ellis, M. (2000). "Mark one or more': counting and projecting by race on US Census 2000 and be yond." Social \& Cultural Geography, Vol. 1, No. 2. Frey, W. (2019). "Six maps reveal that America's ex panding racial diversity." Brookings. Retrieved from https://www.brookings.edu/research/amer icas-racial-diversity-insixmaps/?gclid=CjwK CAjwg6b0BRBMEiwANd1_SFUBQSMyut 70WOdtAXv33p1Z11PDQMNOFMjy4m TauZEvPtkaswwnjhoCu_IQAvD_BwE
Hahn R. (1992). "The State of Federal Health Statistics on Racial and Ethnic Groups." JAMA Network. 1992;267(2):268-271. doi:10.1001/ jama.1992.03480020078035
Hernandez, J., Estrada, L., \& Alvirez, D. (1973). "Cen sus Data and the Problem of Conceptually Defin ing the Mexican American Population." Social Science Quarterly, 53(4), 671-687. Retrieved from http://www.jstor.org/stable/42859051
Hutchinson, R. "Miscounting the Spanish origin pop ulation in the United States: corrections to the 1970 census and their implications." Department of Sociology, UNLV. Retrieved from https://on linelibrary.wiley.com/doi/pdf/10.1111/j.14682435.1984.tb00988.x

Kissam, E (2017). "Differential undercount of Mexi can immigrant families in the U.S. Census." Sta tistical Journal of the IAOS 33, p 797-816.
Nelson, J. (2019). "Counting Change: Ensuring an In clusive Census for Communities of Color." Co lumbia Law Review, 119(5), 1399-1448. Retrieved from www.jstor.org/stable/26650742
O'Hare W.P. (2019) "Who Is Missing? Undercounts and Omissions in the U.S. Census." In: Differential Undercounts in the U.S. Census. Spring Brief in Population Studies. Springer, Cham.
Passel, J. \& Cohn, D. (2009). "A Portrait of Unauthorized Immigrants in the United States." Pew Hispanic Research Center. Retrieved from https://bche althcouncil.wildapricot.org/Resources/Document
s/pew-hispanic-2009.pdf
Perez, A. D., \& Hirschman, C. (2009). "The Changing Ra cial and Ethnic Composition of the US Population: Emerging American Identities." Population and devel opment review, 35(1), 1-51.
Public Policy Institute of California. (2017). "Just the facts: Poverty in California." Retrieved from https://www. ppic.org/publication/poverty-in-california/
Riche, M. F. (1999). "Cultural and Political Dimensions of the U.S. Census: Past and Present." American Behav ioral Scientist, 42(6), 933-945.
Schwede, L. (2010). "Who is Counted? Subpopulation Coverage in US Censuses." Anthropology News.
Terry, R. Schwede, L. King, R. Martinez, M. \& Hunter Childs, J. (2017). "Exploring Inconsistent Counts of Racial/Ethnic Minorities in a 2010 Census Ethno graphic Evaluation." Bulletin of Sociological Method ology/Bulletin De Méthodologie Sociologique, 135(1), 32-49.
U.S. Census Bureau, 2019. "Decennial Census of Popula tion and Housing." Retrieved from https://www.census. gov/programs-surveys/decennial-census.html
U.S. Census Bureau, 2020. "Title 13, U.S. Code." U.S. De partment of Commerce. Retrieved from https://www. census.gov/history/www/reference/privacy_confidenti ality/title_13_us_code.html
Warren, R., \& Passel, J. (1987). "A Count of the Un countable: Estimates of Undocumented Aliens Counted in the 1980 United States Census." Demogra phy, 24(3), 375-393. Retrieved from http://www.jstor. org/stable/2061304
Warren, R., \& Warren, J. (2013). "Unauthorized Immigra tion to the United States: Annual Estimates and Com ponents of Change, by State, 1990 to 2010." The Inter national Migration Review, 47(2), 296-329. Retrieved from www.jstor.org/stable/24542824
Williams, J. (2009). "The 2010 Decennial Census: Back ground and Issues." Library of Congress Washing ton DC Congressional Research Service. Retrieved from https://apps.dtic.mil/dtic/tr/fulltext/u2/a500417. pdf
Wolter, K. (1991) "Accounting for America's uncounted and miscounted." Science., 253(5015), 12. Retrieved from https://www.jstor.org/stable/pdf/2876173.pdf

