## Gettysburg Social Sciences Review

## Gettysburg Social Sciences Review Fall 2018

Follow this and additional works at: https:// cupola.gettysburg.edu/gssr
Part of the American Politics Commons, Community-Based Research Commons, Community Psychology Commons, Demography, Population, and Ecology Commons, Domestic and Intimate Partner Violence Commons, Economic Policy Commons, Environmental Policy Commons, Environmental Studies Commons, Feminist, Gender, and Sexuality Studies Commons, Health Policy Commons, Income Distribution Commons, Other Social and Behavioral Sciences Commons, and the Race and Ethnicity Commons

Share feedback about the accessibility of this item.

[^0]Available at: https://cupola.gettysburg.edu/gssr/vol2/iss2/1

This open access complete issue is brought to you by The Cupola: Scholarship at Gettysburg College. It has been accepted for inclusion by an authorized administrator of The Cupola. For more information, please contact cupola@gettysburg.edu.

## Gettysburg Social Sciences Review Fall 2018

## Keywords

wealth policies, biodiversity, health care, women's health, Arab-Americans, gun violence

# Gettysburg Social Sciences Review 

## Fall 2018

## Volume 2, Number 2

Miranda Wisor ' 17 , Managing Editor
Jesse Shircliff ' 19 , Editor
Tien Dao '19, Editor

Associate Editors: Anjani Kapadia '17, Josephine Rivera '20, Sarah Linton '19, Emma Stejbach '19, Kimberly Longfellow '16 and Emily Wielk '20

## TABLE OF CONTENTS

Page 3 Robin Hood Politics: An Analysis of Wealth Redistributive Policies and the Impact of Political Donations by Marley R. Dizney

Page 51 Factors Affecting Biodiversity Protection in the Mediterranean Basin by Erica L. Porta \& Jesse E. Shircliff

Page 74 Latina Women in Adams County, Pennsylvania: Access to Mental Health Care for Depression by Alison Lauro

## DISCUSSIONS

Page 154 Operation Boulder and its Effects on Arab-American Communities in the 1970's by Molly Wancewicz

Page 169 Addressing Gun Violence in the United States by Sarah House

# Robin Hood Politics: An Analysis of Wealth Redistributive Policies and the Impact of Political Donations 

Marley R. Dizney

This research addresses the impact of political donations on wealth distributive policies and demonstrates an alarming ideological divide along class lines within the Republican Party. Professor Bruce Larson was a mentor throughout this investigative process.


#### Abstract

Both Democrats and Republicans have taken strong positions on wealth redistribution. But is there variance within the parties? I hypothesize that while moderate non-donors and moderate donors will favor increases in federal spending for such policies at similar rates, both liberal and conservative donors will be less likely to favor spending due to attachment to their personal wealth. This paper analyzes the differences in support for increasing the budgets of five wealth redistributive policies while controlling for political donations: public schools, welfare, aid to the poor, childcare, and Social Security. The research finds that moderates and moderate donors support do not differ. Liberal nondonors are more likely to favor increases in spending for public school and Social Security, while their donor counterparts favor childcare. Conservative donors are consistently less likely than non-donors to favor increases in spending on wealth redistributive policies. These findings expose a clear class split amongst conservatives and indicates a concerning divide between the Republican political elite and the constituents they are supposed to represent.


As political parties have become increasingly polarized, so too have many politicians' stances on individual issues. The Republican Party has made it clear that they are staunchly against large-scale wealth redistribution, while the Democratic Party has made this idea part of the fabric of their party's platform. Is there a clear split only between the parties, or do divisions exist within them? Donors tend to be wealthier than the average voter and therefore may have different values when it comes to wealth redistributive policies. While it may be obvious to assume that liberals will be in favor of wealth redistribution and conservatives against it, is there a difference in the level of support for such policies between donors and non-donors?

This distinction is important because it may reveal that elected officials favor the views of their donating constituents over those of non-donating constituents. In a political era dominated by campaign contributions, it is critical to understand how money affects the policies politicians choose to pursue and support. Additionally, wealthier donors may not understand the importance of wealth redistributive policies such as aid to the poor, welfare, and Social Security because they have never had to rely on it. On a more egalitarian note, it is important that all voices are represented in politics in order to ensure that its outcomes are representative of its people.

This research seeks to identify disparities within political ideologies as they pertain to wealth redistributive policies. I hypothesize that while moderate
non-donors and moderate donors will favor increases in federal spending for such policies at similar rates, both liberal donors and conservative donors will be less likely to favor spending than liberal non-donors and conservative non-donors due to attachment to their personal wealth. This paper analyzes the differences in support for increasing the budgets of five wealth redistributive policies while controlling for political donations: public schools, welfare, aid to the poor, childcare, and Social Security. The research finds that moderates' and moderate donors' levels of support do not differ. Liberal non-donors are more likely to favor increases in spending for public school and Social Security, while their donor counterparts are more likely to favor an increase in spending for childcare. Conservative donors are consistently less likely than non-donors to favor increases in spending on wealth redistributive policies. These findings expose slight differences between liberals non-donors and liberal donors, but more significantly, a glaring class split amongst conservatives.

## Literature Review

Wealth redistribution was one of the most salient topics of the 2016 presidential election. From the left, Senator Bernie Sanders championed redistribution from the top $1 \%$ to the rest of the country, whose income had largely stagnated. From the right, Donald Trump campaigned on tax cuts that would redistribute wealth back to middle-class voters. While the issue was addressed from both the

Democratic and Republican parties, the two sides of the aisle spoke about the issue with different targets for the redistributive efforts and different means by which to achieve these goals. Schlozman, Verba and Brady argue that policy outcomes are more responsive to high-income voters, who make up the majority of political donors (2012). This literature review seeks to reconcile scholarly research on wealth redistribution and party polarization to identify the effects, if any, of donors on such policy outcomes leading up to the 2016 presidential election.

Low-income voters are traditionally more likely to have a left-leaning political ideology around the world. However, they are less likely to align themselves with the left if non-economic party polarization is high. Even if it is against their economic interests, low-income voters are often pulled towards the right by moral polarization (Finseraas 2009, 296). Henning Finseraas notes that "anti-redistributive rightist parties wishing to reduce the extent of redistribution" may find distancing themselves from the left on social issues to be an efficient strategy in gaining votes $(2009,298)$. Recently, there has been a global conservative shift when it comes to wealth redistribution. Matthew Luttig analyzes data presented by Lupu and Pontusson and finds that changes in the structure of inequality results in more conservative ideological positions on wealth redistribution (Luttig 2013, 817). However, this shift was not consistent across all income quintiles. When the ratio between lower quintiles is increased,
that quintile becomes more supportive of redistribution. When the ratio between higher income quintiles is increased, the highest income quintile becomes three times less supportive of redistribution than the lowest income is supportive of it (Luttig 2013, 817). That being said, this study was conducted on 14 developed countries; the United States was found to be the only outlier. This could be because of the U.S.'s exceptionally high concentration of racial minorities in the bottom income quintile (Lupu and Pontusson 2011, 329).

The U.S could be the outlier because its citizens generally have a positive view of people at the low end of this inequality. Bartels finds that, overall, Americans give "poor people" an average favorability rating of $73 \%$ over "rich people", who score an average of $60 \%(2008,36)$. It should be noted that while Americans have a positive view of poor people in general, this view is racially charged and tied to an idea of "deserving" versus "undeserving" poor people (Gilens 2009). Schneider and Ingram explain that these two categories of people have been placed into two socially constructed groups. The "deserving" poor are placed in a category that has a positive social construction, but weak political power. The "undeserving" poor share weak political power due to a negative social construction (Schneider and Ingram 1993, 335-337). This makes it difficult for either group to have any effect on policy outcome, and furthermore makes poor people rely on more powerful groups to craft the policy surrounding their group.

Ideals of political and economic equality have long differed in the American psyche. Jennifer Hochschild finds that Americans believe in strict equality in a political sense, but view "economic freedom as an equal chance to become unequal" (Bartels 2008, 28). This results in conflict between firmly held egalitarian beliefs and support for policies that exacerbate inequality (Bartels 2008, 29). Norton and Ariely find that while Americans prefer some degree of inequality to perfect economic equality, most Americans vastly underestimate the level of existing wealth inequality and construct far more equitable wealth distributions in their ideal country $(2011,10)$. In their survey, Norton and Ariely find that citizens who voted for Senator John Kerry in the 2004 election were more likely than former President George W. Bush voters to report a higher percentage of wealth held by the top $20 \%$. Moreover, when Kerry voters were asked to construct an ideal wealth distribution, they gave the top $20 \%$ of wealth holders less than Bush voters did. Bush voters estimated that the top $20 \%$ holds less wealth than they actually do, and in their ideal wealth distribution, would hold more $(2011,11)$. These findings indicate that while egalitarian beliefs are strong in most Americans, disagreements about the causes of inequality may hinder chances for consensus (Norton and Ariely 2011, 12).

Regardless of the causes of inequality, the existing disparity significantly favors the rich when it comes to political representation. Martin Gilens provides evidence that policy outcomes of the United States government are more
responsive to high-income voters "especially in policy domains where the opinions of rich and poor diverge" (Bonica et al. 2012, 118). This is significant when considering that Republicans are more sympathetic to tax burdens on the rich while Democrats are more sympathetic to tax relief for the poor (Bartels 2008, 41). Such a split could lead to significant tax cuts for the rich when Republicans are in power, followed by increases in the budget for social safety net programs when Democrats are in power due to fundamental beliefs held by each party.

The Republican Party values individualism above all else, while the Democratic Party values both individualism and egalitarianism, creating potential incongruity not present in the Republican Party's message (Ura and Ellis 2012, 280). However, both parties have been found to become more liberal in response to growing income inequality (Ura and Ellis 2012, 285). The reaction of the two parties is not the same; Ura and Ellis find an asymmetric party polarization driven predominantly by the preferences of the Republican Party (2012, 288). While the authors note that they implicitly neglected the role of political elites in shaping polarization, other authors attempt to fill the gaps in information (Ura and Ellis 2012, 289). Bonica et al. note that rich Americans have been able to influence "electoral, legislative, and regulatory processes through campaign contributions, lobbying, and revolving door employment of politicians and bureaucrats." (2013, 105) The authors note that it is difficult to gauge the effect of monetary
contributions to Democrats on their positions on wealth redistribution, largely because the party's donating base has recently shifted from the traditional small number of large donors to a more grassroots system of fundraising (Bonica et al. 2013, 113).

Grossman and Hopkins argue that while the parties have clear differences on policy issues regarding wealth redistribution, most individual Americans are symbolic conservatives but operational liberals (2016). In the context of favorability towards poor people, this could mean that Americans are symbolically against spending to the poor, yet when presented with a specific policy (such as an increase in public school spending), they indicate that they are in favor of such a policy. While political ideology is a critical factor in understanding the support of wealth redistribution, education levels also play a role. When broken down by education levels, those with the lowest levels of education were more sympathetic toward the tax burden on rich people and unsympathetic toward the tax burden on poor people (Bartels 2008, 41). This could be because people with low education levels are less aware of how large the wealth disparity is.

Bonica et al. theorize that either party could implement policies to ameliorate the recent sharp rise in inequality, but do not due to extreme polarization between the parties, lack of voter participation, feedback from highincome campaign contributors and the nature of political institutions (2013, 121).

This is underlined by an embrace of free market capitalism from both major parties in the U.S., which results in lower support for social safety nets that rely on wealth redistribution. The parties differ, however, in their general ideological drifts. Republicans have become "sharply" more conservative while Democrats have shifted only slightly left (Bonica et al. 2013, 106). Even with the shift to the left in the Democratic Party, the party has shifted away from social welfare policies and towards policies that "target ascriptive identities of race, ethnicity, gender, and sexual orientation." (Bonica et al. 2013, 107) These factors are not mutually exclusive with wealth redistribution. In fact, racial minorities are often the groups that would benefit most from social welfare policies as they make up the largest percentages of the lowest income quintiles.

The Great Recession of 2008 provided ample political movement on the issue of wealth inequality that was ultimately unrealized. As the inequality increases, the real value of the minimum wage, taxes on income from capital, the top marginal income tax rates, and estate taxes have all fallen (McCarty, Poole, Rosenthal 2006, 118). Additionally, there has been little to no political support for reforms of the financial sector, substantial reduction of mortgage foreclosures, or expansion of investment in human capital of children from low-income households (Bonica et al. 2013, 108). Luttig argues that as economic inequality increases, support for wealth redistribution policies decreases as those who are in a position to influence policy stand to lose as a result of welfare-enhancing
policies $(2013,812)$. This would imply that as contributors to politics become richer, their incentive to give to candidates who support wealth redistribution declines, making lower-income voters' voices muffled below the money.

As party leaders have moved towards extremes, parties as a whole have cued voters to vote based on their income (McCarty, Poole, and Rosenthal 2006, 92). Relative income is a statistically significant factor in Republican partisanship. The Republican Party has increased the size of its base by moving away from redistributive policies as income stratification of voters intensifies (McCarty, Poole, and Rosenthal 2006, 82, 108). McCarty, Poole, and Rosenthal write in 2006 that increases in net worth, wealth, home ownership, and securities ownership could be explanatory factors in the diminished desire for social insurance and the growth in size of the Republican Party (108). This growth was accompanied by a decrease in the party's favorability outlook on wealth redistribution efforts. Despite the right's distinguished position on social issues, from the 1960 s to the early 2000s, partisanship by income led to a "rich-poor cleavage" between the parties (McCarty, Poole, and Rosenthal 2006, 74). While every policy issue could be considered from an economic perspective, recent elections have focused more on social and moral aspects of myriad issues, such as the social issue of increased immigration and the moral issue of legalizing gay marriage. Hacker and Pierson highlight the decline of labor unions as a means of shaping public opinion among working class voters. They also cite the

Democratic Party's shift from populist elements in order to appeal to affluent social liberals, leaving the Republican Party a clear opportunity to recruit those voters with promises of "individual gains" from low taxes and small government (Nagel and Smith 2013, 162). This may cause low-income voters to vote against economic policies that may benefit them, like wealth redistribution (McCarty, Poole, and Rosenthal 2006, 96).

Democrats are more likely than Republicans to sponsor bills such as student loan forgiveness or increases in the minimum wage that are aimed at addressing economic inequality (Kraus and Callaghan 2014, 4-5). Non-white members of both parties in Congress are more likely to sponsor legislation that addresses economic inequality (Kraus and Callaghan 2014, 4). When deconstructed, Kraus and Callaghan discover that while Republicans tend not to sponsor legislation that addresses wealth redistribution regardless of their personal wealth, Democrats are more likely to sponsor the same legislation if they are personally of lower wealth $(2014,4)$. While there was no significant effect for gender in Congress as a whole, Democratic women are more likely to sponsor legislation addressing economic inequality than their male counterparts (Kraus and Callaghan 2014, 4). However, as Congress has continued to be dominated by wealthy white men, the legislative branch has "punched the gas pedal" to accelerate inequality (Carnes 2016, 107).

Despite efforts by the Democratic Party, low-income Americans have steadily been shifting right in their political views. Katherine J. Cramer finds that this is a result of the increase in national economic inequality. Part of this stems from what Cramer labels "rural consciousness," a mindset adopted by many rural dwellers who feel ignored by politics and deprived of the resources they feel they deserve (2016, 5). She also points out that the Republican Party was built upon anti-New Deal, and therefore anti-wealth redistributive, policies. It is in the interest of the party that "attention to class to be diverted to attention to race" (Cramer 2016, 16). Most importantly, Cramer argues, is the composition of the poor in the United States, who are predominantly racial minorities. This means that middle-income voters lack a psychological connection to the poor and are therefore less likely to support a redistribution of resources to them (Cramer 2016, 17).

Regardless of where low-income citizens lie on the political spectrum, they historically do not turn out to vote in large numbers (Bonica et al. 2013, 110). Perhaps as a result of this, vote-seeking candidates are more responsive to political activists than to the median voter (Schlozman, Verba, and Brady 2012, 261). This is important because on average, political activists are wealthier and less likely to support wealth redistribution policies than the average citizen. Many of these political activists donate money to their party and candidates of that party, although the income of these donors differs greatly between parties; there is
a party split between Democrats and Republicans of $\$ 76,000$ to $\$ 118,000$, respectively (Schlozman, Verba, and Brady 2012, 256).

This gap has a compelling connection to Schlozman, Verba, and Brady's observations on perspectives of economic inequality and political polarization. The authors note that "the ideological shift among Democrats derives from the increasing liberalism of the most affluent Democrats" $(2012,259)$. It would then seem to follow that party activists, who tend to be wealthier than the average party member, would drive the ideological positions of party members as a whole to the left. Bonica et al. note that contributions from party activists may have a significant impact on legislation that would address economic inequality, such as a higher tax rate on carried interest income received by private equity investors (2013, 118). Because Republican policies are typically more sympathetic towards tax burdens on the rich while Democratic policies are more sympathetic towards poor people, their responses to economic inequality will differ significantly (Bartels 2008, 41).

Partisans do not always follow the lead of party activists, however. In 2012, Republican voters supported tax increases on the wealthy while party leaders publicly opposed such legislation (Hershey 2014, 252). However, historically speaking, the official party position reflects the view of the majority of partisans in the electorate. Party positions can go so far as to obfuscate objective conditions, like inflation, that surround economic inequality (Hershey

2014, 253-255). Logan Hershey finds that "on a range of issues, scholars find that awareness of elite-level differences and the presence of elite debate on an issue are the drivers of opinion change in the mass public." He continues, saying that a "major reshuffling of the political environment" could "disrupt the relatively stable party attachments in the electorate." (Hershey 2014, 256) It could be argued that in the past few decades, a rise of extremes within each party indicates a future such reshuffling. This is caused in part by competitive primaries, in which incumbents must become more extreme in order to capture the maximum number of votes.

This shift to extremes manifested in the 2016 presidential election. This election cycle was revolutionary in the rhetoric utilized to mobilize voters. On the Republican side, Donald Trump campaigned on bringing back American jobs from abroad in order to address the sentiments of economic insecurity in the middle class. The Democratic response to rising economic inequality was to address equal pay across genders, the stagnant minimum wage, universal healthcare, and campaign finance reform. Before the 2016 presidential election, the Republican Party was characterized, and perhaps caricatured, for being supported by predominantly rich, white men, but Donald Trump enfranchised low-income voters with many of his stances on social issues. Former Secretary of State Hillary Clinton, on the other hand, disenfranchised many low-income voters with her connections to high-income institutions like Goldman Sachs. This
upended the traditional alignment of low-income voters with the Democratic Party. However, it is improbable that this shift was sudden or a one-time fluke. Rather, it seems more likely that low-income voters have gradually been shifting right, a trend that was overlooked by elites as they continued to favor the voices of their wealthier constituents.

Neither the Republican nor the Democratic parties have made significant efforts to craft policy aimed at a significant redistribution of wealth. Political inaction could be due to extreme party polarization, contributions from wealthy donors who do not support redistributive efforts, or a combination of the two in which donors cause polarized gridlock on this issue (Finseraas 2009; Schlozman, Verba and Brady 2012). Although factors of gender, race, and ethnicity on ideological positions regarding wealth redistribution efforts is outside the scope of this paper, it is important to note that white, wealthy men in Congress are the least likely to support redistribution efforts (Kraus and Callaghan 2014). There appears to be a gap in literature that directly addresses the influence that party elites exert to steer conversation and policy outcomes on wealth redistribution. In light of the historic 2016 presidential election, it is necessary to analyze who steers the conversation on redistributive policies in order to assess whether or not the elite stance is truly representative of the American people.

## Hypothesis and Theoretical Argument

This paper seeks to answer the question: is there a difference in levels of support for wealth redistributive policies between donors and non-donors of similar ideologies? Because donors tend to be wealthier than the average voter, it is logical to assume that they may be more conservative in their beliefs on wealth redistribution. This is because many wealthy donors believe that they stand to lose some of their personal wealth by supporting such policies. Additionally, many donors have never benefitted directly from programs that redistribute wealth and therefore cannot attest to their ability to help. I posit that donors will generally be less likely to favor wealth redistributive policies than non-donors. However, I predict that the differences will vary within each ideological category. For this reason, I propose three hypotheses regarding the three political ideology categories utilized in this study.

## Hypothesis 1: Liberal donors will be less likely to favor wealth

redistributive policies than liberal non-donors.
Because liberal donors are typically wealthier than their non-donor counterparts, I predict that the donors will be less likely to favor wealth redistributive policies. While donors will preach redistributive policies and practices as a part of the larger party platform, they will de facto favor them at lower rates than the rest of their party. While Schlozman, Verba, and Brady found that Democratic elites are driving the party to the left, I predict that this shift will manifest in issues other than wealth redistribution (2012, 259). These findings
have the potential to expose a symbolic liberalism within elites in the Democratic Party that breaks down to more moderate views when individual items in the federal budget are considered.

Hypothesis 2: Moderate donors will be just as likely to favor wealth redistributive policies as moderate non-donors.

As the American political party system becomes more polarized, so too do donors. This leaves very few donors in the middle of the two parties. Moreover, donors often give money to certain candidates and causes because they believe strongly in one side or another. Donors also tend to give money in the hopes of winning, which leads them to candidates from the two established parties that stand a chance at winning national elections. I predict that because many moderates do not have strong feelings regarding wealth redistributive policies, they and the donors in their category will not have significantly different views.

Hypothesis 3: Conservative donors will be less likely to favor wealth redistributive policies than non-donor conservatives.

Conservatives and the Republican Party have positioned themselves staunchly against wealth redistributive policies. While most conservative donors have never benefitted directly from these policies, many of their constituents have. For this reason, I believe that conservative non-donors will be more likely to favor wealth redistributive policies when they are framed as individual programs (for example, Social Security, childcare, welfare) as opposed to a
progressive tax shifting wealth because they are personally familiar with the programs. Conservative donors, on the other hand, have the privilege to take a strict ideological stance against these programs because they do not rely on any of them. Strict conservatism is a "system-justifying ideology, in that it preserves the status quo and provides intellectual and moral justification for maintaining inequality in society." (Jost et al. 2003, 63) I therefore predict that conservative donors will be strong advocates for the status quo when it comes to wealth redistribution policies.

## Data and Methods

The data in this paper comes from the 2012 American National Elections Study (ANES) Time Series Study. The unit of analysis in this study is individuals and the cases are respondents to the survey. 5,916 respondents were surveyed, so $\mathrm{N}=5,916$. The dependent variable for this survey was ideological placement, for which survey respondents were sorted into the following categories: liberal, moderate, and conservative. These categories came from the NES 7-point liberalconservative scale. While this does not measure Democrats, Independents, and Republicans exactly, we can assume that most liberal donors will give to Democrats and conservative donors to Republicans. Measuring ideological positioning is a more helpful variable than party identification because it allows
for an analysis of personal symbolic ideological placement that can then be compared to operational ideology.

There are five distinct independent variables. Because the term "wealth redistribution" is politically charged, a direct question regarding favorability towards relevant policies would most likely illustrate a clear partisan split. Instead, I decided to measure five policies that redistribute wealth in various, concrete ways. These variables include government funding for public schools, welfare, aid to the poor, childcare, and Social Security. In the survey, all respondents were asked whether they thought the federal budget for this program should be increased, decreased, or kept about the same. Each response received a score of zero if the respondent answered "decreased" or "kept about the same." A score of one was applied to respondents that answered "increased." This scoring system is employed because keeping federal aid of these programs the same decreases the real value of the budget with inflation, thereby decreasing the funding over the long term. These five variables were then compiled into a variable henceforth referred to as "social welfare." Each response to the question (should federal spending on [welfare variable] be decreased, kept the same, or increased?) received a score of zero, one, or two, respectively. The social welfare gives respondents a score from zero to ten based on the sum of their answers to the five aforementioned variables, measuring their overall favorability towards wealth redistributive policies.

This study controlled for political donations. If an individual responded yes to giving to individual political candidates, political parties, or both, they were considered political donors. This allows for a deeper analysis that goes beyond partisan differences in support for wealth redistributive policies. Controlling for political donations also allows for a separation of the party elites' ideology from non-donating party members, who may have different stances on the same issues. Identifying any differences will give credit to the argument that party elites manipulate candidates they donate to while the average voter must adapt to the changing party (Hershey 2014, 256).

The analysis will begin with an ordinary least squares (OLS) regression of social welfare in order to analyze the difference between parties and their donors on a general level. From there, each individual contributing variable to the social welfare category (Social Security, welfare, childcare, public school, and aid to the poor) will be analyzed via logistic regressions. One general logistic regression will be done for all six categories of survey respondents: liberal, liberal donor, moderate, moderate donor, conservative, and conservative donor. From there, a logistic regression will be performed to analyze the differences between the donors and non-donors of each specified ideology.

## Results and AnAlysis

General

Table A (see Appendix) illustrates the frequency of liberals, liberal donors, moderates, moderate donors, conservatives, and conservative donors. For each ideological affiliation, there were significantly lower numbers of donors than there were non-donors. Table 1 demonstrates the average social welfare score of each of the six groups. Each survey respondent received a score of zero, one, or two based on their support for a decrease, maintenance of the same, or increase, respectively, in the federal budget for each separate category included in the social welfare scale (public school, welfare, childcare, aid to the poor, and Social Security). A mean score of zero indicates that the group wants to decrease the federal budget in all measured aspects of social welfare and ten means the group wants to increase the budget for all five categories.

Table 1: Mean score of the six categories of respondents on the social welfare scale.

|  | Mean | N | Std. Dev. |
| :--- | :--- | :--- | :--- |
| Liberal | 6.952584 | 1460 | 1.926986 |
| Liberal Donors | 7.118597 | 268 | 2.005978 |
| Moderate | 6.231209 | 932 | 2.088464 |
| Moderate Donors | 5.982533 | 77 | 2.041533 |
| Conservative | 5.117015 | 2209 | 2.434877 |
| Conservative Donor | 3.832257 | 277 | 2.537898 |
| Total | 5.876123 | 5221 | 2.412499 |

Based on Table 1, it is possible to see the polarization in the liberal and conservative donor groups. Liberal donors receive the highest average score of 7.12 while their non-donor counterparts receive a 6.95 . On the other side, conservative donors receive the lowest mean score of 3.83 , which is lower than their non-donor counterparts' score of 5.11. Moderate non-donors received a mean score of 6.23 , while moderate donors averaged a more conservative score of 5.98. When an OLS regression is performed, it is possible to see the significant difference between these means (Table B). Liberals vary significantly from moderates, conservatives, and conservative donors. However, they do not vary significantly from their donor counterparts (Table C). Table D illustrates a lack
of significant difference between moderates and moderate donors. Table E, on the other hand, shows a significant difference between conservatives and conservative donors, with conservative donors scoring lower on the social welfare scale.

## Public School

When broken down into individual categories, the differences between ideologies and the donors that adhere to them becomes clearer. Respondents were asked if they thought federal spending on public schools should be increased, decreased, or kept about the same. If the response was "decreased" or "kept about the same," the answer was assigned a zero. If the response was "increased," the answer was assigned a one. Table $\mathbf{F}$ illustrates the odds ratio of each of the six categories of respondents' views to changes in federal spending on public schools. An odds ratio conveys "by how much the odds of the outcome of interest occurring change for each unit change in the independent variable" (Pollock and Edwards 2018, 168). Table 2 makes clear that liberals (with an odds ratio of 4.115 , as seen in Table F) are much more likely to support increasing the federal budget for public schools than any other group.

Table 2: Mean values of responses to an increase in the federal budget for public schools.

|  | Mean | N | Std. Dev. |
| :--- | :--- | :--- | :--- |
| Liberal | 0.8045086 | 1480 | 0.3967125 |
| Liberal donor | 0.7431517 | 270 | 0.4377072 |
| Moderate | 0.6287281 | 942 | 0.4834016 |
| Moderate donor | 0.6947676 | 84 | 0.4632562 |
| Conservative | 0.5335028 | 2281 | 0.4989857 |
| Conservative donor | 0.2971352 | 286 | 0.4577970 |
| Total | 0.6258352 | 5344 | 0.4839518 |

Moderate donors (with a score of 1.344) are the only other group to favor an increase. Liberal donors, moderates, conservatives, and conservative donors favored either maintenance of the status quo or decrease in the federal budget.

Table G gives the results from a logistic regression that considers all six categories of respondents with "liberal" serving as the intercept. It is clear from the P -values ("Pr(>|t|)" on the table) that there is a significant difference between liberals, moderates, and conservatives. Does this mean that donors do not hold significantly different opinions on federal spending on public schools from liberals? This seems improbable. It more likely means that being a donor does not make an individual hold significantly different opinions than their non-donating
counterparts. In order to ensure that this interpretation was correct, the data from Table G was broken down into three separate logistic regressions (Table H, Table I, Table J) to measure the significance in difference between liberals and liberal donors, moderates and moderate donors, and conservative and conservative donors, respectively. Liberals and liberal donors vary with a p-value of 0.1 (a value just short of conventional levels of statistical significance), with liberal nondonors being less likely to favor an increase in the federal budget for public schools (Table H). Table I illustrates a lack of significant difference between moderates and moderate non-donors. In Table $\mathbf{J}$, it is possible to see that conservatives and conservative donors differ significantly in their opinions on federal spending on public schools. Conservative donors are significantly more likely to favor keeping the federal budget about the same or decreasing it than their non-donor counterparts.

## Welfare

Interestingly, all groups scored below 0.26 (on a scale of zero to one) when asked about an increase in the federal budget for welfare (Table 3). This ranged from a 0.252 from liberal donors to a 0.056 from conservative donors, an illustration of the argument that donors tend to be more extreme in their views than their nondonor counterparts. This implies a general lack of support for welfare spending or dissatisfaction with the program as a whole. Table 3 shows a comparison of the means across the six groups of respondents.

Table 3: Mean values of responses to an increase in the federal budget for welfare.

|  | Mean | N | Std. Dev. |
| :--- | :--- | :--- | :--- |
| Liberal | 0.21592363 | 1473 | 0.4116013 |
| Liberal donor | 0.25187830 | 270 | 0.4348984 |
| Moderate | 0.13303709 | 942 | 0.3397952 |
| Moderate donor | 0.09268711 | 83 | 0.2917518 |
| Conservative | 0.07599589 | 2267 | 0.2650500 |
| Conservative donor | 0.05636867 | 286 | 0.2310367 |
| Total | 0.13294683 | 5321 | 0.3395492 |

The odds ratio for responses to welfare spending illustrate that liberal donors have the most positive response to an increase in spending, although their score is still low (Table K). Similar to the response for federal spending on public schools, Table $\mathbf{L}$ shows a highly significant difference between liberals, moderates, and conservatives when it comes to welfare. Tables $\mathbf{M}, \mathbf{N}$, and $\mathbf{O}$ illustrate that there is no significant difference between liberals and liberal donors, moderates and moderate donors, and conservatives and conservative donors, respectively. However, it is interesting to note that not a single category of donors received a significantly different score than their non-donating counterparts. This could be because of effectiveness in messaging from the parties that represent
liberals and conservatives. More likely, it is indicative of an overall lack of support for the program.

The results from the logistic regression on welfare seem to tie back into the argument posed by Gilens that poor people can either be "deserving" or "undeserving" (1999). The hoops that people must jump through to obtain welfare benefits (for example, drug testing) seem to imply that they are not trusted to use the system properly and therefore "undeserving" of such wealth redistribution efforts. Alternatively, Schneider and Ingram would argue that welfare recipients have been placed in a socially constructed group that is both viewed negatively and given weak political power, leading those with power to not support the program as a whole (1993).

## Aid to the Poor

Similar to the results for welfare spending, liberal donors and conservative donors represented the extremes on the mean scores scale in regard to the federal budget for aid to the poor (Table 4).

Table 4: Mean values of responses to an increase in the federal budget for aid to the poor.

|  | Mean | N Std. Dev. |  |
| :--- | :--- | :--- | :--- |
| Liberal | 0.4953054 | 1480 | 0.5001469 |
| Liberal donor | 0.5307258 | 271 | 0.4999786 |
| Moderate | 0.4008793 | 943 | 0.4903366 |
| Moderate donor | 0.3815680 | 84 | 0.4886966 |
| Conservative | 0.2499604 | 2259 | 0.4330857 |
| Conservative donor | 0.1541460 | 287 | 0.3617192 |
| Total | 0.3561007 | 5325 | 0.4788905 |

The odds ratio for this data indicates that the odds of favoring an increase in spending on the poor for liberal donors was $15 \%$ higher than that of a non-liberal donor, while the odds of a conservative donor were $85 \%$ lower than a nonconservative donor (Table P). Table $\mathbf{Q}$ illustrates significant differences between liberals, moderates, and conservatives. When broken down by ideology, logistic regressions yielded no significant different between liberals and liberal donors, nor between moderates and moderate donors (Table R, Table S). There was a strong significant difference between conservatives and conservative donors (with a P-value below 0.01 ), in which conservative donors were less likely to favor an increase in the federal budget for aid to the poor (Table T).

## Childcare

When asked about federal spending on childcare, the groups again illustrated significant differences in their values. Once again, liberal donors had the highest means score while conservative donors had the lowest mean score (Table 5).

Table 5: Mean values of responses to an increase in the federal budget for childcare.

|  | Mean | N Std. Dev. |  |
| :--- | :--- | :--- | :--- |
| Liberal | 0.4628661 | 1481 | 0.4987876 |
| Liberal donor | 0.5404033 | 270 | 0.4992918 |
| Moderate | 0.3250649 | 944 | 0.4686474 |
| Moderate donor | 0.2300255 | 77 | 0.4236041 |
| Conservative | 0.2494619 | 2261 | 0.4327974 |
| Conservative donor | 0.1507043 | 286 | 0.3583885 |
| Total | 0.3314778 | 5317 | 0.4707887 |

The odds ratio for federal spending on child care reinforces this information, illustrating that liberal donors are the only group that are more likely to favor an increase in spending than not (Table U). Table $\mathbf{V}$ illustrates strong differences between most of the groups. When broken down by ideology, it is shown that liberal donors are more likely to favor an increase in federal spending on
childcare than their non-donor counterparts, although the P-value falls just short of conventional levels of statistical significance (Table W). As with the previous variables, there was no difference between moderates and moderate donors on the issue of child care (Table X). However, there was a highly significant difference between conservatives and conservative donors, with conservative donors being less likely to favor an increase in federal spending on child care (Table $\mathbf{Y}$ ).

Social Security
Interestingly, liberal donors did not score the highest when it came to federal spending on Social Security (Table 6). In fact, liberals were the only group to have an odds ratio above a value of one, meaning that the odds of a liberal respondent supporting an increase in the budget for Social Security were 16.8\% higher than a non-liberal (Table Z). Unlike welfare, Social Security is not a means-tested program and as such, it not typically viewed as a program for the poor. Unlike welfare, the beneficiaries of Social Security are not a part of a negatively viewed social group. Therefore, the program as a whole receives higher favorability ratings.

Table 6: Mean values of responses to an increase in the federal budget for Social Security.

|  | Mean | N | Std. Dev. |
| :--- | :--- | :--- | :--- |
| Liberal | 0.5387621 | 1474 | 0.4986645 |
| Liberal donor | 0.4629038 | 269 | 0.4995501 |
| Moderate | 0.5311211 | 943 | 0.4992955 |
| Moderate donor | 0.4232112 | 84 | 0.4970192 |
| Conservative | 0.4491807 | 2269 | 0.4975204 |
| Conservative donor | 0.2531787 | 284 | 0.4356008 |
| Total | 0.4783288 | 5322 | 0.4995771 |

While most groups responded close to the mean of 0.478 , there was significant variance among ideological categories (Table AA). For liberals, nondonors were slightly less likely to support an increase in the federal budget for Social Security (Table AB). For moderate donors and non-donors, there was no significant difference (Table AC). Conservatives had the largest and most significant differences. Conservative non-donors hovered just slightly below the mean of 0.478 , but conservative donors were significantly less likely to favor an increase in spending on Social Security at 0.253 (Table AD).

## DISCUSSION

When analyzed by variable (public school, welfare, aid to the poor, childcare, and Social Security, it is simple to see that there are significant differences in ideology between liberals, moderates, and conservatives. However, do the differences persist when controlling for political donations? The answer for moderates is a resounding no. There was not a single category in which moderates held significantly different beliefs from their donating counterparts. It is important to note that the number of "moderate donor" responses was always the lowest of the six categories. This could be because donors tend to give money because of strongly held beliefs that generally represent strong, polarized views (Schlozman, Verba, and Brady 2012). This results in the donors picking a party that will champion their strongly held beliefs, which generally leads them to the Democratic or Republican Parties. These results strongly support Hypothesis 2, which predicted that moderate donors would be just as likely to favor wealth redistributive policies as moderate non-donors.

The differences between liberals and liberal donors are more pronounced. There were no significant differences between liberals and liberal donors in regard to support for an increase in federal spending on welfare or aid to the poor. In two categories (public school and Social Security), liberal donors were less likely (with a P-value of 0.1 , which falls short of conventional standards of significance) to favor an increase in federal spending when compared to their non-
donor counterparts. This could be because there are fewer donors than non-donors who directly benefit from these services. Wealthy donors may have gone to or have children in private schools. Additionally, they may not need to rely on Social Security. However, donors were more likely to favor an increase in federal spending on childcare (again at the 0.1 level). This could be because wealthier donors with children would directly benefit from such a service. These findings do not support Hypothesis 1, which predicted that liberal donors would be less likely to favor wealth redistributive policies than liberal non-donors. While this was true for public school and Social Security, it did not hold true across all five categories.

Conservatives, however, had statistically significant differences in levels of support for social welfare spending than their donating counterparts. There was only one category in which conservatives and conservative donors did not have significantly different values: welfare spending. In the categories of federal spending on public school, aid to the poor, childcare, and Social Security, conservative donors were consistently less likely to favor an increase in spending. This strongly supports Hypothesis 3, which posited that conservative donors would be less likely to favor wealth redistributive policies than non-donor conservatives. The implications of these findings are important in understanding how the Republican Party has shifted dramatically right over the past few decades while the Democratic Party has only gradually shifted left (Grossman and

Hopkins 2016). These findings indicate that conservative donors are controlling the direction of the party while non-donors' more moderate views are being drowned out by party elites. This should be important to political scientists in understanding ideological trends on wealth redistributive policies and to elected officials who may not be representing their average constituents' views on wealth redistributive policies.

## Conclusion

This research asked if there was a significant difference between donors and nondonors when it came to support for wealth redistributive policies. By scoring responses to the 2012 ANES Time Series Study for support of increased funding for public schools, welfare, aid to the poor, childcare, and Social Security, it was possible to run logistic regressions to determine whether such a significant difference exists. Because donors tend to be high-income voters, I posited that liberal donors and conservative donors would be less likely to support wealth redistributive policies than their non-donating counterparts due to an attachment to their personal wealth. That being said, because there are few causes that court moderate donors, I hypothesized that moderate donors and non-donors would not differ significantly in their views. I found that moderates and just as likely to favor wealth redistributive policies as moderate non-donors. Liberal donors are more likely to favor an increase in spending for childcare than liberal non-donors,
who are more likely to favor an increase in public school and Social Security spending. In every category but welfare spending, conservative donors were less likely to favor an increase in spending on wealth redistributive policies.

These findings support McCarty, Poole, and Rosenthal's observation that the Republican Party has increased its base by moving away from redistributive policies (2006, 82, 108). This could be because, as Cramer argues, the composition of the poor in the United States results in a lack of connection between them and middle- and high-income voters $(2016,17)$. If middle- and high-income voters are the majority of party activists, and vote-seeking candidates are more responsive to party activists than the median voter, how do activists shape the policy outcomes regarding wealth redistribution (Schlozman, Verba, and Brady 2012, 261)? This paper adds to existing literature by offering evidence that Republican elites want to shape these policies to be far more conservative than even conservative non-donors. Because Republicans are currently in control of the executive and legislative branches, they could use their power to make dramatic slashes to social safety net programs. Just as important is the contribution of further evidence of the class divide within the Republican Party that Democrats could exploit or-without external intervention-could cause a split between conservatives.

Future research should consider utilizing additional dependent variables to federal budget spending on public schools, welfare, aid to the poor, childcare, and

Social Security. Alternatively, a further analysis of the amount of money donated (as opposed to a binary "yes" or "no") and the scaled effects on candidates' positions on wealth redistribution could prove to be illuminating. Holding these findings to data from the 2016 presidential election could establish a trend in wealth redistribution policies as the issues become increasingly salient. The sheer amount of money in politics implies that political elites are out of touch with their poor constituents that would benefit the most from these policies. More importantly, the country as a whole would benefit if concrete steps were made to lift America's lowest classes.

## REFERENCES

Bartels, Larry M. 2008. Unequal Democracy: the Political Economy of the New Gilded Age. Princeton, NJ: Princeton University Press.

Bonica, Adam, Nolan McCarty, Keith T Poole, and Howard Rosenthal. 2013. "Why Hasn’t Democracy Slowed Rising Inequality?" Journal of Economic Perspectives 27(3): 103-24.

Carnes, Nicholas. 2016. "Who Votes for Inequality?" Congress and Policymaking in the $21^{\text {st }}$ Century, Cambridge University Press, 106-133.

Cramer, Katherine Jean. 2016. The Politics of Resentment: Rural Consciousness in Wisconsin and the Rise of Scott Walker. Chicago, IL: University of Chicago Press.

Finseraas, H. 2009. "What If Robin Hood Is a Social Conservative? How the Political Response to Increasing Inequality Depends on Party Polarization." Socio-Economic Review 8(2): 283-306.

Gilens, Martin. 2009. Why Americans Hate Welfare: Race, Media, and the Politics of Antipoverty Policy. Chicago, IL: University of Chicago Press.

Gilens, Martin. 2012. Affluence and Influence: Economic Inequality and Political Power in America. New York, NY: Russell Sage Foundation [u.a.].

Grossmann, Matthew, and David A. Hopkins. 2016. Asymmetric Politics: Ideological Republicans and Group Interest Democrats. New York City, NY: Oxford University Press.

Hacker, Jacob S., and Paul Pierson. 2011. Winner-Take-All Politics How Washington Made the Rich Richer - and Turned Its Back on the Middle Class. New York City, NY: Simon \& Schuster.

Hershey, Marjorie Randon. 2014. U.S. Political Parties. Thousand Oaks, California: CQ Press.

Jost, John T, Sally Blount, Jeffrey Pfeffer, and György Hunyady. 2003. "Fair Market Ideology: Its Cognitive-Motivational Underpinnings." Research in Organizational Behavior 25: 53-91.

Kraus, Michael W., and Bennett Callaghan. 2014. "Noblesse Oblige? Social Status and Economic Inequality Maintenance among Politicians". PLoS ONE 9(1): e85293.

Lupu, Noam, and Jonas Pontusson. 2011. "The Structure of Inequality and the Politics of Redistribution." American Political Science Review 105(02): 31636.

Luttig, M. 2013. "The Structure of Inequality and Americans' Attitudes toward Redistribution." Public Opinion Quarterly 77(3): 811-21.

McCarty, Nolan M., Keith T. Poole, and Howard Rosenthal. 2006. Polarized America: The Dance of Ideology and Unequal Riches. Cambridge, Mass: MIT Press.

Nagel, Jack H., and Rogers M. Smith. 2013. Representation Elections and Beyond. Philadelphia: University of Pennsylvania Press.

Norton, Michael I., and Dan Ariely. 2011. "Building a Better America-One Wealth Quintile at a Time." Perspectives on Psychological Science 6(1): 912.

Pollock, Philip H., and Barry C. Edwards. 2018. An R Companion to Political Analysis. Thousand Oaks, CA: CQ Press.

Schlozman, Kay Lehman, Sidney Verba, and Henry E. Brady. 2012. The Unheavenly Chorus: Unequal Political Voice and the Broken Promise of American Democracy. Princeton; Oxford: Princeton University Press.

Schneider, Anne, and Helen Ingram. 1993. "Social Construction of Target Populations: Implications for Politics and Policy." American Political Science Review87(02): 334-47. http://www.jstor.org/stable/2939044.

Ura, Joseph Daniel, and Christopher R. Ellis. 2012. "Partisan Moods: Polarization and the Dynamics of Mass Party Preferences." The Journal of Politics 74(1): 277-91.

## Appendix

Table A: Frequency of the six categories of respondents.

|  | Frequency | Percent | Valid Percent |
| :--- | :--- | :--- | :--- |
| Liberal | 1525 | 25.778 | 28.362 |
| Liberal Donor | 321 | 5.426 | 5.970 |
| Moderate | 963 | 16.278 | 17.910 |
| Moderate donor | 113 | 1.910 | 2.102 |
| Conservative | 2143 | 36.224 | 39.855 |
| Conservative donor | 312 | 5.274 | 5.802 |
| NA's | 539 | 9.111 |  |
| Total | 5916 | 100.000 | 100.000 |

Social Welfare Tables
Table B: OLS regression results for social welfare by category of respondent.

|  | Estimate | Std. Error | T value | $\operatorname{Pr}(>\|t\|)$ |
| :--- | :--- | :--- | :--- | :--- |
| Intercept (liberal) | 6.95258 | 0.06740 | 103.157 | $<2 \mathrm{e}-16^{* * *}$ |
| Liberal donor | 0.16601 | 0.18056 | 0.919 | 0.358 |
| Moderate | -0.72137 | 0.11229 | -6.424 | $1.44 \mathrm{e}-10^{* * *}$ |
| Moderate donor | -0.24868 | 0.26684 | -0.932 | 0.351 |
| Conservative | -1.83557 | 0.09663 | -18.996 | $<2 \mathrm{e}-16^{* * *}$ |
| Conservative donor | -1.28476 | 0.19820 | -6.482 | $9.88 \mathrm{e}-11^{* * *}$ |
| Significance codes: $0.001^{\text {‘***' } 0.01^{\prime * *}} 0.05^{\prime *} 0.1^{\prime} . ’$ |  |  |  |  |

Table C: OLS regression results for social welfare between liberal non-donors and liberal donors.

|  | Estimate | Std. Error | T value | $\operatorname{Pr}(>\|t\|)$ |
| :--- | :--- | :--- | :--- | :--- |
| Liberal | 6.95258 | 0.06740 | 103.157 | $<2 \mathrm{e}-16^{* * *}$ |
| Liberal donor | 0.16601 | 0.18056 | 0.919 | 0.358 |

Table D: OLS regression results for social welfare between moderate non-donors and moderate donors.

|  | Estimate | Std. Error | T value | $\operatorname{Pr}(>\|t\|)$ |
| :--- | :--- | :--- | :--- | :--- |
| Moderate | 6.23121 | 0.08981 | 69.384 | $<2 \mathrm{e}-16^{* * *}$ |
| Moderate donor | -0.24868 | 0.26684 | -0.932 | 0.351 |

Table E: OLS regression results for social welfare between conservative nondonors and conservative donors.

|  | Estimate | Std. Error | T value | $\operatorname{Pr}(>\|t\|)$ |
| :--- | :--- | :--- | :--- | :--- |
| Conservative | 5.11701 | 0.06924 | 73.901 | $<2 \mathrm{e}-16^{* * *}$ |
| Conservative donor | -1.28476 | 0.19820 | -6.482 | $9.88 \mathrm{e}-11^{* * *}$ |

Public School Tables
Table F: Odds ratio results of responses to an increase in federal spending on public schools.

|  | Odds Ratio | $2.5 \%$ | $97.5 \%$ |
| :--- | :--- | :--- | :--- |
| Intercept (liberal) | 4.115 | 3.469 | 4.882 |
| Liberal donor | 0.703 | 0.475 | 1.040 |
| Moderate | 0.411 | 0.322 | 0.526 |
| Moderate donor | 1.344 | 0.736 | 2.454 |
| Conservative | 0.278 | 0.227 | 0.341 |
| Conservative donor | 0.370 | 0.265 | 0.516 |

Table G: Logistic regression results for responses to an increase in federal spending on public schools.

|  | Estimate | Std. Error | T value | $\operatorname{Pr}(>\|t\|)$ |
| :---: | :---: | :---: | :---: | :---: |
| Intercept (liberal) | 1.4147 | 0.0872 | 16.223 | <2e-16 *** |
| Liberal donor | -0.3523 | 0.1996 | -1.765 | 0.0776 . |
| Moderate | -0.8880 | 0.1256 | -7.071 | 1.74e-12 *** |
| Moderate donor | 0.2957 | 0.3072 | 0.963 | 0.3357 |
| Conservative | -1.2805 | 0.1043 | -12.277 | <2e-16 *** |
| Conservative donor | -0.9952 | 0.1702 | -5.847 | $5.31 \mathrm{e}-09^{* * *}$ |
|  |  |  |  |  |

Table H: Logistic regression results for responses to an increase in federal spending on public schools between liberal non-donors and liberal donors.

|  | Estimate | Std. Error | T value | $\operatorname{Pr}(>\|t\|)$ |
| :--- | :--- | :--- | :--- | :--- |
| Liberal | 1.4147 | 0.0872 | 16.223 | $<2 \mathrm{e}-16^{* * *}$ |
| Liberal Donors | -0.3523 | 0.1996 | -1.765 | 0.0776. |

Table I: Logistic regression results for responses to an increase in federal spending on public schools between moderate non-donors and moderate donors.

|  | Estimate | Std. Error | T value | $\operatorname{Pr}(>\|t\|)$ |
| :--- | :--- | :--- | :--- | :--- |
| Moderates | 0.52676 | 0.09037 | 5.829 | $5.90 \mathrm{e}-09$ *** |
| Moderate Donors | 0.29574 | 0.30717 | 0.963 | 0.335699 |

Table J: Logistic regression results for responses to an increase in federal spending on public schools between conservative non-donors and conservative donors.

|  | Estimate | Std. Error | T value | $\operatorname{Pr}(>\|t\|)$ |
| :--- | :--- | :--- | :--- | :--- |
| Conservatives | 0.13421 | 0.05722 | 2.346 | $0.019030^{*}$ |
| Conservative Donors | -0.99519 | 0.17021 | -5.847 | $5.31 \mathrm{e}-09^{* * *}$ |

Welfare Tables
Table K: Odds ratio results of responses to an increase in federal spending on welfare.

|  | Odds Ratio | $2.5 \%$ | $97.5 \%$ |
| :--- | :--- | :--- | :--- |
| Intercept (liberal) | 0.275 | 0.234 | 0.324 |
| Liberal donor | 1.223 | 0.829 | 1.804 |
| Moderate | 0.557 | 0.411 | 0.755 |
| Moderate donor | 0.666 | 0.277 | 1.600 |
| Conservative | 0.299 | 0.230 | 0.389 |
| Conservative donor | 0.726 | 0.361 | 1.462 |

Table L: Logistic regression results for responses to an increase in federal spending on welfare.

|  | Estimate | Std. Error | T value | $\operatorname{Pr}(>\|t\|)$ |
| :--- | :--- | :--- | :--- | :--- |
| Intercept (liberal) | -1.28958 | 0.08277 | -15.580 | $<2 \mathrm{e}-16^{* * *}$ |
| Liberal Donor | 0.20096 | 0.19843 | 1.013 | 0.311211 |
| Moderate | -0.58479 | 0.15497 | -3.773 | $0.000163^{* * *}$ |
| Moderate Donor | -0.40689 | 0.44731 | -0.910 | 0.363058 |
| Conservative | -1.20846 | 0.13425 | -9.002 | $<2 \mathrm{e}-16^{* * *}$ |
| Conservative Donor | -0.31978 | 0.35679 | -0.896 | 0.370144 |
| Significance codes: $0.001^{\boldsymbol{}^{* * *} 0.0} 0.01^{*^{* *}} 0.05^{\prime *} 0.1^{\ddots}$ |  |  |  |  |

Table M: Logistic regression results for responses to an increase in federal spending on welfare between liberal non-donors and liberal donors.

|  | Estimate | Std. Error | T value | $\operatorname{Pr}(>\|t\|)$ |
| :--- | :--- | :--- | :--- | :--- |
| Liberal | -1.28958 | 0.08277 | -15.580 | $<2 \mathrm{e}-16^{* * *}$ |
| Liberal Donors | 0.20096 | 0.19843 | 1.013 | 0.311211 |

Table N: Logistic regression results for responses to an increase in federal spending on welfare between moderate non-donors and moderate donors.

|  | Estimate | Std. Error | T value | $\operatorname{Pr}(>\|t\|)$ |
| :--- | :--- | :--- | :--- | :--- |
| Moderates | -1.8744 | 0.1310 | -14.306 | $<2 \mathrm{e}-16^{* * *}$ |
| Moderate Donors | -0.4069 | 0.4473 | -0.910 | 0.363058 |

Table O: Logistic regression results for responses to an increase in federal spending on welfare between conservative non-donors and conservative donors.

|  | Estimate | Std. Error | T value | $\operatorname{Pr}(>\|t\|)$ |
| :--- | :--- | :--- | :--- | :--- |
| Conservatives | -2.4980 | 0.1057 | -23.635 | $<2 \mathrm{e}-16^{* * *}$ |
| Conservatives Donors | -0.3198 | 0.3568 | -0.896 | 0.370144 |

Aid to the Poor Tables
Table P: Odds ratio results of responses to an increase in federal spending on aid to the poor.

|  | Odds Ratio | $2.5 \%$ | $97.5 \%$ |
| :--- | :--- | :--- | :--- |
| Intercept (liberal) | 0.981 | 0.855 | 1.127 |
| Liberal donor | 1.152 | 0.828 | 1.603 |
| Moderate | 0.682 | 0.545 | 0.853 |
| Moderate donor | 0.922 | 0.516 | 1.648 |
| Conservative | 0.340 | 0.281 | 0.410 |
| Conservative donor | 0.547 | 0.367 | 0.816 |

Table Q: Logistic regression results for responses to an increase in federal spending on aid to the poor.

|  | Estimate | Std. Error | T value | $\operatorname{Pr}(>\|t\|)$ |
| :---: | :---: | :---: | :---: | :---: |
| Intercept (liberal) | -0.01878 | 0.07045 | -0.267 | 0.789830 |
| Liberal donor | 0.14184 | 0.16841 | 0.842 | 0.399692 |
| Moderate | -0.38302 | 0.11448 | -3.346 | 0.000826 *** |
| Moderate donor | -0.08110 | 0.29641 | -0.274 | 0.784408 |
| Conservative | -1.08004 | 0.09641 | -11.203 | <2e-16 *** |
| Conservative donor | -0.60362 | 0.20400 | -2.959 | 0.003101 ** |
|  |  |  |  |  |

Table R: Logistic regression results for responses to an increase in federal spending on aid to the poor between liberal non-donors and liberal donors.

|  | Estimate | Std. Error | T value | $\operatorname{Pr}(>\mid \mathbf{t})$ |
| :--- | :--- | :--- | :--- | :--- |
| Liberal | -0.01878 | 0.07045 | -0.267 | 0.789830 |
| Liberal donor | 0.14184 | 0.16841 | 0.842 | 0.399692 |

Table S: Logistic regression results for responses to an increase in federal spending on aid to the poor between moderate non-donors and moderate donors.

|  | Estimate | Std. Error | T value | $\operatorname{Pr}(>\|t\|)$ |
| :--- | :--- | :--- | :--- | :--- |
| Moderates | -0.40180 | 0.09023 | -4.453 | $8.63 \mathrm{e}-06 * * *$ |
| Moderate Donors | -0.08110 | 0.29641 | -0.274 | 0.784408 |

Table T: Logistic regression results for responses to an increase in federal spending on aid to the poor between conservative non-donors and conservative donors.

|  | Estimate | Std. Error | T value | $\operatorname{Pr}(>\|t\|)$ |
| :--- | :--- | :--- | :--- | :--- |
| Conservatives | -1.09882 | 0.06581 | -16.696 | $<2 \mathrm{e}-16^{* * *}$ |
| Conservatives Donors | -0.60362 | 0.20400 | -2.959 | $0.0031^{* *}$ |

## Childcare Tables

Table U: Odds ratio results of responses to an increase in federal spending on childcare.

|  | Odds Ratio | $2.5 \%$ | $97.5 \%$ |
| :--- | :--- | :--- | :--- |
| Intercept (liberal) | 0.862 | 0.751 | 0.989 |
| Liberal donor | 1.364 | 0.981 | 1.899 |
| Moderate | 0.559 | 0.445 | 0.702 |
| Moderate donor | 0.620 | 0.345 | 1.115 |
| Conservative | 0.386 | 0.319 | 0.466 |
| Conservative donor | 0.534 | 0.353 | 0.806 |

Table V: Logistic regression results for responses to an increase in federal spending on childcare.

|  | Estimate | Std. Error | T value | $\operatorname{Pr}(>\|t\|)$ |
| :---: | :---: | :---: | :---: | :---: |
| Intercept (liberal) | -0.14881 | 0.07045 | -2.112 | 0.03472 * |
| Liberal donor | 0.31078 | 0.16861 | 1.843 | 0.06535 |
| Moderate | -0.58178 | 0.11636 | -5.000 | 5.92e-07 *** |
| Moderate donor | -0.47758 | 0.29920 | -1.596 | 0.11050 |
| Conservative | -0.95267 | 0.09640 | -9.882 | <2e-16 *** |
| Conservative donor | -0.62760 | 0.21035 | -2.984 | 0.00286 ** |
|  |  |  |  |  |

Table W: Logistic regression results for responses to an increase in federal spending on childcare between liberal non-donors and liberal donors.

|  | Estimate | Std. Error | T value | $\operatorname{Pr}(>\|t\|)$ |
| :--- | :--- | :--- | :--- | :--- |
| Liberal | -0.14881 | 0.07045 | -2.112 | $0.03472 *$ |
| Liberal Donors | 0.31078 | 0.16861 | 1.843 | 0.06535. |

Table X: Logistic regression results for responses to an increase in federal spending on childcare between moderate non-donors and moderate donors.

|  | Estimate | Std. Error | T value | $\operatorname{Pr}(>\|t\|)$ |
| :--- | :--- | :--- | :--- | :--- |
| Moderates | -0.7306 | 0.0926 | -7.889 | $3.66 \mathrm{e}-15^{* * *}$ |
| Moderate Donors | -0.4776 | 0.2992 | -1.596 | 0.11050 |

Table Y: Logistic regression results for responses to an increase in federal spending on childcare between conservative non-donors and conservative donors.

|  | Estimate | Std. Error | T value | $\operatorname{Pr}(>\|t\|)$ |
| :--- | :--- | :--- | :--- | :--- |
| Conservatives | -1.1015 | 0.0658 | -16.740 | $<2 \mathrm{e}-16^{* * *}$ |
| Conservatives Donors | -0.6276 | 0.2104 | -2.984 | $0.00286^{* *}$ |

## Social Security Tables

Table Z: Odds ratio results of responses to an increase in federal spending on

| Social Security. |  |  |  |
| :--- | :--- | :--- | :--- |
|  | Odds Ratio | $2.5 \%$ | $97.5 \%$ |
| Intercept (liberal) | 1.168 | 1.016 | 1.343 |
| Liberal donor | 0.738 | 0.529 | 1.029 |
| Moderate | 0.970 | 0.778 | 1.209 |
| Moderate donor | 0.648 | 0.374 | 1.122 |
| Conservative | 0.698 | 0.583 | 0.835 |
| Conservative donor | 0.416 | 0.295 | 0.585 |

Table AA: Logistic regression results for responses to an increase in federal spending on Social Security.

|  | Estimate | Std. Error | T value | $\operatorname{Pr}(>\|t\|)$ |
| :--- | :--- | :--- | :--- | :--- |
| Intercept (liberal) | 0.15536 | 0.07116 | 2.183 | $0.0291 *$ |
| Liberal donor | -0.30402 | 0.16952 | -1.793 | 0.0730. |
| Moderate | -0.03071 | 0.11236 | -0.273 | 0.7846 |
| Moderate donor | -0.43425 | 0.28049 | -1.548 | 0.1216 |
| Conservative | -0.35934 | 0.09157 | -3.924 | $8.82 \mathrm{e}-05^{* * *}$ |
| Conservative donor | -0.87775 | 0.17416 | -5.040 | $4.81 \mathrm{e}-07^{* * *}$ |
| Significance codes: $0.001^{* * * * '} 0.01^{\prime * *} 0.05^{\prime * \prime} 0.1^{\ddots} . ?$ |  |  |  |  |

Table AB: Logistic regression results for responses to an increase in federal spending on Social Security between liberal non-donors and liberal donors.

|  | Estimate | Std. Error | T value | $\operatorname{Pr}(>\|t\|)$ |
| :--- | :--- | :--- | :--- | :--- |
| Liberal | 0.15536 | 0.07116 | 2.183 | $0.0291^{*}$ |
| Liberal Donors | -0.30402 | .16952 | -1.793 | 0.0730. |

Table AC: Logistic regression results for responses to an increase in federal spending on Social Security between moderate non-donors and moderate donors.

|  | Estimate | Std. Error | T value | $\operatorname{Pr}(>\|t\|)$ |
| :--- | :--- | :--- | :--- | :--- |
| Moderates | 0.12465 | 0.08696 | 1.433 | 0.15181 |
| Moderate Donors | -0.43425 | 0.28049 | -1.548 | 0.12164 |

Table AD: Logistic regression results for responses to an increase in federal spending on Social Security between conservative non-donors and conservative donors.

|  | Estimate | Std. Error | T value | $\operatorname{Pr}(>\|t\|)$ |
| :--- | :--- | :--- | :--- | :--- |
| Conservatives | -0.20398 | 0.05764 | -3.539 | $0.000405 * * *$ |
| Conservatives Donors | -0.87775 | 0.17416 | -5.040 | $4.81 \mathrm{e}-07 * * *$ |

# Factors Affecting Biodiversity Protection in the Mediterranean Basin 

Erica L. Porta \& Jesse E. Shircliff

Erica-Lynn Porta is an Environmental Studies and Political Science major, and Jesse Shircliff is a Sociology major and Environmental Studies minor at Gettysburg College.We would like to acknowledge Dr. Rud Platt from the Gettysburg College Environmental Studies Department for his assistance in developing this project. This work is an example of the student scholarship opportunities undertaken by students of the Environmental Studies Department and supported by the faculty there.

Earth's biodiversity includes all extant species; however, species are not evenly distributed across the planet. Species tend to be clustered in densely populated areas known as "biodiversity hotspots;" species which inhabit only a single area are also termed "endemic," and tend to be highly vulnerable to population-reducing changes in their environment. Biodiversity hotspots are considered priorities for conservation if the area has a high rate of endemism as well as a notable and continual habitat loss (Noss et al., 2015). Preventing biodiversity loss is a complex and multi-level decision-making process about setting priorities and defining clear biodiversity protection areas. Biodiversity loss, or the loss of entire species or sub-populations in an area, can be driven by multiple processes, including land use changes, climate change, and the introduction of invasive species (Plexida et al. 2018).

The Mediterranean Basin is one such hotspot, transecting multiple countries surrounding the Mediterranean Sea, including European, Middle Eastern, and North African countries with different systems of government and cultural perceptions of environmental resources and biodiversity. Furthermore, the basin is one the most species-rich biodiversity hotspots on Earth in terms of endemic vascular plants and has high rates of endemism for amphibians and fish, as well as being an important migration corridor for many bird species (Cuttelod et al., 2008). The hotspot is at high risk for continued biodiversity loss due to
several human-driven factors including population increase and government-level environmental policies (Grainger, 2003).

One method of preserving biodiversity hotspots is the legal designation of protected areas (PAs). PA territories are clearly defined geographic boundaries recognized by law or other official means to limit human uses of the land or marine space, enshrined for long-term conservation goals (International Union for Conservation, 2018). PAs are a commonly-employed policy to achieve conservation goals. However, different habitat types and biomes tend to have markedly different proportions of their total area set aside for conservation regardless of the recommendations outlined in the Convention on Biological Diversity treaty of 1992 (Watson et al., 2014). PA effectiveness for biodiversity protection also tends to vary based on a country's domestic policies and where transnational biodiversity hotspots are managed by multiple countries (Clement, Moore, and Lockwood, 2016); establishing PAs is additionally complicated when species-rich regions across international borders and depend upon the decisions of multiple countries (Clement et al., 2016; Zimmer, Galt, and Buck 2004). As hotspot protection and biodiversity loss are issues that cross political borders, a domestic approach to preserving biodiversity through PAs may not be the most effective method of preventing habitat and species loss in hotspot zones.

Previous studies demonstrate that macro-level social and economic factors affect domestic biodiversity protection. A study examining biodiversity changes
through forest loss found that both increasing per capita gross domestic product (GDP) and population density had notable effects on decreased forest area in regions considered high-priority for biodiversity protection (Morales-Hidalgo, Oswalt and Somanathan, 2015). Therefore, both increasing economic growth and population holds a potentially negative correlation to a country's terrestrial hotspot protection legislation. Furthermore, national democratic policies have irregular influence on environmental protection effectiveness. A broad literature and empirical analysis by Scruggs (2003) suggests that there is no correlation between democratic policies in a country and its environmental protection record. Other research, however, shows that democracy relates to the effectiveness of a country's PAs only when considered in context with the country's (in)equality, where greater total PA area tends to appear in democratic countries that also have low inequality (Kashwan, 2017). This research follows Boyce's inequality hypothesis, which states that different forms of inequality tend to reduce environmental protection and enhance environmental degradation (Boyce, 1994).

The purpose of this study was to examine the economic, demographic, and political characteristics of countries with the most effective domestic terrestrial PAs within the Mediterranean hotspot. Specifically, we examined the relationships between PA effectiveness in each country and GDP per capita, population density, and democracy and equality ratings. The effectiveness of PAs
in each country will be determined by what percent of the total hotspot area in each country was covered by terrestrial PAs.

## METHODS

For this project, we used geographic data from world borders with GDP and population data from 2010, world protected areas, world designated hotspots, and democracy and human development ratings in 2010 (Table 1). First, we identified countries with any portion of their territory covered by the Mediterranean Basin hotspot. Terrestrial PAs of the Mediterranean hotspot were separated from a worldwide data set of marine, terrestrial, and coastal PAs. We selected these target countries based on whether their territory crossed with the boundary of a raster of the hotspot area (cell size: $13000 \mathrm{~m}^{2}$ ). A zonal statistics test returned each country's hotspot coverage in square kilometers $\left(\mathrm{km}^{2}\right)$. We calculated the total area in $\mathrm{km}^{2}$ of the terrestrial PAs that covered the hotspot by country using zonal statistics. We then divided the area of the PAs in the hotspot by the total area of the country within the boundary of the designated hotspot. In order to have perspective on the completeness of our PA effectiveness percent, we also compared PA effectiveness by country to the total area of PAs covering

Table 1. Data Sources

| Name | Who Created | Time valid for | Type | Spatial Unit |
| :--- | :--- | :--- | :--- | :--- |
| World Hotspots | UN Environment <br> Programme, <br> World <br> Conservation <br> Monitoring <br> Center | 2004 | Shapefile | Polygons |
| World <br> Designated <br> Protected Areas | UN Environment <br> Programme, <br> World <br> Conservation <br> Monitoring <br> Center | 2017 | Geodatabase | Polygons |
| Thematic <br> Mapping World <br> Borders | Bjorn Sandvik, <br> Thematic <br> Mapping | 2009 | Shapefile | Polygons |
| Democracy <br> Index | Economist <br> Intelligence Unit | 2010 | Table | Country |
| Human <br> Development <br> Index | United Nations <br> Development <br> Programme | 2010 | Table | Country |

$\mathrm{km}^{2}$. This allowed us to evaluate the percent of hotspot protected and the total area of protected hotspot per country.

We compared the effectiveness value to main three variables: GDP per capita, population density in 2010, and a rating of countries based on democracyequality index (Table 2). For GDP per capita and population density per kilometer, we calculated the values from GDP in 2010, population in millions in

2010, and country area in $\mathrm{km}^{2}$ for target countries. For our third variable, the democracy and inequality index rating, we used the EIU "Democracy Index" and the UN Development Programme's "Human Development Report" (Table 1). Creating a unique Equality Index, countries above the medians of democracy (6.215) and equality (.7465) were

Table 2. Democracy-development index

| $\begin{aligned} & \hline \text { Country } \\ & \text { (ISO3) } \end{aligned}$ | Democrac y Index | Human Developme nt Index | Equality Index (Ratings above/below medians of Democracy and Human Development Index) | $\begin{array}{\|l\|} \hline \text { Country } \\ \text { (ISO3) } \end{array}$ | Democrac y Index | Human <br> Developmen <br> t Index | Equality Index |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ALB | 5.86 | 0.454 | Negative | LBY | 1.94 | 0.756 | Negative |
| DZA | 3.44 | 0.724 | Negative | MLT | 8.28 | 0.826 | Positive |
| BIH | 5.32 | 0.711 | Negative | MCO | no data | no data | Positive |
| BGR | 6.84 | 0.775 | Positive | MNE | 6.27 | 0.792 | Positive |
| CPV | 7.94 | 0.632 | Negative | MAR | 3.79 | 0.612 | Negative |
| HRV | 6.81 | 0.808 | Positive | PSE | 5.44 | 0.669 | Negative |
| CYP | 7.21 | 0.847 | Positive | PRT | 8.02 | 0.818 | Positive |
| EGY | 3.07 | 0.671 | Negative | SRB | 6.33 | 0.757 | Positive |
| FRA | 7.77 | 0.882 | Positive | SVN | 7.69 | 0.876 | Positive |
| GRC | 7.92 | 0.86 | Positive | ESP | 8.16 | 0.867 | Positive |
| IQR | 4 | 0.649 | Negative | SYR | 2.18 | 0.646 | Negative |
| ISR | 7.48 | 0.883 | Positive | MKD | 6.16 | 0.735 | Negative |
| ITA | 7.83 | 0.872 | Positive | TUN | 2.79 | 0.714 | Negative |
| JOR | 3.74 | 0.737 | Negative | TUR | 5.73 | 0.737 | Negative |
| LBN | 5.82 | 0.758 | Negative |  |  |  |  |

designated as positively democratic/equal, and those countries that falling below these two medians were designated negatively democratic with low equality (Table 3).

With the values of each variable per country calculated in our target countries layer, we joined the tables containing the zonal statistics output of PA effectiveness and the three variables and saved the new data. From this layer, we developed three scatterplots-one for each variable of GDP per capita, population density and total PA area-in comparison to the effectiveness of the PA in each country. We also generated Tukey's Five Number Summaries for PA effectiveness, total PA area, GDP per capita, and population density. To compare the efficiency of positively and negatively rated countries, we created a box-andwhisker plot according to PA effectiveness to look for an average correlation

Table 3. Results of Tukey's Five Number Summaries of each variable calculated.

| Tukey's 5 <br> Number <br> Summary | PA <br> effectivene <br> ss (\%) | PA total <br> (km2) in <br> hotspot <br> area | GDP per <br> capita | Populations <br> Density | Positive <br> Democracy <br> -Equality <br> Index <br> Rating | Negative <br> Democracy <br> -Equality <br> Index <br> Rating |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Min | 0 | 0 | 2076 | 3.73 | 0 | 0 |
| Q1 | 0 | 0 | 4094 | 74.62 | 6.9 | 1.25 |
| Median | 6.98 | 0.065 | 6631 | 92.48 | 24.5 | 6.4 |
| Q3 | 28.31 | 0.312 | 22878 | 119.25 | 31.57 | 9.8 |


| Max | 100.0 | 10.1 | 145,541 | 2846.15 | 100 | 41.192 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Upper <br> outliers | 100.0 | 1.287 | 145,541 | 1148.65 | 68.48 | 22.62 |
| 2.184 |  |  |  |  |  |  |
| 2.44 |  |  |  |  |  |  |
| 3.042 |  |  |  |  |  |  |
| 8.892 |  |  |  |  |  |  |
| 10.1 |  | 2846.15 |  |  |  |  |
| Lower <br> outliers | NA | NA | NA | 3.73 | NA | NA |

between the positive and negative democracy/inequality indexes (Figure 1). We calculated average results without outliers.

## RESULTS

Overall, PA effectiveness analysis showed that Greece, Macedonia, Croatia, Morocco, France, Slovenia, and Bulgaria had notably high effective hotspot protected areas within their territories being over $30 \%$ effective and falling above the third quartile (Figure 2). Countries to the south and east of the Mediterranean hotspot showed the lowest PA effectiveness, with Egypt, Libya, Monaco, Palestine, Western Sahara, and Serbia having no PA in their territory at all. PAs in Montenegro, Malta, and Iraq did not overlap with a hotspot area in these countries, and thus also had low PA effectiveness. There was a weak positive relationship between GDP per capita and PA effectiveness on a log scale (Figure 3). Countries above the third quartile for GDP per capita, often larger European countries (Figure 4), were above the median of PA effectiveness
(median PA effectiveness $=6.98 \%$ [Israel], Table 3), with the singular exception of Monaco, which has no PAs in its territory at all (Figure 4). Countries in the median GDP per capita ( $\$ 6,631$, Montenegro, Table 3) also fell mostly above the median PA effectiveness. Bulgaria, with a lower GDP per capita of $\$ 6,459$, is a notable exception, as it holds the highest PA effectiveness with a GDP per capita below the median (Figure 2).

Based on PA effectiveness, there appeared to be an "ideal" population density of 100 people per $\mathrm{km}^{2}$ (Figure 5). The countries with the highest PA effectiveness were clustered around 100 people per $\mathrm{km}^{2}$, and countries of higher and lower population density above and


Figure 1. Comparison of positively rated and negatively rated countries on the democracy-equality index based on percent PA effectiveness.


Figure 2. PA effectiveness in countries of the Mediterranean Basin hotspot
below this mark tended to have lower PA effectiveness the farther the population density was from 100 people per $\mathrm{km}^{2}$ (Figure 5).

Positive and negative democracy/equality index ratings of the test countries are listed in Table 2. Ignoring PA effectiveness outliers for each group, the mean effectiveness of positive countries was calculated to be about $21 \%$, while the effectiveness of negative countries was around $1.3 \%$. The results of the average PA effectiveness according to the positive and negative indexes are compared with a box-plot (Figure 1). Geographically, the countries with high PA effectiveness and positive index rating were predominantly European countries on the northern border of the hotspot, and negative index countries largely
overlapped with low PA effectiveness -rated countries in the south and east of the hotspot (Figure 6).


Figure 3. GDP per capita (in US \$, 2010) compared to PA effectiveness by country in the Mediterranean Basin hotspot.


GDP per capita, 2010

0\%-25\%
25\%-50\%
50\%-75\%
75\%-100\%
Upper Ouliter
Mediterranean Basin Hotspot

African and European countries

Figure 4. Distribution of countries by GDP per capita in the Mediterranean Basin hotspot.


Figure 5. Comparison of population density (2010, people per $\mathrm{m}^{2}$ ) by PA effectiveness by country in the Mediterranean Basin hotspot.

## DISCUSSION

The data demonstrated a weakness in domestic biodiversity responsibility: nations of lesser economic standing and political equality tended to cover less of the Mediterranean Basin hotspot with PAs. Our study reported that countries with more developed economies-such as European countries and countries on the western border of the Mediterranean Basin hotspot—showed a high total area of PAs covering a hotspot, as well as scoring at least above the $75 \%$ percentile in PA effectiveness. We also found that high PA effectiveness was centered on what appeared to be an "ideal" population density for countries of 100 people per square meter. These results seem to contradict previous research, which states that increases in economic growth and population density tended to result in net loss in area of protected forests in high-priority protection areas by country (MoralesHidalgo et al., 2015). Therefore, our data potentially indicate a discrepancy between the designation of protected areas and actual protection of habitats: even as the area of PAs in a country increases, or at least remains higher than average at higher GDP levels, there is still potential damage occurring within those protected areas.

Clement et al. (2016) provides a potential explanation for this discrepancy: in an examination of biodiversity protection in the Alps, cultural perception and support of biodiversity protection was the main determining factor of a PA successfully maintaining biodiversity and habitat. Therefore, total area of protection, GDP, or population density must be considered in tandem with the
motivation of management and the community supporting hotspots in the country overall. Our data supports the argument that democracy must be accompanied with high equality ratings. Previous research disagrees as to whether a democratic government structure alone indicated a country's effectiveness in protecting environmental resources, with a recent study suggesting that democracy is only significant when a country is a democracy with high equality (Kashwan, 2017). Our study shows that a highly democratic and equal country provides more effective PA protection on average, with the exception of the outliers: Morocco and the former Yugoslav Republic of Macedonia (Figure 6). The spatial distribution of more effective PA protection follows this trend (Figure 6). Our study thus demonstrates that a country's environmental protection effectiveness has a notable relation to both governing style and equality of a country.

However, evaluating countries based simply on total area $\left(\mathrm{km}^{2}\right)$ of PAs covering a hotspot produced different results than the evaluation based on percent effectiveness. Based on total area, western and European countries feature prominently, with Morocco, Portugal, Spain, France, Italy, and Greece as upper outliers in this category (Figure 7). While these countries had scores closer to the median in PA effectiveness (Figure 1), they are all above the third quartile in total domestic PA area $\left(\mathrm{km}^{2}\right)$ covering hotspot area (Figure 7). Generally, there is a weak positive relationship between total PA area on a hotspot and PA
effectiveness (Figure 8). However, countries with extremely low total hotspot area

also tended to fall into the higher
Figure 6. Distribution of countries in the Mediterranean Basin hotspot by PA effectiveness (\%) and democracy-equality index rating.
percentiles of PA effectiveness (Figure 1). This discrepancy between highest effectiveness and highest total area of PAs of hotspot underscores incompleteness for domestic PA efficiency. Dividing by the total area of the hotspot in the country to create the percent effectiveness rating favored countries such as Bulgaria, which only had a small amount of hotspot in its territory and happened to be protecting that small area with $0.013 \mathrm{~km}^{2}$ of PAs, and disadvantaged larger countries that had more territory covered by the hotspot as well as a total of more $\mathrm{km}^{2}$ of domestic PAs.

The economic development of countries towards greater parity with their neighbors should assist transnational biodiversity protection in light of international standard and policy limitations. Whereas Watson et. al (2014) advocates for individual nations to double-down PA efforts, the inefficiency of domestic PAs for negative index countries suggests that international treaties and agreements cannot overcome regional or national differences in socioeconomic status. Zimmerer et al. (2004) noted the inefficacy of international institutions such as the United


Figure 7. Total PA area $\left(\mathrm{km}^{2}\right)$ by country in the Mediterranean Basin hotspot.

Nations, the International Union for the Conservation of Nature (IUCN), and the World Wildlife Fund. These organizations launched new conservation initiatives through 1980-2000, resulting in a boom in global PA coverage. However, the effectiveness of these PAs were predominantly determined by national and even
regional differences in conservation priorities, such as development and management style.

While international conservation institutions have low efficacy, economicdevelopment institutions potentially re-prioritize conservation policies for developed and developing countries alike (Watson et. al, 2014; Clement et. al, 2016). The economic and social factors determined to influence domestic PA effectiveness are driven by international commerce and trade have been highlighted by other studies (Zimmerer et al. 2004). Thus, economic development institutions could improve both political and environmental agency and protections by enhancing popular financial security. If environmental activists have acknowledged the interconnectedness of the global environment, their solutions must take an international approach that considers economic and social inequality between nations a barrier to biodiversity protection that transcends state boundaries.

A few data inconsistencies are worth noting for PA size. Our WDPA shapefile was created from hotspot data that was self-reported by each individual country, and manipulation of PA size by regimes with incentives for top-down manipulation of environmental protection is possible. A second source of error in relation to PA effectiveness is that our Mediterranean hotspot shapefile is dated to 2004. It is possible that hotspot size has changed between 2004 and 2018. Finally,

GDP and population data also dated to 2010, which carries the same source of time-sensitive inaccuracy.

Future research should test the relationships between democracy, equality, and environmental protection supported in this study through other means. A larger-if not global-sample can provide a more robust examination of the inequality hypothesis supported by this study. Also, Clement et al. (2016) identified that the culture surrounding PA management was a notable determinant of PAs' successes in biodiversity protection. The positive relationship between democracy and high equality could be related to research conducted by Clement et al.


Figure 8. PA total area $\left(\mathrm{km}^{2}\right)$ compared to PA effectiveness in protected hotspot territory by country in the Mediterranean Basin hotspot.
(2016) who noted that cultural support increases PA effectiveness, which would support Boyce's inequality and biodiversity protection hypothesis (1994). Alternatively, a grassroots analysis of PA management techniques could account for the discrepancy in our findings for higher GDP per capita countries and the established body of evidence on PA effectiveness and economic and population growth, as well as the macro-level factors determining cultural and management differences (Zimmerer et al., 2004). Therefore, future investigation should establish an index of public support for biodiversity conservation in comparison to scales of PA effectiveness and total PA area in a country to determine the influence of public opinion on biodiversity legislation and vice-versa.

## References

Boyce, James, K. 1994. "Inequality as a Cause of Environmental Degradation."
Ecology Economics 11:169-178.
Clement, Sarah, Susan A. Moore, and Michael Lockwood. 2016. "Letting the Managers Manage: Analyzing Capacity to Conserve Biodiversity in a Cross-Border Protected Area Network." Ecology and Society 21(3):39. Cuttelod, Annabelle, Nieves García, Dania Abdul Malak, Helen Temple, and Vineet Katariya. 2008. The Mediterranean: A Biodiversity Hotspot Under Threat. In: J.-C. Vié, C. Hilton-Taylor and S.N. Stuart (eds). The 2008 Review of The IUCN Red List of Threatened Species. IUCN Gland, Switzerland.

Grainger, John. 2003. "'People are Living in the Park': Linking Biodiversity Conservation to Community Development in the Middle East Region: A Case Study from the Saint Katherine Protectorate, Southern Sinai." Journal of Arid Environments 54:29-38.

International Union for Conservation of Nature. 2018. "Protected Areas." IUCN. Retrieved August 17, 2018 (https://www.iucn.org/theme/protectedareas/about)

Jaidan, Nizar, Laziz E. Amraou, Jean-Luc Attie, Philippe Ricaud, and François Dulac. 2018. "Future Changes in Surface Ozone Over the Mediterranean Basin in the Framework of the Chemistry-Aerosol Mediterranean

Experiment (ChArMEx)." Atmosphere, Chemistry, and Physics 18:93519373.

Kashwan, Prakash. 2017. "Analysis: Inequality, Democracy, and the Environment: A Cross-National Analysis." Ecological Economics, 131: 139-151.

Morales-Hildalgo, David, Sonja Oswalt and E. Somanathan. 2015. "Status and Trends in Global Primary Forest, Protected Areas, and Areas Designated for Conservation of Biodiversity from the Global Forest Resources Assessment 2015." Forest Ecology and Management 352:68-77.

Noss, Reed, F., William J. Platt, Bruce A. Sorrie, Alan S. Weakley, D. Bruce Means, Jennifer Costanza, and Robert K. Peet. 2015. "How Global Biodiversity Hotspots May Go Unrecognized: Lessons from the North American Coastal Plain." Diversity Distributions 21: 236-244.

Plexida, Sofia, Alexandra Solomou, Kostas Poirazidiz, and Athanasios Sfougraris. (2018). "Factors Affecting Biodiversity in Agrosylvopastoral Ecosystems within the Mediterranean Basin: A Systematic Review" Journal of Arid Environments 151: 125-133.

Scruggs, Lyle. 2003. Democracy and Environmental Protection: An Empirical Analysis (Rep.). Midwest Political Science Association 67th Annual National Conference.

Watson, James, E. M., Nigel Dudley, Daniel B. Sega, and Marc Hockings. 2014.
"The Performance and Potential of Protected Areas." Nature 515:67-73.
Zimmerer, Karl S., Ryan E. Galt and Margaret V. Buck. 2004. "Globalization and Multi-Spatial Trends in the Coverage of Protected-Area Conservation (1980-2000)." Ambio 33(8):520-529.

# Latina Women in Adams County, Pennsylvania: <br> Access to Mental Health Care for Depression 

Alison Lauro

The goal of this research was to address a serious mental health concern in Adams County in hopes of helping to find a community solution. Professor Nathalie Lebon and community health educator Yeimi Gagliardi dedicated considerable time and assistance with research and data collection.

Healthy Adams County, a non-profit organization in Gettysburg, Pennsylvania, conducts a community health assessment every three years, entitled the Community Health Needs Assessment of Adams County. In 2015, it revealed that depression is a major health concern among adults, and this was the impetus for my survey. The focus of this research was narrowed to women of Latin American background, since research has shown that Latinos, especially Latina women, are more vulnerable to depression than other racial/ethnic groups (Cabassa, Lester, \& Zayas 2007; Fox \& Kim-Godwin 2011; Molina \& Alcántara 2013). Living in poverty, being uninsured, and having limited access to transportation have been cited as barrier to accessing mental health care, and these barriers are more pronounced for immigrant women and undocumented women (Marshall, Urrutia-Rojas, Mas, \& Coggin 2005; Nadeem et al. 2007; Acury \& Quandt 2007; Martinez-Tyson, Arriola, \& Corvin 2016). Besides a lack of material resources that would expand access to healthcare, stigmatization of mental illness in some Latino communities also exists. Attitudes towards mental illness and its treatment may contribute to the underutilization of mental health services among Latino communities. Certain attitudes, such as viewing mental illness as a somatic problem, as opposed to a chemical imbalance in the brain, and not considering psychiatric help as a resource, may cause Hispanics to not look into mental health treatment (Cabassa et al. 2007).

Wellspan Community Health Improvement, located in Gettysburg, offers an insurance-type program for people living in poverty, which addresses some of the hurdles Latina women face. This program makes important strides in addressing the issues many low-income people face regarding healthcare, such as living in poverty or being uninsured. However, the program does not have a bilingual health professional, which significantly limits the number of Spanishspeaking women who can benefit from these services, particularly immigrant and undocumented Latina women. Wellspan Community Health and the Latino Services Task Force of Adams County (LSTF) are looking to widen the services available to the underserved Latino community in Adams County, and the information gathered from this survey will be used to better understand what obstacles the community faces in accessing mental health care.

It is important to note that, although I tried to access a wide range of women in the Gettysburg Community, I believe that most participants in this survey may be more aware of services for mental health issues than other migrant workers because they already have access to an existing network of people and programs. All of the surveys were collected at English as a second language classes, Sunday Swimming, and the Wellspan Community Health Improvement, places that a person goes when they already have established roots in the community. These roots give access to other women and immigrant and Latina families, who can help provide information and guidance to them, as well as
resources from the college and town that an individual outside of these programs would likely not be privy to. This likely shaped the results of my survey.

The barriers Latina women may face when accessing mental health care are numerous, partially due to their gender and ethnic minority status, and are compounded by class and migratory status. I found that, among this sample of Latina women, low wages, lack of insurance, limited transportation, and a lack of Spanish-speaking health professionals limit women's access to mental health care. I believe some of these problems can be remedied, and I make recommendations for Wellspan and the Latino Services Task Force later in this paper.

## MENTAL HEALTH \& LATINA WOMEN

The Adams County Community Health Needs Assessment (CHNA) shows that depression affects adults of all ethnicities living in Adams County, but Latina women are the focus of this paper due to their increased vulnerability to depression and decreased access to resources. Women of all races face an increased risk to depression compared to men; one study showed that women in every age group are affected by depression almost twice as much as men (Pulgar et al. 2016). Hispanic men, and especially Hispanic women, are less likely than Whites to receive mental health care (Heilemann, Pieters, \& Dornig, 2016; Fox \& Kim-Godwin 2011). Research focusing on Mexican Americans has shown large cultural barriers that may contribute to low quality and limited access to mental
health care, such as low education levels, poverty, and discrimination (ValenciaGarcia, Simoni, Alegría, \& Takeuchi 2012). This is significant for Adams County, where the most common country of origin, outside of the U.S., is Mexico (Data USA).

Latinas, as both women and ethnic minorities, may live with few or fragile resources and face ethnic or immigrant related structural barriers, such as language or cultural differences, which affect access to health care (ValenciaGarcia et al. 2012). Latinas are at greater risk for, and experience higher rates of, anxiety and depression (Valencia-Garcia et al. 2012). However, Latina women are often unable to receive proper care, despite evidence showing that they are in need of services to combat depressive symptoms. One study by Heilemann et al. (2016) examined over 9,000 adult Latina women and found that $68 \%$ of those who met the criteria for a past year major depressive episode went undiagnosed. There is no single reason why Latina women, including immigrant and undocumented Latinas, are not able to access high quality care, but the following sections will demonstrate the most significant barriers that affect Latina women's access to these resources.

Underutilization of Health Services:
Research shows that Latinos in the U.S. underutilize healthcare services; this is true even when they have insurance and equal access to care (Nadeem et al., 2007, p. 1548; Hochhausen, Lee, \& Perry 2011). However, equal access is not
the norm: for example, U.S.-born white women are much more likely to be in treatment for mental health issues than women from minority groups (Nadeem et al. 2007). One study found that only $8.8 \%$ of Mexican-Americans (mainly those born in the United States) utilized mental health services, and those born outside of the U.S. showed only a $4.6 \%$ rate of usage over a 12-month period (Vega, Kolody, Aguilar-Gaxiola, \& Catalano 1999:932-33). Indeed, Hochhausen et al. (2011) reported in their research that, among women who felt a need for mental health services, $67 \%$ of white women compared to $50 \%$ of Latina women sought out those services (2011:15). Although this low-level of utilization may occur even for those with access to health insurance, there are instrumental barriers in place that influence why Latinas are not seeking or finding mental health care services, including lack of insurance, documentation status, and stigma, which will be discussed in the following sections.

## Health Insurance \& Income

Latina women often do not utilize services because they lack insurance or are unable to pay for mental health care. Marshall et al. (2005) argues that people with the worst health status are typically those that have the highest poverty rates and the least education (2005:918). In one study, researchers investigated Latino subgroups: Mexicans and Colombians, compared to other Latinos, were more likely to mention economic barriers as a reason people do not use programs for mental health. In the study, one Mexican woman said, "many people don't use
those programs for mental help, maybe because they feel that are not going to have money to pay for psychological treatment'" (Martinez-Tyson, Arriola, \& Corvin, 2016:1294).

Of all racial and ethnic groups in the United States, Latinos are the least likely to be insured and the least likely to use health care services for preventative care (Valencia-Garcia et al. 2012). Alegría et al. (2007) found that only about $19 \%$ of uninsured Latinos used any type of health service, even those with a psychiatric disorder; those who had insurance used services at $38.6 \%$, for those with public insurance, and $51.6 \%$ for those with private insurance, which shows a significant difference between utilization of services for those with and without insurance (Alegría et al., 2007:81-82). Thus, one's socioeconomic status is a major factor in who receives help for mental illness.

In order to combat some of the difficulties that comes with living in poverty or being uninsured, Wellspan offers a health insurance-type program for those living below the federal poverty line. This program gives people a card that they can use for health services even if they do not have documentation; they bring the card to their doctor's office, pay $\$ 10$, and can access various healthcare services, including mental health. This program certainly helps eradicate major barriers to healthcare access for Latina women living in poverty and Latina women without legal documents. However, there are no Spanish-speaking mental health professionals at Wellspan, so even though economic and legal barriers have
been eliminated, most immigrant women will not be able to use this service for mental health purposes. Finally, according to Gagliardi (2018) about 209 Latina women over the age of 18 use this insurance program. The program expires every six months to one year and card holders have to reapply frequently (Gagliardi 2018) . Yeimi Gagliardi, an employee of Wellspan Community Health Improvement, is unsure how many people know about this insurance, but she states that there are likely more than 209 women using the program; however, since they must reapply so frequently, their card might have lapsed and they would not be in the system as a card holder.

## Migratory Status and Language:

One of the most significant factors that can affect a Latina woman's access to mental health care is whether she was born in the U.S. Immigrant status has shown to decrease one's access to health care (Marshall et al. 2005) and foreign born Latinas are less likely than U.S.-born Latinas to receive mental health care (Nadeem et al. 2007). Immigrant Latinos are often employed in jobs with low pay, and the money they do earn may be sent to family members in their home country (Hiott, Grzywacz, Arcury, \& Quandt 2006). Latina immigrants, compared with U.S.-born Latinas, typically have fewer years of education, earn lower wages, and are more likely to be concentrated in agricultural, manufacturing, and service industries, which results in immigrant Latinas living in poverty in higher numbers than U.S.-born Latinas (Molina \& Alcántara 2013). As previously
shown, being impoverished means one has less access to insurance, and thus to healthcare of any kind.

The lack of bilingual mental health professionals presents a major difficulty for monolingual Latina women. Studies show that people living in the US who have limited English-language skills are less likely to seek and receive needed mental health services (Alegría et al. 2007). Additionally, not all Latino people speak Spanish; farmworkers, for instance, speak a variety of indigenous languages, such as Mixtexo, Tarasco, or Quiche; thus, Spanish is an unfamiliar language and mental health professionals fluent in Spanish would not be helpful (Satcher, 2001:141). Martinez-Tyson et al. (2016) noted that many Latinos, regardless of their English proficiency, still prefer to talk about and receive info about health issues in their native language (2016:1298). For mental health issues, the ability to communicate is critical, in order to give voice to the anxieties and stressors in one's life. Without a someone who can speak her language, it would be impossible for a woman to communicate these things and get medication or receive counseling.

## Farmworkers in Adams County

Adams County, with a population of about 100,000 people, is a relatively small county in the state of Pennsylvania. However, it is one of the counties with the highest number of migrant farmworkers. Seasonal farmworkers live in one location during the year, whereas migrant workers migrate from one place to
another to earn a living in agriculture (Hovey \& Magaña 2000). Migrant farmworkers establish a temporary home, and their migration may be from farm to farm, within a state, between states, or internationally (Arcury \& Quandt 2007:346).

Most of these farmworkers are Latino: Mexican, Puerto Rican, Cuban, and others from South and Central America (with others from Jamaica and Haiti among other countries.) Ninety-five percent of migrant and seasonal farmworkers are foreign born. Each year, about 45,000 to 50,000 migrant and seasonal farmworkers are employed in Pennsylvania to harvest crops. Adams County has more migrant farmers compared to other counties with similar numbers of agricultural workers (Cason \& Snyder 2004). Although men more commonly work in agriculture, about $25 \%$ of agricultural workers are women (Pulgar et al. 2016: 498).

Farm workers are not high-wage earners. Although the median income in Adams County is about $\$ 60,000$ per year, for the general population, (Data USA), about sixty-one percent of the state's hired farmers live in poverty. Farm workers often live in rented houses, apartments, or condominiums. Others live with extended family members or in a one-family residence. In a study by Cason \& Snyder (2004) that analyzed farmworkers in Adams and Chester counties, 45 Hispanic people were involved in focus groups. The average number of people living in the same household was 5.3. 80 percent had eight years or less of
education, and about half had an income of $\$ 15,001-\$ 25,000$, which is below the federal poverty level. The study participants were less educated and had lower incomes than the general population of the two counties studied. In this study, the focus group participants mentioned several issues that affected a large number of them: diabetes, poor dental health, heart disease, being overweight, and female/teen depression. It is believed that some migrant women and teens were experiencing depression due to a lack of community interaction in their new communities. This was especially difficult since many came from small villages in Mexico where family and neighbors are part of an extended family network. Access to basic health services was noted as problematic by some participants (Cason \& Snyder 2004).

These researchers noted that service providers in the area found that many types of services are available, but access to these services was difficult for farmworkers. The main barriers they cited were language differences, lack of finances or insurance coverage, and lack of transportation. National data shows that almost 60 percent of Latino migrant farm workers have employers that pay for work injuries but no type of formal insurance. There are very low levels of insured migrant workers, based on this study: only 12 percent of farmworkers, 6 percent of their spouses, and 13 percent of their children have some form of health insurance (Cason \& Snyder 2004: 13). Workers' children may be eligible for the Child Health Insurance Program (CHIP), which gives benefits to families
who cannot afford health insurance; but, many immigrants are not enrolled due to the belief that all immigrants are barred from publicly funded health care (Cason \& Snyder 2004:13). Medicaid, on the other hand, is a form of public assistance for low-income families that is not available to undocumented people. Service workers also noted other barriers to care, such as literacy, which goes along with the limited education many agricultural workers have, in addition to fear of deportation for undocumented workers; the inability to take time off of work; and low service use by migrant Latino farm workers in general (2004:14).

## Stigmatization of Mental Illness

Thus far, the focus of this paper has been on material barriers that keep Latina women from receiving mental health care, such as low wages or lack of insurance. However, cultural factors such as stigma against mental health and support for these issues are important factors that may prevent women from seeking needed help. Latina, black, and immigrant women are more likely to report concerns about stigma related to depression treatment, and some Latinos report that taking anti-depressants is a sign of severe depression, being "crazy" or illicit drug use (Interian et al. 2010). Interian, Martinez, Guarnaccia, Vega, \& Escobar (2007) found that taking antidepressants was seen as a sign of severe illness. In this study, one participant, upon being told she needed anti-depressants, said, "‘Bueno, tan grande es mi problema?" (Well, so my problem is that big?)"" (Interian et al. 2007: 1591). Some women reported viewing anti-depressants as
something only "crazy people" need or for those unable to deal with life's problems (Interian et al. 2007).

## METHODOLOGY

As mentioned earlier, depression is a common and significant health issue in Adams County. I chose to conduct a survey which addressed what barriers exist for Latina women when accessing mental health care. I worked closely with Yeimi Gagliardi, an employee at WellSpan Community Health Improvement and the co-chair of the Latino Services Task Force (LSTF) of Adams County. I conducted this research in order to supply both Wellspan and the LSTF with information about the specific mental health concerns of the Latino community in Adams County. I attached my survey, in English and Spanish, as annex.

I chose to work under a participatory action framework, which prioritizes working with community members to understand the needs of the community from their perspective. Working with members of the community the researcher is studying is a way of engaging with local knowledge. The researcher should engage with "insiders" as well as expert or other researchers in order to construct knowledge together (Naples \& Gurr 2014). However, my framework is limited because I did not work directly with Latina women in the community. Instead, I worked with Yeimi Gagliardi, who served as an "insider" because she works closely with the Latino community and is bilingual: she provided local
knowledge. I also utilized Kimberlé Crenshaw's theory of intersectionality. I chose this framework because it allows for the examination of multiple identities and the interactions between them. This is particularly important for immigrant Latina women who may occupy multiple marginalize identities, as ethnic minorities, women, undocumented residents, and members of the working-class or working poor. To avoid monolithic understandings of these women and their various identities, it is important to understand how all of these identities affect their lived experiences and contribute to different advantages and disadvantages. Ultimately, my research was able to reveal the most significant challenges for the most vulnerable members of this community.

The survey was administered in person and online. However, I did not receive any online responses from women. I used Survey Monkey to analyze my data. This site allowed me to analyze descriptive statistics, such as how many women answered each question and how they answered. Using upper-level statistics is preferable because it allows one to see how each factor influences another factor, but I do not have enough training in statistics to do this. Luckily, if the LSTF chooses to, they can export the data I have collected to a statistic program and hire another student to analyze the statistics more completely. In order to get in-person survey results, I distributed a 34-question pen and paper survey at various educational and recreational programs that are offered for people of Latin American descent in Adams County. Surveys were distributed at

English as a second language classes, offered twice a week at Gettysburg College, and Sunday swimming, a program that teaches children how to swim.

## Limitations

This research project had several limitations. Due to time constraints and a lengthy process to get certification from Institutional Review Board, I was unable to pre-test my survey. A pre-test would have identified any issues with the phrasing of certain questions. As a result, one question had to be eliminated, asking participants whether they were seasonal or migratory agricultural workers. I asked this question to identify differences between migrant farmworkers and farmworkers who live in the area year round. However, after collecting many surveys, a participant informed me that the question did not make sense to her and other women near her who were taking the survey. Thus, all survey responses to this question were discarded.

Like with any survey, a limitation is that participants can skip any question they want. the responses to questions they did answer were valuable, but the surveys were incomplete, and thus certain questions had more data to draw from than others. This may be due to the sensitive nature of the survey, which asked participants personal information which they may have felt uncomfortable answering, even though the survey was anonymous.

Finally, my identities as a white Gettysburg College student and a Native English speaker likely positioned me as an outsider. I was able to limit this
somewhat by speaking Spanish to these women (although I am not fluent) and by referencing my work with Wellspan and Yeimi Gagliardi, a place and person known to some of these women. Nonetheless, my position as outsider possibly limited what people were willing to share on the survey.

## DATA ANALYSIS

## Demographics

52 women participated in this research survey. One response was omitted because the woman did not identify as Latina. No responses were collected online. 12 responses were collected from English as a Second Language classes; 20 responses were collected from Sunday Swimming classes, and 20 responses were collected by Yeimi Gagliardi through her work at Wellspan. Countries of origin include: Mexico (34), Puerto Rico (4), Colombia (2), Guatemala (1) and the United States (5), for a total of 46 respondents. This supported data showing that Mexico is the most popular country of origin of foreign born people in Adams County (Data USA).

## Language Barriers

Most of the participants identified their preferred language as Spanish. 46 women chose Spanish as their preferred language and 4 women chose English; one chose both English and Spanish. This was not a surprise considering the
research showing that Spanish is the most commonly spoken language in Adams County, next to English (Data USA). Another question asked women to evaluate their level of English language skills, and the vast majority knew a little bit of English or none at all (see Annex 3, tables 2 and 19).

A language barrier can present numerous consequences for women when accessing mental health care. A major issue is the lack of mental health providers who speak Spanish. This concern was brought up several times throughout the survey. For instance, question 16 asked women why they had stopped going to a doctor, if that was the case. One woman specifically cited a lack of providers that speak her language as a reason she stopped seeing a doctor (see Annex 3, table 16). One question asked participants why they had not seen a trained mental health professional, if they had considered it. Six women identified a lack of providers that speak their native language as an issue (see Annex 3, table 22).

This lack of Spanish-speaking mental health professionals has been identified by researchers. Data indicates that Latinos comprise a tiny percentage of practicing psychologists; for instance, in a survey of 596 psychologists with active practices, only $1 \%$ of the randomly selected group identified as Latino, whereas $96 \%$ identified as white (Satcher 2001:141). Another survey discovered that there are 29 Latino mental health professionals for every 100,000 Latinos in the U.S. population, whereas for whites, the rate was 173 for every 100,000 white people. However, these surveys were not looking at language skills specifically,
only ethnicity, and being Latino does not mean one is fluent in Spanish. There is no guarantee all 29 of these professionals can speak Spanish, so the situation for immigrants appears even bleaker in terms of language barriers.

Furthermore, Wellspan offers an inexpensive insurance-type program for people in the area, as previously noted. This program includes services for mental health. However, there is no Spanish speaking therapist, and thus most participants in this survey would not be able to attend any sessions or receive as much help as they could if they were able to speak in their native language.

Additionally, when respondents were asked their language preference, an "other" option was included. This was to take into account Latino women who speak a non-Spanish/English language, such as an indigenous language. As mentioned earlier, research shows that some farmworkers from parts of Mexico may speak several different indigenous languages (Satcher, 2001:141). However, it was unsurprising that no participants spoke these languages. First of all, the survey itself was in Spanish, so they would not have been able to answer the question if they did not understand Spanish. Also, the Latino community members who go to programs such as ESL classes and Sunday Swimming are generally a Spanish-speaking group, and those who do not speak Spanish would probably find it hard to communicate with other people going to these programs, or even find information about their existence.

Discrimination may also come up for monolingual Latina women. I crosstabulated question 20, which asked if participants had felt discriminated against while in the United States, with question 19, asking about participants level of English language skills (see Annex 3, table A). Of the women who had felt discriminated against, six cannot speak English and two can. Meanwhile, for those who had not felt discriminated against, three cannot speak English, and four women can. Thus, more women who cannot speak English have experienced discrimination than women who can speak English. Thus, there was a connection between the inability to speak English and feelings of discrimination, as well as the ability to speak English and not experiencing discrimination.

| Question 20: <br> Have you felt <br> discriminated <br> against? | Q: 19 <br> I don't <br> know <br> English <br> (in \%) | I know a <br> little bit of <br> English <br> (in \%) | I know <br> English <br> very <br> well <br> (in \%) | I know <br> enough <br> to get <br> around <br> (in \%) | Skip <br> this <br> question <br> (in \%) | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Yes | 31.6 | 57.9 | 10.5 | 0.00 | 12.5 | $\mathrm{n}=19$ |
| No | 15.7 | 57.8 | 21.0 | 5.2 | 0.0 | $\mathrm{n}=19$ |
| Unsure | 37.5 | 37.5 | 25.0 | 0.0 | 0.0 | $\mathrm{n}=18$ |
| Total \# <br> respondents | $\mathrm{n}=12$ | $\mathrm{n}=25$ | $\mathrm{n}=8$ | $\mathrm{n}=1$ | $\mathrm{n}=0$ | $\mathrm{n}=46$ |

## Transportation

Lack of transportation has been noted as a barrier to accessing health care (Martinez-Tyson et al., 2016), especially among those with a low socioeconomic status (Syed, Gerber, \& Sharp, 2013). However, even when controlling for socioeconomic status, whites had higher rates of transportation use for health care access than ethnic minorities (2013:989). Further, Syed et al. (2016) noted that people in rural areas, compared with urban ones, face more barriers to transportation access. Rural patients had a higher burden of travel for health care when measured by distance and time (2016:987). When looking at a large secondary analysis of data, Syed et al. (2016) noted that " 3.6 million people do not obtain medical care due to transportation barriers [in the United States]. These individuals were more likely to be older, poorer, less educated, female, and from an ethnic minority group" (2016:987).

As Table 11 shows, participants were asked if they have access to a car. Participants were also asked if it is difficult to receive services due to a lack of transportation (see table 12). Interestingly, the majority of women (37) say they always have access to a car; yet, 19 women say they sometimes or always experience difficulty accessing services due to lack of transportation. In order to understand this seeming contradiction, I cross-tabulated questions 13 and 14. As Table B shows below, of the women who said they always have access to a vehicle, two women said it is still difficult to access services and seven said it is sometimes difficult to access services. Thus, about a quarter of women who
always have access to a vehicle still have at least some trouble accessing services. However, it is clear that having access to a vehicle at least sometimes makes accessing services easier for women; 24 of the 37 women who always have access to a car (64.9\%), responded that it was rarely difficult to access services because of a lack of transportation. Transportation issues were identified again in question 15 when three women identified a lack of transportation as a reason they cannot get to a doctor (see Table 13).

| Question 11: Do <br> you have access to <br> a vehicle? | Q12: <br> Yes <br> (in \%) | Sometimes <br> (in \%) | No/rarely <br> (in \%) | Skip <br> this <br> question | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Yes, always | 6.1 | 21.2 | 72.7 | 0.0 | $\mathrm{n}=33$ |
| Sometimes | 37.5 | 50.0 | 0.0 | 12.5 | $\mathrm{n}=8$ |
| Never | 100.0 | 0.0 | 0.0 | 0.0 | $\mathrm{n}=1$ |
| Total respondents | $\mathrm{n}=6$ | $\mathrm{n}=11$ | $\mathrm{n}=24$ | $\mathrm{n}=1$ | $\mathrm{n}=42$ |

## Employment, Income, \& Family

Most of the participants work outside of the home parttime or fulltime (see Annex 3, Tables 3 and 4). I was careful to write the option as working outside of the home, because the vast majority of these women have children, and thus are always working, even if not in a formal, paid setting. However, although most of
these women are earning incomes outside of the home, they are not necessarily earning enough to get by. The majority of women make $\$ 35,000$ and less annually, and a significant amount (11 women out of 41 respondents) make less than $\$ 20,000$ yearly (see Table 25). The federal poverty level for a family of four is $\$ 24,600$.

Overwhelmingly, these participants are mothers, and the majority (32 of 49 respondents) have two or three children, although a significant number have four or more children. To understand these women's economic situations better, I looked at how many children each women has and tabulated these responses with their annual income (see Annex 3, Table C). The federal poverty limit depends on the size of a family; for a family of four the poverty limit is 24,600 ; for a family of six, it is $\$ 32,960$. Based on the results, all women making below $\$ 20,000$ per year are living below the federal poverty limit. But for many others, depending on their exact income, they are earning at or just above the federal poverty limit. Very few of these women and their families have much extra money to spare, particularly for out-of-pocket healthcare costs if they have limited or no insurance.

Analyzing income is important when looking at mental health care because without insurance or the ability to pay for health care out-of-pocket, accessing care for mental health issues is nearly impossible. Earning a larger salary grants one greater access to quality healthcare (Marshall et al., 2005).

Marshall et al. (2005) further suggests poverty/low-income may make someone prone to needing healthcare more, either due to unsafe living conditions or lack of preventative care leading to greater health costs (both financially and physically) in the future. Poverty has consequences for quality of life that reach beyond a mere lack of material things; for instance, the poor are more likely than others to be exposed to stressful life events like unemployment and illness, and they live with long-term strains such as economic hardship and job dissatisfaction (Amato \& Zuo 1992). These types of stressors may lead to mental health issues.

| Question 10: | Q25: <br> Less than <br> Do you have <br> health <br> insurance? | $\$ 20,000-$ <br> (in \%) | $\$ 35,000$ <br> (in \%) | 50,000- <br> (in \%) | $\$ 50,000-$ <br> 100,000 <br> (in \%) | $\$ 100,000+$ | Skip this <br> question |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Yes | 21.7 | 26.1 | 21.7 | 30.4 | 0.0 | 0 | $\mathrm{n}=$ <br> 23 |
| No | 42.9 | 28.6 | 14.3 | 0.0 | 0.0 | 2 | $\mathrm{n}=$ |
| 14 |  |  |  |  |  |  |  |
| Total \# <br> respondents | $\mathrm{n}=11$ | $\mathrm{n}=10$ | $\mathrm{n}=7$ | $\mathrm{n}=7$ | $\mathrm{n}=0$ | $\mathrm{n}=2$ | $\mathrm{n}=$ |
| 37 |  |  |  |  |  |  |  |

## Health Insurance \& Income

Question 12 asked participants if they have health insurance, and the results showed that many respondents do have health insurance (36) but a sizeable
portion (16) do not (see Annex 3, Table 10). This is significant because without insurance, the ability to pay for healthcare can be extremely difficult. In the United States, Latinos are the least likely to be insured (Valencia-Garcia et al., 2012). When a person is uninsured, they are probably not going to use needed health services because they cannot pay for them. Many people get their health insurance from their employers; nationally, $49 \%$ of people get health insurance from their employer and $19 \%$ from Medicaid (health insurance for those living in poverty); in Pennsylvania, 53\% get health insurance from their employer and $19 \%$ from Medicaid (Health Insurance Coverage). Thus, those without health insurance who are not receiving Medicaid (a government program that is not applicable to undocumented immigrants) and are not getting insurance from their employer probably do not have a high paying job that would allow them to pay for coverage out-of-pocket.

In order to understand the relationship between the uninsured women and their annual income, I crosstabulated these responses (see Annex 3, table C). I found that of the women who do not have health insurance, six of them make less than $\$ 20,000$ per year. Thus, half the number of women (11) making less than $\$ 20,000$ per year are also uninsured. Four other women who are uninsured only make $\$ 20,000-\$ 35,000$ annually. This suggests that there is a link between living in poverty and being uninsured. Alegría et al. (2007) found that only about $19 \%$ of uninsured Latina women used any type of health service, even those with a
psychiatric disorder. Thus, a lack of health coverage is a significant obstacle to receiving care.

However, upon completion of my research, I learned that the insurance program Wellspan offers is sometimes mistaken as actual insurance by some users. This program allows people making below the federal poverty line to access limited health services, such as doctor's visits, at a low cost. However, it is not a replacement for insurance even if it does help women living in poverty access some needed services. Thus, it is possible that some participants who said that they have insurance could be referring to this program, so it is possible the number of insured women in this survey has been overestimated.

## Immigrant Status

The majority of women in this research are immigrants. As stated earlier, only five participants listed the United States as their country of origin. To understand how income and immigrant status intersect, I cross-tabulated annual income with migratory status (see Table D). Surprisingly, those earning annual salaries in the highest income bracket are all foreign-born women. However, since this survey did not ask participants to specify when they immigrated, some of these participants could have immigrated here at very young ages. However, this survey also showed that women earning the lowest incomes were all foreign-born as well. This inconsistency is perhaps due to the low number of U.S.-born Latina women who participated in this survey. Thus, my results could not confirm a
strong relationship between immigrant status and low wages. However, there is a stronger relationship between income and documentation status, which will be discussed in the next section. Finally, I cross-tabulated immigrant status and insurance status. Of the 13 women who say they do not have health insurance, all were foreign-born except one woman who was born in Gettysburg. Thus, the overwhelming majority of women who do not have health insurance are immigrants, whereas the majority of women who are U.S. born do have health insurance.

Family separation issues due to immigration were not addressed much in this research, but the theme came up among immigrant women nonetheless. For instance, question 21 asked participants what things had caused them to be anxious or sad. The majority of women who answered chose "family problems" as one issue. This could mean a host of things not exclusive to family separation, but it does involve family. However, seven women chose "other" as an option, and two women wrote in "family distance" or "I miss my family" as a psychological stressor. This confirms considerable research, as previously stated, that shows that family distance can cause psychological distress. Studies show that immigrants in the U.S. tend to have declining mental health outcomes with more time spent in the U.S. (Torres, Lee, González, Garcia, \& Haan 2016). And, the 2008 Pew Hispanic Survey shows that over $40 \%$ of immigrant Latinos living in the U.S. make at least weekly phone calls to family in their home countries
(Torres et al. 2016), showing that contact with family is important. Overall,
Torres et al. (2016) found that cross-border ties are associated with greater odds of depression (2016:116).

| Q26: <br> Migratory <br> status | Annual <br> income: <br> Less than <br> $\$ 20,000$ <br> (in \%) | $\$ 20,000-$ <br> 35,000 <br> (in \%) | $\$ 35,000-$ <br> 50,000 <br> (in \%) | $\$ 50,000-$ <br> $\$ 100,000$ <br> (in \%) | $\$ 100,000+$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| U.S. citizen | 11.8 | 29.4 | 23.5 | 35.3 | 0.0 | $\mathrm{n}=17$ |
| Permanent <br> Resident | 37.5 | 25.0 | 25.0 | 12.5 | 0.0 | $\mathrm{n}=8$ |
| Undocumente <br> d | 60.0 | 20.0 | 20.0 | 0.0 | 0.0 | $\mathrm{n}=5$ |
| Tourist | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | $\mathrm{n}=1$ |
| Other | 0.0 | 100.0 | 0.0 | 0.0 | $\mathrm{n}=1$ |  |
| Total \# <br> respondents | $\mathrm{n}=8$ | $\mathrm{n}=10$ | $\mathrm{n}=7$ | $\mathrm{n}=7$ | $\mathrm{n}=0$ | $\mathrm{n}=32$ |

## Undocumented Women

Participants were asked about migratory status, and, to my surprise, 17 women, ( $40 \%$ of participants) are U.S. citizens. In addition, ten women are permanent residents, five women are undocumented, one is a tourist, and four
identified as "other," for a total of 37 respondents. I believe the low number of respondents speaks to the small sample size of this research and the sensitive nature of this question. Although the survey is anonymous, the current political status is turbulent and there is increased stigma and discrimination against Latino immigrants (Neel 2017).

I completed several crosstabulations, as shown in Tables E, F, and G (see Annex 3) to understand how migratory status, specifically being undocumented, intersects with having health insurance, education levels., and English language proficiency. It is important to note that it is difficult to make generalizations with this data given the small number of women who reported being undocumented. The details are summarized in the tables, but ultimately I found the following: U.S. citizens and permanent residents are more likely to have health insurance than undocumented women; most U.S. citizens have more than 12 years of education, while 3 of the 5 undocumented women only had 6-8 years; and, finally, no undocumented woman knows English fluently, while almost half of U.S. citizens know English very well. This supports research on undocumented women, as previously stated. For instance, Marshall et al. (2005) found that less than $5 \%$ of undocumented women, in one survey, spoke English.

Fear of deportation is also a stressor that affects undocumented women. Molina \& Alcántara (2013) found that in their study, 28\% of Latina immigrants reported fears of being questioned about their legal status (2013:153). Fears of
being questioned about legal status may prevent undocumented immigrants from going to health care clinics out of fear that they will be reported to the authorities (Arcury \& Quandt 2007; Martinez-Tyson et al. 2016; Marshall et al. 2005). These fears were addressed, in indirect ways, in this research. For instance, question 18 asked women why they had stopped going to the doctor at any point. One undocumented woman listed her legal status as a reason. Question 21 asked participants reasons why they had ever felt sad or anxious, and four undocumented women listed their legal status. This shows that a lack of documents may cause women to avoid the doctor and to feel increased psychological stress.

| Q26: Migratory <br> status | Yes <br> (in \%) | No <br> (in \%) | 18.75 |
| :--- | :--- | :--- | :--- |
| U.S. Citizen | 81.25 | 11.1 | $\mathrm{n}=16$ |
| Permanent resident | 88.9 | 60.0 | $\mathrm{n}=9$ |
| Undocumented | 40.0 | 100.0 | $\mathrm{n}=5$ |
| Tourist | 0.0 | 75.0 | $\mathrm{n}=4$ |
| Other | 25.0 | $\mathrm{n}=11$ | $\mathrm{n}=35$ |
| Total \# respondents | $\mathrm{n}=24$ |  |  |


| Q26: <br> Migratory <br> Status: | Q22: <br> I don't <br> know <br> any <br> English <br> (in \%) | A little <br> bit of <br> English | I know <br> English <br> very <br> well | Enough <br> to get by | I don't <br> want to <br> answer <br> this <br> question | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| U.S. Citizen | 13.3 | 33.3 | 46.7 | 6.7 | 0.0 | $\mathrm{n}=$ <br> 15 |
| Permanent <br> Resident | 22.2 | 77.8 | 0.0 | 0.0 | 0.0 | $\mathrm{n}=9$ |
| Undocumented | 20.0 | 80.0 | 0.0 | 0.0 | 0.0 | $\mathrm{n}=5$ |
| Tourist | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | $\mathrm{n}=1$ |
| Other | 25.0 | 50.0 | 25.0 | 0.0 | 0.0 | $\mathrm{n}=1$ |
| I don't want to <br> answer this <br> question | 40.0 | 60.0 | 0.0 | 0.0 | 0.0 | $\mathrm{n}=4$ |
| Total \# <br> respondents | $\mathrm{n}=7$ | $\mathrm{n}=18$ | $\mathrm{n}=8$ | $\mathrm{n}=1$ | $\mathrm{n}=0$ | $\mathrm{n}=$ |


| Q26: <br> Migratory <br> Status | Q29:: <br> Less than <br> (in \%) | $1-5$ | $6-8$ | $9-12$ | More than <br> 12 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| U.S. Citizen | 0.0 | 0.0 | 6.3 | 25.0 | 68.6 | $\mathrm{n}=16$ |
| Permanent <br> Resident | 11.1 | 0.0 | 44.4 | 44.4 | 0.0 | $\mathrm{n}=9$ |
| Undocumented | 0.0 | 0.0 | 60.0 | 20.0 | 20.0 | $\mathrm{n}=5$ |
| Tourist | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | $\mathrm{n}=1$ |
| Other | 0.0 | 0.0 | 25.0 | 50.0 | 25.0 | $\mathrm{n}=4$ |
| Total \# <br> respondents | $\mathrm{n}=1$ | $\mathrm{n}=0$ | $\mathrm{n}=10$ | $\mathrm{n}=11$ | $\mathrm{n}=13$ | $\mathrm{n}=35$ |

## Agricultural Workers

Questions 8 and 9 asked each participant if she or her partner works in agriculture (see Annex 3, table 8 and 9). Ten women said they work in agriculture and 13 women said their partners work in agriculture. It was surprising to see that almost as many women as men work in agriculture, given research that shows only about $25 \%$ of agricultural workers are women (Pulgar et al. 2016). Based on the research that shows that a significant number of agricultural workers are undocumented, I crosstabulated question 9, asking about a partner's agricultural work, with migratory status (see Annex 3, table H). One U.S. citizen, four permanent residents, and two undocumented women have partners who work in agriculture. Thus, most agricultural workers in this study are not undocumented. However, this may be partially due to the small sample size and the small number of women who reported themselves as undocumented, as well as the location of where these surveys were collected. Surveys were collected in public spaces among a network of people who are already connected; undocumented people may be less likely to attend these programs since they may have fewer established networks and may fear interacting with people they do not know because of their legal status (Molina \& Alcántara 2013) (Martinez-Tyson et al. 2016) (ValenciaGarcia et al. 2012).

I also cross-tabulated yearly income with agricultural workers. Of the eight women who identify as agricultural workers and reported their yearly income, four make below $\$ 20,000 /$ year, and one makes $\$ 20,000-\$ 35,000$ per year. This confirms the research that shows agricultural workers make low wages; however, three of the other women make above $\$ 35,000$ per year, so not all wages are as low as others. Finally, I cross-tabulated health insurance and agricultural worker status. I found that eight of the ten women who identify as farmworkers have health insurance, and one does not. This contrasts with research showing that many agricultural workers do not have health insurance (Arcury \& Quandt 2007).

Studies have shown that farmworkers often meet criteria for depression and anxiety (Arcury \& Quandt 2007; Pulgar et al. 2016). In order to discern whether agricultural workers showed any signs of psychological distress, I crosstabulated agricultural workers with question 17, which asked if participants have felt isolated from the rest of the Adams County Community (see Table I). Five female agricultural workers and seven non-agricultural workers responded that they sometimes feel isolated from the community. Studies also show that women in farm-working families, even those who are not themselves farmworkers, are vulnerable to depression due to stressful life conditions like poverty, food insecurity, limited education, and substandard housing (Pulgar et al. 2016). I also cross-tabulated agricultural workers with question 18 , which asked participants to identify reasons they have felt anxious or sad (see Table J). One female
agricultural worker identified family problems as a stressor; two women identified their documentation status; four women identified a lack of money; and four women chose "other." Of these four women, one wrote that a stressor is the mistreatment "we" receive, one wrote family distance, and one wrote problems at work. This shows that stressors for agricultural workers include work problems, documentation, and income. Hovey \& Magaña (2000) describe how these characteristics contribute to psychological distress:

It is important to note that the high overall rate of anxiety and depression found in the present sample does not imply that all immigrant farmworkers, per se, are highly anxious and/or depressed, but that the experiences that go into being an immigrant farmworker (e.g., discrimination, language inadequacy, reduced self-esteem, financial stressors, lack of family and social support) potentially influence psychological status. (128)

| Q26: <br> Migratory status: | Q10: <br> Yes (in \%) | No | I don't want to <br> answer this <br> question | Total |
| :---: | :---: | :---: | :---: | :---: |
| U.S. Citizen | 6.7 | 86.7 | 6.7 | $\mathrm{n}=15$ |
| Permanent Resident | 57.1 | 42.9 | 0.0 | $\mathrm{n}=7$ |
| Undocumented | 50.0 | 50.0 | 0.0 | $\mathrm{n}=4$ |
| Tourist | 100.0 | 0.0 | 0.0 | $\mathrm{n}=1$ |
| Other | 0.0 | 100.0 | 0.0 | $\mathrm{n}=3$ |
| Total \# respondents | $\mathrm{n}=8$ | $\mathrm{n}=21$ | $\mathrm{n}=1$ | $\mathrm{n}=30$ |


| Q17: <br> Have you felt <br> isolated from the <br> Adams County <br> community? | Q20: <br> Yes <br> (in \%) | No | I don't wish to <br> answer this <br> question | Total |
| :--- | :--- | :--- | :--- | :--- |
| No | 13.3 | 83.3 | 3.3 | $\mathrm{n}=30$ |
| Sometimes | 41.7 | 588.3 | 0.0 | $\mathrm{n}=12$ |
| Yes, Frequently | 0.0 | 100.0 | 0.0 | $\mathrm{n}=2$ |
| Total \# respondents | $\mathrm{n}=9$ | $\mathrm{n}=34$ | $\mathrm{n}=1$ | $\mathrm{n}=44$ |


| Q18: <br> Reasons you have <br> felt anxious/sad | Q20: <br> Yes <br> (in \%) | No | I don't wish to <br> answer this <br> question | Total |
| :---: | :---: | :---: | :---: | :---: |
| Lack of money | 0.0 | 80.0 | 20.0 | $\mathrm{n}=5$ |
| Family problems | 10.0 | 80.0 | 10.0 | $\mathrm{n}=10$ |
| Feelings that I <br> don't belong | 0.0 | 0.0 | 0.0 | $\mathrm{n}=0$ |
| The state of my <br> documentation | 28.6 | 71.4 | 0.0 | $\mathrm{n}=7$ |
| I don't wish to <br> answer this <br> question | 20.0 | 80.0 | 0.0 | $\mathrm{n}=5$ |
| Total \# respondents | $\mathrm{n}=4$ | $\mathrm{n}=20$ | $\mathrm{n}=1$ | $\mathrm{n}=27$ |

## Underutilization of Services: Stigma Related?

As previously stated, research has noted that Latinos in the United States underutilize health services (Cabassa et al. 2007) (Vega et al. 1999) (MartinezTyson et al. 2016). To address this question of health service utilization, various questions were posed. Participants were asked if they have a family doctor-37 women do and 13 do not. They were also asked if they had considered talking to a mental health professional, and as previously stated, 15 women had considered it and 34 women had not. Since the subject of this research was not specifically about the underutilization of health services, the number of questions pertaining to this were limited. However, these two questions give an idea of whether services are being utilized. Most women have a family doctor, but about a quarter of women do not, a significant amount especially given the small sample size.

Generally, the consensus by researchers is that Latinos receive and have less access to mental health care than White Americans (Heilemann et al. 2016; Hochhausen et al. 2011; Nadeem et al. 2007). This difference is not a coincidence, but often the result of factors already described in this paper (Cabassa et al. 2007). For instance, about a quarter of participants had considered seeing a trained mental health professional; this survey did not ask women whether they have ever seen a trained therapist before, but given the instrumental barriers in place, it is likely that many women are unable to afford or find a Spanish-speaking therapist. However, besides structural barriers, the
stigmatization of mental health issues may also cause Latina women to avoid addressing mental health issues.

Stigma is a powerful feeling that, researchers suggest, may keep people from seeking out help for problems with their mental health. Being labeled as depressed may signify to others stereotypes such as personal weakness (Interian et al. 2010:373) or weakness of character, which can cause feelings of shame for a woman who is seeking help (Martinez-Tyson et al. 2016:1290). Stigma is a feeling that is reported more frequently by immigrant and ethnic minority groups than white and U.S.-born women. Nadeem et al. (2007) found that, in a group of racially diverse women, immigrant Latina women were $26 \%$ more likely than U.S.-born white women to report stigma-related concerns (Nadeem et al. 2007:1551).

Stigma against mental health and its treatment may even cause a person to feel they do not need help. In a study of low-income women who met the criteria for depression, those who had stigma-related concerns about getting treatment for mental health issues were less likely to believe that they had a need for mental health treatment. Stigma included being embarrassed to talk about personal matters with another person, being afraid of what others might think, and fears that family members would not approve of them getting care (Heilemann et al. 2016:1351-52). However, Latinas do not always endorse higher levels of stigma; a study by Nadeem et al. (2007) found that depressed white women reported more
stigma concerns than Latina women or women of color. Nadeem et al., (2007) noted that other barriers likely impede these women from getting care, such as a lack of insurance, and that if these barriers were removed, stigma would play a greater role among ethnic minority women (Nadeem et al. 2007:1551-1552). Thus, stigma may be less likely to play a role for some women when the possibility of treatment is not even available due to other barriers.

Clearly, feelings of stigma may cause women to avoid going to a professional or even recognizing symptoms of a mental health issue. Thus, in order to understand what is stopping women from receiving mental health care, stigma needed to be addressed. However, stigma is difficult to measure, and it may be a term not everyone is familiar with, especially those with less formal education. As a result, I tried to ask about stigma not by using the word, but by including answers, such as being uncomfortable, that addresses that feeling without stating it explicitly.

Question 17 which asked participants if they have ever stopped going to a doctor. The possible responses were a) I did not like the doctor b) I do not have money to pay c) my legal documentation d) I felt uncomfortable (this included an option to explain why she felt uncomfortable). This last response did not specifically ask about stigma, but the hope was the respondents would elaborate on feelings of discomfort. Forty-eight women answered question 17; 19 women said they have stopped going to the doctor at some point. However, only 12
women responded to the following question, explaining why they had stopped going to the doctor, with the option to choose multiple reasons. More than half of the respondents ( 7 women) said they did not have money to pay, two said their legal status stopped them, and three said they felt uncomfortable. When asked to explain their feeling of being uncomfortable, one woman wrote that she does not have insurance, one said she does not speak English, and one wrote that she does not have money to pay and is undocumented. Clearly, these structural barriers prevent women from seeing a doctor, because those who cannot pay and do not have insurance simply stop seeing a doctor. However, no one wrote in an answer that indicated that they felt stigmatized or perceived mental illness as a sign of someone's "craziness." However, feelings of stigma are difficult to assess and I do not believe the measures in this survey were enough to ascertain whether women felt stigmatized or themselves stigmatize mental health issues.

## Health Literacy

Health literacy is "the capacity to obtain, process, and understand basic health information and services" (Coffman, 2010:116). Because the capacity to read and understand information is vital, health literacy may be limited by language barriers and a lack of formal education. Coffman (2010) has found a relationship between low health literacy and inadequate preventive health care use and poor health outcomes, as well as a relationship between low health literacy and depressive symptoms (2010:117). If one cannot navigate the health services
available to them, it may be difficult to access needed services, or know that they are available to you. For instance, there is a perception among immigrants, particularly those without documentation, that publicly funded healthcare is banned for all immigrants. This is untrue, but it might cause an immigrant not to look into healthcare resources at all (Cason \& Snyder 2004).

However, low health literacy is not a personal deficiency. Immigrants in the United States, for instance, did not grow up within the U.S. health care system, one that is already complicated for natives. Thus, it is not surprising that their familiarity and background with the health services will be limited, and further strained by language differences. This may mean a person is unable to function in the health care environment. She may have trouble identifying depressive symptoms, and thus not report them; she may be unaware of treatment options and unable to access health care services and navigate the complicated U.S. healthcare system (Coffman 2010). Martinez-Tyson et al. (2016) who researched perceptions of depression and access to mental health care among Latino immigrants, found in her study that one of the major factors that keeps a person from accessing mental health care is that she does not "accept, recognize, or think" she needs help. This research did not directly address health literacy in the survey; however, due to the number of foreign born women, and women with lower levels of formal education, it is possible that some participants' health literacy is limited, which is a barrier to accessing care.

## CONCLUSION

Latina women in Adams County are a subset of the large Latina population in the United States, and the participants in this survey present similarities and differences with the issues they face when accessing mental health services. Research shows that foreign-born Latina women typically earn lower incomes than U.S. born Latina women, but this survey did not strongly support that evidence; however, this could be due to the low number of U.S. born respondents. Further, our results found that about a third of respondents have no insurance, and the majority of women without insurance are foreign-born women, while the majority of U.S. born women are insured. Respondents who have limited access to a vehicle identified transportation as a barrier to accessing services, given the fact that Adams County is located in a rural part of the state. Finally, we found that the majority of participants speak a little bit of English or none at all. Several women also identified a lack of Spanish-speaking health professionals as an issue when accessing health services.

When addressing barriers to accessing mental health services, the most important findings from this research are a lack of Spanish-speaking health providers, limited transportation, and low wages and insurance rates that make paying for care impossible. The program Wellspan offers that provides inexpensive health services for women living in poverty is a step in the right direction. However, this program is not as useful for mental health services for

Latina women since there is no bilingual mental health professional. Therefore, Wellspan must find a Spanish-speaking mental health professional or translator, advertise their program widely, particularly to undocumented women and women experiencing poverty, advertise their location, and help with transportation as much as possible.

## Recommendations

The Latino Services Task Force of Adams County and Wellspan Community Health hope to use this research to initiate a campaign to target Latino folks with depression. After completing this research project, I have several recommendations for these organizations.

First, it is important that immigrant and undocumented women know what healthcare options are available for them. This is especially important for undocumented women, who may have fewer options based on their citizenship status. Any campaign that informs people where they can access healthcare services should include information about where undocumented women can go for services. Wellspan should widely advertise their pseudo health insurance insurance program to people living below the federal poverty limit.

Additionally, participants expressed that they are not always sure where to go for health services. A campaign should make clear where health services are located, the hours they are open, and how to get there. In conjunction with this, because transportation is limited, some type of transportation service is
recommended for those people without consistent access to a vehicle. This could be in the form of organized carpools or finding a volunteer driver. Alternatively, Wellspan could have an information booth at a location where buses routinely stop; or, a driver could pick up clients from this central location. A final possibility would be to create an app that would allow folks to connect with Wellspan, express their needs, learn what resources are available to them, and perhaps could help people arrange carpools to the Wellspan office. This app would need to be in Spanish as well as English.

Farmworkers made up about one-sixth of the total participants in this research ( 9 women out of 52 respondents). Given the small size of this research, we were still able to survey a sizable population of migrant workers, but there is more work needed to be done to reach out to these folks. Because this population may be undocumented and monolingual, it is important for the LSTF and Wellspan to reach out to this community, perhaps by going to migrant worker housing or the LIU Migrant Education program in Gettysburg. These agricultural workers may be purposefully staying hidden to avoid being questioned about their legal status.

Finally, a major concern for women in this research is the lack of Spanishlanguage health providers. It is imperative that these organizations look for health professionals or translators who can speak Spanish, and thus make patients feel safer and more comfortable in a healthcare setting. Language is an essential part
of treatment because if there is no communication between a professional and a patient, there can be no advice given and no thoughts exchanged, and healing cannot begin. Bilingual health professionals/translators would also help address the lack of health literacy among some of these women. This is particularly important because, since there is a health program ready for low-income women to use, the largest remaining barrier is finding a professional who can communicate with these women now that they can afford such a service.

## References

Alegría, M., Mulvaney-Day, N., Woo, M., Torres, M., Gao, S., \& Oddo, V. 2007. "Correlates of Past-Year Mental Health Service Use Among Latinos: Results from The National Latino and Asian-American Study." American Journal of Public Health, 97(1), 76-83. https://doi.org/10.2105/ AJPH.2006.087197

Amato, P. R., \& Zuo, J. 1992. "Rural Poverty, Urban Poverty, and Psychological Well-Being." The Sociological Quarterly, 33(2), 229-240. Retrieved from JSTOR database. (edsjsr.4121143)

Arbona, C., Olvera, N., Rodriguez, N., Hagan, J., Linares, A., \& Wiesner, M. 2010. "Acculturative Stress Among Documented and Undocumented Latino Immigrants in the United States." Hispanic Journal of Behavioral Sciences, 32(3), 362-384. http://journals.sagepub.com/doi/ pdf/10.1177/0739986310373210

Arcury, T. A., \& Quandt, S. A. 2007. "Delivery of Health Services to Migrant and Seasonal Farmworkers." Annual Review of Public Health, 28, 345-
363. https://doi.org/10.1146/annurev.publhealth.27.021405.102106

Cabassa, L. J., Lester, R., \& Zayas, L. H. 2007. "'It's Like Being in a Labyrinth:' Hispanic Immigrants' Perceptions of Depression and Attitudes Toward Treatments." Journal of Immigrant and Minority Health, 9(1), 1-16. https://doi.org/10.1007/s10903-006-9010-1

Cason, K. L., \& Snyder, A. (2004, November). The Health and Nutrition of Hispanic Migrant and Seasonal Farm Workers. Retrieved December 13, 2017, from Rural PA Legislature website: http://www.rural. palegislature.us/migrant_farm_workers.pdf

Coffman, M. J. (2010). "Demands of Immigration, Health Literacy, and Depression in Recent Latino Immigrants." Home Health Care Management \& Practice, 22(2), 116-122. https://doi.org/ezpro.cc. gettysburg.edu:2121/10.1177/1084822309347343

Data USA: Adams County, USA. n.d. Retrieved December 13, 2017, from Data USA website: https://datausa.io/profile/geo/adams-countypa/\#demographics

Fox, J. A., \& Kim-Goodwin, Y. 2011. "Stress and Depression Among Latina Women in Rural Southeastern North Carolina." Journal of Community Health Nursing, 28(4), 223-232. https://doi.org/10.1080/07370016.2011.614861 Gagliardi, Yeimi (2018). Personal Interview.

Heilemann, M. V., Pieters, H. C., \& Dornig, K. 2016. "Reflections of LowIncome, Second-Generation Latinas About Experiences in Depression Therapy." Qualitative Health Research, 26(10), 1351-1365. https://doi.org/ 10.1177/1049732315624411

Hiott, A., Grzywacz, J. G., Arcury, T. A., \& Quandt, S. A. 2006. "Gender Differences in Anxiety and Depression Among Immigrant Latinos."

Families, Systems, \& Health, 24(2), 137-146. http://dx.doi.org/10. 1037/1091-7527.24.2.137

Hochhausen, L., Lee. H., \& Perry, D. 2011. "Community-Based Mental Health Service Utilization Among Low-Income Latina Immigrants." Community Mental Health Journal, 47(1), 14-23. https://doi.org/10.1007/s10597-009-9253-0

Hovey, J., \& Magaña, C. 2000. "Acculturative Stress, Anxiety, and Depression Among Mexican Immigrant Farmworkers in the Midwest United States." Journal of Immigrant Health, 2(3), 119-131. Retrieved from Complementary Index database. (Accession No. 50171816)

Interian, A., Ang, A., Gara, M. A., Link, B. G., Rodriguez, M. A., \& Vega, W. A. 2010. "Stigma and Depression Treatment Utilization Among Latinos: Utility of Four Stigma Measures." Psychiatric Services, 61(4), 373-379. https://doi.org/10.1176/appi.ps.61.4.373

Interian, A., Martinez, I. E., Guarnaccia, P. J., Vega, W. A., \& Escobar, J. I. 2007. "A Qualitative Analysis of the Perception of Stigma Among Latinos Receiving Antidepressants." Psychiatric Services, 58(12), 1591-1594. https://doi.org/10.1176/appi.ps.58.12.1591

Marshall, K. J., Urrutia-Rojas, X., Mas, F. S., \& Coggin, C. 2005. "Health Status and Access to Health Care of Documented and Undocumented Immigrant Latino Women. Health Care for Women International, 26(10), 916-936.
https://doi.org/10.1080/07399330500301846
Martinez-Tyson, D., Arriola, N. B., \& Corvin, J. 2016. "Perceptions of Depression and Access to Mental Health Care among Latino Immigrants: Looking Beyond One Size Fits All." Qualitative Health Research, 26(9), 1289-1302. http://dx.doi.org/10.1177/1049732315588499

Molina, K. M., \& Alcántara, C. 2013. "Household Structure, Family Ties, and Psychological Distress Among U.S.-born and Immigrant Latino Women." Journal of Family Psychology, 27(1), 147-158. https://doi.org/ 10.1037/a0031135

Nadeem, E., Lange, J. M., Edge, D., Fongwa, M., Belin, T., \& Miranda, J. 2007. "Does Stigma Keep Poor Young Immigrant and U.S.-born Black and Latina Women From Seeking Mental Health Care?" Psychiatric Services, 58(12). Retrieved from PsycINFO database. (Accession No. 2008-10374004)

Naples, N. A., \& Gurr, B. 2014. "Feminist Empiricism and Standpoint Theory." In S. N. Hesse-Biber (Ed.), Feminist Research Practice: A Primer (Second ed., pp. 14-41). Sage.

Neel, J. (2017, November 1). Poll: 1 in 3 Latinos Report Discrimination Based on Ethnicity. Retrieved February 28, 2018, from National Public Radio website: https://www.npr.org/sections/thetwoway/2017/11/01/561185815/ poll-1-in-3-latinos-report-discrimination-based-on-ethnicity

Pulgar, C. A., Trejo, G., Suerken, C., Ip, E. H., Arcury, T. A., \& Quandt, S. A. 2016. "Economic Hardship and Depression Among Women in Latino Farmworker Families." Journal of Immigrant and Minority Health, 18(3), 497-504. https:/doi.org/10.1007/s10903-015-0229-6

Satcher, D. 2001. Mental health care for Hispanics. In D. Satcher (Author), Mental health: Culture, Race, and Ethnicity-A Supplement to Mental Health: A Report of the Surgeon General (pp. 127-156). Retrieved from Minority Health Archive database. (edsuph.866)

Syed, S., Gerber, B., \& Sharp, L. 2013. "Traveling Towards Disease: Transportation Barriers to Health Care Access." Journal of Community Health, 38(5), 976-993. https://doi.org/10.1007/s10900-013-9681-1

Torres, J. M., Lee, A., González, H. M., Garcia, L., \& Haan, M. N. 2016. "A Longitudinal Analysis of Cross-Border Ties and Depression for Latino Adults. Social Science \& Medicine, 160, 111-119. https://doi.org /10.1016/j.socscimed.2016.04.018

Valencia-Garcia, D., Simoni, J. M., Alegría, M., \& Takeuchi, D. T. 2012. "Social Capital, Acculturation, Mental Health, and Perceived Access to Services Among Mexican American Women." Journal of Consulting and Clinical Psychology, 80(2), 177-185. https://doi.org/10.1037/a0027207

Vega, W. A., Kolody, B., Aguilar-Gaxiola, S., \& Catalano, R. 1999. "Gaps in Service Utilization by Mexican Americans with Mental Health Problems."

American Journal of Psychiatry, 156(6), 928-934. Retrieved from
Biological Abstracts database. (Accession No. BACD199900214027)

## Annex 1

1.) Do you have a Family Doctor?
$\square$ No
$\square$ Yes
$\square$ I choose not to answer this question, but I will continue with the survey.
2.) My language preference is:
$\square$ Spanish
$\square$ English
$\square$ Other $\qquad$
$\square$ I choose not to answer this question, but I will continue with the survey.
3.) My work status: (check all that apply):
$\square$ Work outside of the home
$\square$ Stay at home mother/father
$\square$ Retired
$\square$ Unemployed
$\square$ Going to school
$\square$ Disabled
$\square$ I choose not to answer this question, but I will continue with the survey.
4.) Employment status:
$\square$ Full-time
$\square$ Part-time
$\square$ Seasonal
$\square$ I choose not to answer this question, but I will continue with the survey.
5.) Where were you born?

Place $\qquad$ , country: $\qquad$
$\square$ I choose not to answer this question, but I will continue with the survey.
6.) If you were not born in the United States, how long have you lived here?
$\square$ Less than 1 year
$\square 1-5$ years
$\square 6-10$ years
$\square$ more than 10 years
$\square$ I choose not to answer this question, but I will continue with the survey.
7.) How many children do you have?
$\square$ I choose not to answer this question, but I will continue with the survey.
8.) Do you work in agriculture?
$\square$ Yes
$\square$ No
$\square$ I choose not to answer this question, but I will continue with the survey.
9.) Does your partner work in agriculture?
$\square$ Yes
$\square$ No
$\square$ I choose not to answer this question, but I will continue with the survey.
10.) Seasonally or migrant?
$\square$ Seasonally
$\square$ Migrant
$\square$ Not applicable
$\square$ I choose not to answer this question, but I will continue with the survey.
11.) Do you have health insurance?
$\square$ Yes
$\square$ No
$\square$ I choose not to answer this question, but I will continue with the survey.
12.) Do you have access to a car?
$\square$ Yes
$\square$ No
$\square$ Sometimes
$\square$ I choose not to answer this question, but I will continue with the survey.
13.) Do you ever have trouble getting to places or accesing services because you lack transportation?
$\square$ Yes
$\square$ No
$\square$ I choose not to answer this question, but I will continue with the survey.
14.) Are you ever unable to go to the doctor?
$\square$ Yes
$\square$ No
$\square$ I choose not to answer this question, but I will continue with the survey.
15.) If you answered yes to the previous question, why? Choose all that apply:
$\square$ Lack of insurance
$\square$ Lack of childcare
$\square$ Lack of transportation
$\square$ No doctors who speak my language

Other, please specify
I choose not to answer this question, but I will continue with the survey.
16.) Do you ever avoid going to the doctor?
$\square$ Yes
$\square$ No
$\square$ I choose not to answer this question, but I will continue with the survey.
17.) If yes, why?
$\square$ Feelings of discomfort, explain $\qquad$
Do not like the doctor
$\square$ Documentation status
Not applicable
$\square$ I choose not to answer this question, but I will continue with the survey.
18.) Where do you go for healthcare?
$\square$ I choose not to answer this question, but I will continue with the survey.
20.) Do you ever feel isolated from the rest of the Gettysburg community?
$\square$ No
$\square$ Sometimes, but not often
Frequently
$\square$ I choose not to answer this question, but I will continue with the survey.
21.) Have you ever felt anxious or sad due to: (choose all that apply)

# $\square$ Lack of money 

$\square$ Family problems
$\square$ Feeling like you don't belong
$\square$ Documentation status
$\square$ Other
$\square$ Not applicable
$\square$ I choose not to answer this question, but I will continue with the survey.
22.) Rate your level of English:
$\square$ No ability
$\square$ A little bit
$\square$ Enough to get around without problems
$\square$ Yes, very well
I choose not to answer this question, but I will continue with the survey.
23.) Have you faced discrimination while in the United States?
$\square$ Yes
$\square$ No
$\square$ I choose not to answer this question, but I will continue with the survey.
24.) Have you ever considered seeing a professional who has been trained to help people deal with stress, sadness, and similar problems?

Yes
$\square$ No
$\square$ I choose not to answer this question, but I will continue with the survey.
25.) If you have considered seeing a professional who has been trained to help people deal with stress, sadness, and similar problems and did not go, what stopped you?

Feeling like I don't need it
Fear of what others might think
$\square$ None of my friends or family go to these doctors
$\square$ No insurance or ability to pay
$\square$ No way to get there
$\square$ No childcare
Lack of availability of providers who speak my language
Other, please specify:
I choose not to answer this question, but I will continue with the survey.
26.) Gender:
$\square$ Male $\square$ Female $\square$ Other
$\square$ I choose not to answer this question, but I will continue with the survey.
27.) Marital Status:
$\square$ Married $\square$ Divorced $\square$ Separated $\square$ Single $\square$ Widowed $\square$ Living with someone
$\square$ I choose not to answer this question, but I will continue with the survey.
28.) Ethnicity: Do you consider yourself Hispanic/Latino?
$\square$ Yes $\square$ No $\square$ Don't know
$\square$ I choose not to answer this question, but I will continue with the survey.
29.) How long did you attend school for?
$\square 1-5$ years
$\square 6-8$ years
$\square 9-12$ years
$\square$ More than 12 years
$\square$ I choose not to answer this question, but I will continue with the survey.
30.) What is your average yearly household income?

Less than \$20,000

- \$20,000-\$35,000
\$35,000 - \$50,000
- \$50,000 - \$ 100,000

More than \$ 100,000
$\square$ I choose not to answer this question, but I will continue with the survey.
31.) Which category best describes your race?
$\square$ Indigenous (Indigeno)
$\square$ White
$\square$ Mixed race (Mestizo)
$\square$ Black or African AmericanAsian
$\square$ Unavailable/Unknown
$\square$ Declined
Other, please specify:
$\square$ I choose not to answer this question, but I will continue with the survey.
32.) Citizenship:
$\square$ US Citizen $\square$ Permanent Resident $\square$ Temporarily undocumented $\square$ Refugee
$\square$ Other
$\square$ I choose not to answer this question, but I will continue with the survey.
33.) Are you interested in speaking to a trained professional?
**If this survey has caused any feelings of discomfort and you would like to talk to someone about your feelings about this study, you are encouraged to contact Yeimi Gagliardi at 7173374264 Ext. 6

## Annex 2

Preguntas de la encuesta:
1.) Al aceptar participar está indicando que tiene al menos 18 años, ha leído y entendido el formulario de consentimiento, y está de acuerdo en participar. Por favor, no escriba su nombre en la encuesta.
a. Sí
2.) ¿Tiene médico de la familiar?
$\square$ No
$\square$ No deseo contestar esta pregunta, pero quiero seguir con le encuesta.
3.) Mi lenguaje de preferencia es:
a. Español
b. Inglés
c. Otro
d. No deseo contestar esta pregunta, pero quiero seguir con le encuesta.
4.) Mi estado de empleo:
a. Trabajo afuera de la casa
b. Afuera de la casa principalmente
c. Desempleada
d. Jubilada
e. Asisto a la escuela/universidad
f. Incapacitada
g. No deseo contestar esta pregunta, pero quiero seguir con le encuesta.
5.) Estado de empleo:
a. Tiempo completo
b. De medio tiempo
c. Ninguno de los anteriores
d. No deseo contestar esta pregunta, pero quiero seguir con le encuesta.
6.) ¿Dónde creció? (Ciudad, país)
a.
b. No deseo contestar esta pregunta, pero quiero seguir con le encuesta.
7.) Si no nació en los Estados Unidos, ¿cuánto tiempo ha vivido en los Estados Unidos?
a. Menos de 1 año
b. 1-5 años
c. 6-10 años
d. Más de 10 años
e. Nací en los Estados Unidos
f. No deseo contestar esta pregunta, pero quiero seguir con le encuesta.
8.) ¿Cuántos hijos/as tiene?
a. 0
b. 1
c. 2
d. 3
e. 4
f. 5
g. Más de 5
h. No deseo contestar esta pregunta, pero quiero seguir con le encuesta.
9.) ¿Trabaja en la agricultura?
a. Sí
b. No
c. No deseo contestar esta pregunta, pero quiero seguir con le encuesta.
10.) ¿Su pareja trabaja en agricultura?
a. Sí
b. No
c. No aplicable
d. No deseo contestar esta pregunta, pero quiero seguir con le encuesta.
11.)¿Estacionalmente o migratorio?
$\square$ Estacionalmente
$\square$ migratorio
$\square$ Ninguno de los anteriores
$\square$ No deseo contestar esta pregunta, pero quiero seguir con le encuesta.
12.) ¿Tiene seguro de la salud?
$\square$ Sí
$\square$ No
$\square$ No deseo contestar esta pregunta, pero quiero seguir con le encuesta.
13.) ¿Tiene acceso a un vehículo?
$\square$ Sí, siempreA veces
$\square$ Con poca frecuencia
$\square$ Nunca
$\square$ No deseo contestar esta pregunta, pero quiero seguir con le encuesta.
14.) ¿Le es difícil recibir servicios o ir a sitios a donde necesita ir por falta de transporte?
$\square$ Sí
A veces
$\square$ No/raramente
$\square$ No deseo contestar esta pregunta, pero quiero seguir con le encuesta.
15.) ¿Tiene como llegar al médico?
$\square$ Sí
$\square$ No
$\square$ No deseo contestar esta pregunta, pero quiero seguir con le encuesta.
16.) ¿Si su respuesta fue: NO , ¿por qué? Por favor, marque todas las dificultades que tiene:
$\square$ Falta de seguro de la salud
$\square$ Falta de cuidado de niños
$\square$ Falta de transporte
$\square$ No hay médicos que hablan mi idioma.
$\square$ Otro, ¿Cuál?: $\qquad$
$\square$ No deseo contestar esta pregunta, pero quiero seguir con le encuesta.
17.) ¿Ha dejado de ir al médico alguna vez?
$\square$ Sí
No
$\square$ No deseo contestar esta pregunta, pero quiero seguir con le encuesta.
18.) ¿Si su respuesta fue: sí, ¿por qué? Por favor marque todas las dificultades que tiene:
$\square$ Se siente incomoda; ¿por qué? $\qquad$
$\square$ No le gusta el/la médico/a
$\square$ Mi estado de documentación
$\square$ No deseo contestar esta pregunta, pero quiero seguir con le encuesta.
19.) ¿A dónde va para obtener seguro de salud?
$\square$ No deseo contestar esta pregunta, pero quiero seguir con le encuesta.
20.) ¿Alguna vez se siente aislado del resto de la comunidad del Condado de Adams?
$\square$ No
$\square$ A veces, pero no frecuentemente
$\square$ Frecuentemente
$\square$ No deseo contestar esta pregunta, pero quiero seguir con le encuesta.
21.) Alguna vez se sintió ansiosa o triste porque: (escoge todo que aplica)
$\square$ una falta de dinero
$\square$ Los problemas de mi familia
$\square$ Sentimientos de que no pertenezco
$\square$ El estado de mi documentación
$\square$ Otro
No aplicable
$\square$ No deseo contestar esta pregunta, pero quiero seguir con le encuesta.
22.) ¿Evalúe su nivel de las inglés?
$\square$ No sé nada de las inglés
$\square$ Un poco de inglés
$\square$ Sé inglés muy bien
$\square$ Lo suficiente como para poder moverme
$\square$ No deseo contestar esta pregunta, pero quiero seguir con le encuesta.
23.) ¿Se ha sentido discriminado en los Estados Unidos?
$\square$ Sí
$\square$ No
$\square$ No estoy seguro
$\square$ No deseo contestar esta pregunta, pero quiero seguir con le encuesta.
24.) ¿Alguna vez has considerado hablar con un profesional entrenado en ayudar personas que sufren de la ansiedad, la tristeza, el estrés, y problemas similares?
$\square$ Sí
$\square$ No
$\square$ No deseo contestar esta pregunta, pero quiero seguir con le encuesta.
25.) ¿Si has considerado lo anterior, ¿qué la detuvo?
$\square$ No necesito hablar con un profesional
$\square$ Miedo de lo que otros pueden pensar.
$\square$ Nunca nadie de mis amigos o miembros de la familia ha ido a estos profesionales
$\square$ No seguro de salud o inhabilidad a pagar
$\square$ No modo a llegar allí.
$\square$ Falta de cuidado para los niños
$\square$ Falta de proveedores que hablen mi idioma
$\square$ Otro, especifique
$\square$ Nunca he pensando en esto
$\square$ No deseo contestar esta pregunta, pero quiero seguir con le encuesta.
26.) Mi género:
$\square$ Varón
$\square$ Hembra
$\square$ Otro
$\square$ No deseo contestar esta pregunta, pero quiero seguir con le encuesta.
27.) El estado de marital:
$\square$ Casada
$\square$ Divorciada
$\square$ Separada
Sola
$\square$ Enviudada
$\square$ Viviendo con un parejo
$\square$ No deseo contestar esta pregunta, pero quiero seguir con le encuesta.
28.) Identidad étnica: ¿Se considera hispánica/latina?
$\square$ Sí
$\square$ No
$\square$ No disponible/desconocido
$\square$ No deseo contestar esta pregunta, pero quiero seguir con le encuesta.
29.) ¿Cuantos años asistió a la escuela?
$\square$ Menos de 1 año
-1-5 años
$\square$ 6-8 años
$\square$ 9-12 años
$\square$ Más de 12 años
$\square$ No deseo contestar esta pregunta, pero quiero seguir con le encuesta.
30.) ¿Qué se considera?
$\square$ Indígena (India)
$\square$ Blanca

- Mestiza
$\square$ Negra
$\square$ No disponible/desconocido
$\square$ Rechazo
$\square$ Otro, especifica $\qquad$
$\square$ No deseo contestar esta pregunta, pero quiero seguir con le encuesta.
31.) ¿Qué es el ingreso promedio de tu hogar cada año?
a. Menos de $\$ 20,000$
b. 20,000 - $\$ 35,000$
c. $\$ 35,000-\$ 50,000$
d. $\$ 50,000-\$ 100,000$
e. Más de $\$ 100,000$
f. No deseo contestar esta pregunta, pero quiero seguir con le encuesta.
32.) Estado migratorio:
$\square$ EEUU ciudadana
$\square$ Residente permanente
$\square$ Temporalmente no documentada
$\square$ Refugiada
$\square$ Otro
$\square$ No deseo contestar esta pregunta, pero quiero seguir con le encuesta.
33.) ¿Tienes interés en hablar con un o una profesional?
$\square$ Sí
$\square$ No
**Si el sondeo te causas sentimientos de incómodo y te gustaría hablar con alguien sobre tus sentimientos, te alientas a contactar Yeimi
Gagliardi al 7173374264 Ext. 6


## Annex 3

Table 1.) Do you have a family doctor?

| Answer Choices | Responses (\# of women) |
| :--- | :--- |
| Yes | 37 |
| No | 13 |
| I don't want to answer this question | 0 |
| (Total) | 50 |

Table 2.) My language preference

| Answer Choices | Responses (\# of women) |
| :--- | :--- |
| Spanish | 46 |
| English | 4 |
| I don't want to answer this question | 0 |
| Other | 1 |
| (Total) | 51 |

Table 3.) My state of employment

| Answer Choices | Responses (\# of women) |
| :--- | :--- |
| I don't work outside the home | 13 |
| I work outside of the home | 31 |
| Retired | 2 |
| Student | 1 |
| Disabled/incapacitated | 0 |
| I don't want to answer this question | 0 |
| (Total) | 47 |

Table 4.) Employment frequency:

| Answer Choices | Responses (\# of women) |
| :--- | :--- |
| Full time | 25 |
| Part time | 7 |
| Neither of the above | 4 |
| I don't want to answer this question | 0 |
| (Total) | 36 |

Table 5.) Where were you born?

| Answer Choices | Responses (\# of women) |
| :--- | :--- |
| Mexico | 34 |
| Puerto Rico | 4 |
| Guatemala | 1 |
| Colombia | 2 |
| United States | 5 |
| Total | 46 |

Table 6.) If you were not born in the U.S., how long have you lived here?

| Answer Choices | Responses (\# of women) |
| :--- | :--- |
| Less than 1 year | 1 |
| $1-5$ years | 3 |
| 6 -10 years | 6 |
| More than 10 years | 37 |


| I was born in the U.S. | 0 |
| :--- | :--- |
| I don't want to answer this question | 0 |
| Total | 47 |

Table 7.) How many children do you have?

| Answer Choices | Responses (\# of women) |
| :--- | :--- |
| 0 | 0 |
| 1 | 4 |
| 2 | 16 |
| 3 | 16 |
| 4 | 10 |
| 5 | 2 |
| More than 5 | 1 |
| I don't want to answer this question | 0 |
| Total | 49 |

Table 8.) Do you work in agriculture?

| Answer Choices | Responses (\# of women) |
| :--- | :--- |
| Yes | 10 |
| No | 35 |
| I don't want to answer this question | 1 |
| Total | 46 |

Table 9.) Does your partner work in agriculture?

| Answer Choices | Responses (\# of women) |
| :--- | :--- |
| Yes | 13 |
| No | 27 |
| I don't want to answer this question | 2 |
| Total | 42 |

Table 10.) Do you have health insurance?

| Answer Choices | Responses (\# of women) |
| :--- | :--- |
| Yes | 30 |
| No | 16 |
| I don't want to answer this question | 0 |
| Total | 46 |

Table 11.) Do you have access to a vehicle?

| Answer Choices | Responses (\# of women) |
| :--- | :--- |
| Yes, always | 37 |
| Sometimes | 8 |
| Rarely | 2 |
| Never | 1 |
| I don't want to answer this question | 0 |
| Total | 48 |

Table 12.) Is it difficult to receive services or go to places where you need to go due to lack of transportation?

| Answer Choices | Responses (\# of women) |
| :--- | :--- |
| Yes | 7 |
| Sometimes | 12 |
| No/rarely | 25 |
| I don't want to answer this question | 1 |
| Total | 45 |

Table 13.) Can you get to a doctor?

| Answer Choices | Responses (\# of women) |
| :--- | :--- |
| Yes | 47 |
| No | 2 |
| I don't want to answer this question | 1 |
| Total | 50 |

Table 14.) If your response was no, why? Choose all that apply.

| Answer Choices | Responses (\# of women) |
| :--- | :--- |
| Lack of health insurance | 3 |
| Lack of childcare | 0 |
| Lack of transportation | 3 |
| No doctors that speak my language | 1 |
| I don't want to answer this question | 0 |
| Total | 7 |

Table 15.) Have you stopped going to the doctor at some point?

| Answer Choices | Responses (\# of women) |
| :--- | :--- |
| Yes | 19 |
| No | 29 |
| I don't want to answer this question | 1 |
| Total | 49 |

Table 16.) If your response was yes, why? Choose all that apply?

| Answer Choices | Responses (\# of women) |
| :--- | :--- |
| I don't like the doctor | 0 |
| I don't have money to pay | 6 |
| My legal status | 1 |
| I don't want to answer this question | 1 |
| Total | 12 (see additional responses below) |

I felt uncomfortable (explain why):

| Response 1 | I don't have money to pay, and my legal <br> status |
| :--- | :--- |
| Response 2 | Lack of health insurance |
| Response 3 | I don't speak English |
| Response 4 | I don't have money to pay, and my legal <br> documentation |

Table 17.) Have you ever felt isolated from the rest of the Adams Community?

| Answer Choices | Responses (\# of women) |
| :--- | :--- |
| No | 33 |
| Sometimes | 13 |
| Frequently | 3 |
| I don't want to answer this question | 0 |
| Total | 49 |

Table 18.) Have you ever felt anxious or sad because: (choose all that apply)

| Answer Choices | Responses (\# of women) |
| :--- | :--- |
| Lack of money | 7 |
| Family problems | 10 |
| Feelings that I don't belong | 1 |
| State of my documentation | 8 |
| Other | 7 |
| I don't want to answer this question | 5 |
| Total | 34 |

Table 19.) Evaluate your level of English:

| Answer Choices | Responses (\# of women) |
| :--- | :--- |
| I don't know any English | 12 |
| A little bit of English | 26 |
| Enough to get by | 1 |
| I know English very well | 8 |
| I don't want to answer this question | 0 |
| Total | 47 |

Table 20.) Have you felt discriminated against in the United States?

| Answer Choices | Responses (\# of women) |
| :--- | :--- |
| Yes | 20 |
| No | 21 |
| I'm not sure | 8 |


| I don't want to answer this question | 0 |
| :--- | :--- |
| Total | 49 |

Table 21.) Have you ever considered talking with a professional trained to help people that suffer from anxiety, sadness, stress, and similar problems?

| Answer Choices | Responses (\# of women) |
| :--- | :--- |
| Yes | 15 |
| No | 34 |
| I don't want to answer this question | 0 |
| Total | 49 |

Table 22.) If you have considered the above, what stopped you? Choose all that apply.

| Answer Choices | Responses (\# of women) |
| :--- | :--- |
| I don't know where to go | 8 |
| I don't need to talk with a professional | 1 |
| I fear what others could think | 0 |
| None of my friends/family see these <br> kinds of professionals | 1 |
| I don't have money to pay | 3 |
| I don't know how to get there | 2 |
| Lack of child care | 2 |
| Lack of providers that speak my <br> language | 6 |
| I have never thought about seeing <br> someone | 2 |
| Other | 2 |
| I don't want to answer this question | 2 |
| Total | 19 |

Table 23.) My marital state:

| Answer Choices | Responses (\# of women) |
| :--- | :--- |
| Married | 29 |
| Divorced | 4 |
| Separated | 3 |


| Single | 5 |
| :--- | :--- |
| Living with a partner | 6 |
| I don't want to answer this question | 1 |
| Total | 48 |

Table 24.) How many years did you attend school?

| Answer Choices | Responses (\# of women) |
| :--- | :--- |
| Less than 1 year | 1 |
| 1-5 years | 3 |
| 6-8 years | 12 |
| 9-12 years | 16 |
| More than 12 years | 15 |
| I don't want to answer this question | 0 |
| Total | 47 |

Table 25.) What is your average annual income?

| Answer Choices | Responses (\# of women) |
| :--- | :--- |
| Less than $\$ 20,000$ | 11 |
| $\$ 20,000-35,000$ | 14 |
| $\$ 35,000-50,000$ | 7 |
| $\$ 50,000-100,000$ | 7 |
| More than 100,000 | 0 |
| I don't want to answer this question | 2 |
| Total | 41 |

Table 26.) Migratory status:

| Answer Choices | Responses (\# of women) |
| :--- | :--- |
| U.S. Citizen | 17 |
| Permanent Resident | 10 |


| Temporarily Undocumented | 5 |
| :--- | :--- |
| Refugee | 0 |
| Tourist | 1 |
| Other | 4 |
| I don't want to answer this question | 5 |
| Total | 42 |

## Cross Tabulations:

Table A.) Questions 20 and 19.
Connection between feelings of discrimination and English-language skills.


| Question 20: <br> Have you felt <br> discriminated <br> against? | Q: 19 <br> I don't <br> know <br> English <br> (in \%) | I know a <br> little bit of <br> English <br> (in \%) | I know <br> English <br> very <br> well <br> (in \%) | I know <br> enough <br> to get <br> around <br> (in \%) | Skip <br> this <br> question <br> (in \%) | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Yes | 31.6 | 57.9 | 10.5 | 0.00 | 12.5 | $\mathrm{n}=19$ |
| No | 15.7 | 57.8 | 21.0 | 5.2 | 0.0 | $\mathrm{n}=19$ |
| Unsure | 37.5 | 37.5 | 25.0 | 0.0 | 0.0 | $\mathrm{n}=8$ |
| Total \# <br> respondents | $\mathrm{n}=12$ | $\mathrm{n}=25$ | $\mathrm{n}=8$ | $\mathrm{n}=1$ | $\mathrm{n}=0$ | $\mathrm{n}=46$ |

Table B.) Questions 11 and 12. Connection between having access to a vehicle and having access to services.

> Q12: Do you have trouble accessing services due to a lack of transportation?

| Question 11: Do <br> you have access to <br> a vehicle? | Q12: <br> Yes <br> (in \%) | Sometimes <br> (in \%) | No/rarely <br> (in \%) | Skip <br> this <br> question | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Yes, always | 6.1 | 21.2 | 72.7 | 0.0 | $\mathrm{n}=33$ |
| Sometimes | 37.5 | 50.0 | 0.0 | 12.5 | $\mathrm{n}=8$ |
| Never | 100.0 | 0.0 | 0.0 | 0.0 | $\mathrm{n}=1$ |
| Total \# <br> respondents | $\mathrm{n}=6$ | $\mathrm{n}=11$ | $\mathrm{n}=24$ | $\mathrm{n}=1$ | $\mathrm{n}=42$ |

## Cross Tabulations:

Table A.) Questions 20 and 19.
Connection between feelings of discrimination and English-language skills.

> Q19: Evaluate your level of English
> $\downarrow \downarrow$

| Question 20: <br> Have you felt <br> discriminated <br> against? | Q: 19 <br> I don't <br> know <br> English <br> (in \%) | I know a <br> little bit of <br> English <br> (in \%) | I know <br> English <br> very <br> well <br> (in \%) | I know <br> enough <br> to get <br> around <br> (in \%) | Skip <br> this <br> question <br> (in \%) | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Yes | 31.6 | 57.9 | 10.5 | 0.00 | 12.5 | $\mathrm{n}=19$ |
| No | 15.7 | 57.8 | 21.0 | 5.2 | 0.0 | $\mathrm{n}=19$ |
| Unsure | 37.5 | 37.5 | 25.0 | 0.0 | 0.0 | $\mathrm{n}=8$ |
| Total \# <br> respondents | $\mathrm{n}=12$ | $\mathrm{n}=25$ | $\mathrm{n}=8$ | $\mathrm{n}=1$ | $\mathrm{n}=0$ | $\mathrm{n}=46$ |

Table B.) Questions 11 and 12.
Connection between having access to a vehicle and having access to services.
Q12: Do you have trouble accessing services due to a lack of transportation? !

| Question 11: Do <br> you have access to <br> a vehicle? | Q12: <br> Yes <br> (in \%) | Sometimes <br> (in \%) | No/rarely <br> (in \%) | Skip <br> this <br> question | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Yes, always | 6.1 | 21.2 | 72.7 | 0.0 | $\mathrm{n}=33$ |
| Sometimes | 37.5 | 50.0 | 0.0 | 12.5 | $\mathrm{n}=8$ |
| Never | 100.0 | 0.0 | 0.0 | 0.0 | $\mathrm{n}=1$ |
| Total \# <br> respondents | $\mathrm{n}=6$ | $\mathrm{n}=11$ | $\mathrm{n}=24$ | $\mathrm{n}=1$ | $\mathrm{n}=42$ |

Table E.) Questions 10 and 26.
Connection between having insurance and migratory status.
Q10: Do you have health insurance? $\downarrow \downarrow$

| Q26: Migratory status | Yes <br> (in $\%$ ) | No <br> (in \%) | Total |
| :---: | :---: | :---: | :---: |
| U.S. Citizen | 81.25 | 18.75 | $\mathrm{n}=16$ |
| Permanent resident | 88.9 | 11.1 | $\mathrm{n}=9$ |
| Undocumented | 40.0 | 60.0 | $\mathrm{n}=5$ |
| Tourist | 0.0 | 100.0 | $\mathrm{n}=1$ |
| Other | 25.0 | $\mathrm{n}=11$ | $\mathrm{n}=4$ |
| Total \# respondents | $\mathrm{n}=24$ |  |  |

Table F.) Questions 24 and 26
Education and migratory Status.
Q24: Years of education $\downarrow \downarrow$

| Q26: <br> Migratory <br> Status | Q29: <br> Less than <br> (in \%) | $1-5$ | $6-8$ | $9-12$ | More than <br> 12 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| U.S. Citizen | 0.0 | 0.0 | 6.3 | 25.0 | 68.6 | $\mathrm{n}=16$ |
| Permanent <br> Resident | 11.1 | 0.0 | 44.4 | 44.4 | 0.0 | $\mathrm{n}=9$ |
| Undocumented | 0.0 | 0.0 | 60.0 | 20.0 | 20.0 | $\mathrm{n}=5$ |
| Tourist | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | $\mathrm{n}=1$ |
| Other | 0.0 | 0.0 | 25.0 | 50.0 | 25.0 | $\mathrm{n}=4$ |
| Total \# <br> respondents | $\mathrm{n}=1$ | $\mathrm{n}=0$ | $\mathrm{n}=10$ | $\mathrm{n}=11$ | $\mathrm{n}=13$ | $\mathrm{n}=35$ |

Table G.) Questions 19 and 26
English language proficiency and Migratory Status

Q19: Evaluate your level of English $\downarrow \downarrow$

| Q26: <br> Migratory <br> Status: | Q22: <br> I don't <br> know any <br> English (in <br> $\%$ ) | A little bit <br> of English | I know <br> English <br> very well | Enough to <br> get by | I don't <br> want to <br> answer this <br> question |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :--- |
| U.S. Citizen | 13.3 | 33.3 | 46.7 | 6.7 | 0.0 | $\mathrm{n}=15$ |
| Permanent <br> Resident | 22.2 | 77.8 | 0.0 | 0.0 | 0.0 | $\mathrm{n}=9$ |
| Undocumented | 20.0 | 80.0 | 0.0 | 0.0 | 0.0 | $\mathrm{n}=5$ |
| Tourist | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | $\mathrm{n}=0$ |
| Other | 25.0 | 50.0 | 25.0 | 0.0 | 0.0 | $\mathrm{n}=1$ |
| I don't want to <br> answer this <br> question | 40.0 | 60.0 | 0.0 | 0.0 | 0.0 | $\mathrm{n}=4$ |
| Total \# <br> respondents | $\mathrm{n}=7$ | $\mathrm{n}=18$ | $\mathrm{n}=8$ | $\mathrm{n}=1$ | $\mathrm{n}=0$ | $\mathrm{n}=34$ |

Table H.)
Questions 9 and 26.
Agricultural workers and migratory status.

|  | Q9: Does your partner work in agriculture? $\downarrow$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Q26: <br> Migratory status: | Q10: <br> Yes (in \%) | No | I don't want to <br> answer this <br> question | Total |
| U.S. Citizen | 6.7 | 86.7 | 6.7 | $\mathrm{n}=15$ |
| Permanent Resident | 57.1 | 42.9 | 0.0 | $\mathrm{n}=7$ |
| Undocumented | 50.0 | 50.0 | 0.0 | $\mathrm{n}=4$ |
| Tourist | 100.0 | 0.0 | 0.0 | $\mathrm{n}=1$ |
| Other | 0.0 | 100.0 | 0.0 | $\mathrm{n}=3$ |
| Total \# respondents | $\mathrm{n}=8$ | $\mathrm{n}=21$ | $\mathrm{n}=1$ | $\mathrm{n}=30$ |

Tabe I.) Questions 8 and 17
Feelings of isolation and agricultural workers.
Q8: Do you work in agriculture? $\downarrow \downarrow$

| Q17: <br> Have you felt isolated <br> from the Adams <br> County community? | Q20: <br> Yes <br> (in \%) | 13.3 | 83.3 | I don't wish to <br> answer this <br> question |
| :---: | :---: | :---: | :---: | :---: |
| No | 41.7 | 588.3 | 3.3 | $\mathrm{n}=30$ |
| Sometimes | 0.0 | 100.0 | 0.0 | $\mathrm{n}=12$ |
| Yes, Frequently | $\mathrm{n}=9$ | $\mathrm{n}=34$ | 0.0 | $\mathrm{n}=2$ |
| Total \# respondents | $\mathrm{n}=1$ | $\mathrm{n}=44$ |  |  |

Table J.) Questions 8 and 18
Reasons for sadness/anxiety and agricultural workers.

|  | Q8: Do you work in agriculture? $\downarrow \downarrow$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Qeasons you have <br> Relt anxious/sad <br> fels | Q20: <br> Yes <br> (in \%) | No | I don't wish to <br> answer this <br> question | Total |
| Lack of money | 0.0 | 80.0 | 20.0 | $\mathrm{n}=5$ |
| Family problems | 10.0 | 80.0 | 10.0 | $\mathrm{n}=10$ |
| Feelings that I don't <br> belong | 0.0 | 0.0 | 0.0 | $\mathrm{n}=0$ |
| The state of my <br> documentation | 28.6 | 71.4 | 0.0 | $\mathrm{n}=7$ |
| I don't wish to <br> answer this question | 20.0 | $\mathrm{n}=4$ | $\mathrm{n}=20$ | $\mathrm{n}=1$ |
| Total \# respondents | $\mathrm{n}=4$ | $\mathrm{n}=27$ |  |  |

DISCUSSIONS

# Operation Boulder and its Effects on Arab-American Communities of the 1970's 

Molly Wancewicz

Molly Wancewicz is a sophomore at Rice University studying Political Science and History. This paper was written in fall 2017 for her freshman writing seminar, with the mentorship of her professor Suraya Khan.

Operation Boulder, a United States government surveillance program deployed in 1972 under the direction of then-President Richard M. Nixon, launched a large-scale federal investigation of both Arab immigrants to the U.S. and Arab-Americans. ${ }^{1}$ In this context, the term "Arab" is used to mean a person originating from an Arabic-speaking country in the Middle East or North Africa, while "Arab-American" refers to a person of Arab lineage who was born in the United States. For the purposes of this paper, the Arabs and Arab-Americans referred to are only those residing in the United States. Before the project was canceled due to its overuse of resources, Operation Boulder led to the investigation of 150,000 Arabs. ${ }^{2}$ During the operation, government agents employed invasive and discriminatory tactics in their investigations of Arab immigrants and Arab-Americans. Further, a combination of historical evidence and contemporary analysis indicates that these federal investigations intended to suppress and divide Arab communities. However, though the U.S. government was able to dampen community activity initially, their surveillance tactics ultimately resulted in mobilization and cooperation within the Arab community in the U.S., resulting in a strengthened ethnic and cultural identity.

## U.S. GOVERNMENT TACTICS

[^1]A collaboration between United States government agencies employed a wide variety of tactics to intimidate, harass, and surveil Arab-Americans. The Federal Bureau of Investigation (FBI), Immigration and Naturalization Service, Central Intelligence Agency, Internal Revenue Service, State Department, and U.S. Customs Service collaborated on a large-scale investigation targeting Arabs in America, both immigrants and Arab-Americans. The initial tactic used to ramp up surveillance in the early stages of Operation Boulder was a tightening of immigration and visa requirements: the United States government required Arab immigrants and Arab-Americans who travelled internationally to obtain transit visas. Though government officials originally promised that these regulations would only affect those suspected of terrorism, the restrictions were applied to Arabs writ large, regardless of their criminal history. This spillover indicated a future trend of ostensibly innocent immigrants and Arab-Americans being surveilled and targeted based on their national origins alone. Travel and immigration restrictions soon expanded beyond a simple requirement for special visas: Arab immigrants began to face extra screening when trying to enter the United States, which resulted in some visa requests being denied. Further, government agents utilized this additional screening as an opportunity to uncover small technical errors in the previously approved visa applications of Arabs now living in the U.S. The discovery of these errors was used as justification to deport

Arab immigrants, though such technical inconsistencies had previously been overlooked in immigration processes. ${ }^{3}$
U.S. government agencies also employed more invasive tactics in their investigation of Arabs living in the U.S. For instance, in the case of the Arab attorney Abdeen Jabara, government officials used wiretaps as part of "an intensive harassment campaign" that lasted nine years. ${ }^{4}$ Further, officials also aggressively questioned Arab-Americans, even those not suspected of any crime. FBI officers made practice of arriving at the homes of Arab-Americans in the early hours of the morning and demanding that Arab-Americans submit to an interrogation immediately, often justifying their actions to subjects and their families with false statements that the person being questioned was suspected of involvement in an anti-United States organization. The government officials also used exploitative tactics during interrogations, such as lying to detainees and telling them they would not need a lawyer. Finally, the U.S. government even went so far as to organize burglaries to steal intelligence on investigation targets. For instance, the FBI carried out a burglary on the office of a leader of the Arab Information Center and allegedly stole the names of the Center's agents. ${ }^{5}$ Federal use of exploitative tactics to gain information about the U.S. Arab community

[^2]sowed fear among Arab immigrants and Arab-Americans and provided federal investigators with an ever-growing pool of targets.

## JUSTIFICATION OF TACTICS

The United States government justified its surveillance of Arab-Americans by asserting that this oversight was necessary to protect the security of U.S. citizens of Israeli background. ${ }^{6}$ Government officials bolstered this claim by pointing to the "Palestinian commando action" that occurred at the 1972 Olympic games in Munich. ${ }^{7}$ At the Olympics, a Palestinian terrorist group took members of the Israeli Olympic team hostage, killing some and then engaging in a firefight that left the remainder of the Israeli athletes dead. ${ }^{8}$ Representatives of the U.S. government argued that the Munich attacks could be attributed to "Arab history and tradition of extremism and violence which has contributed the word assassin to the international lexicon." ${ }^{\prime 9}$ Therefore, officials posited, surveillance of ArabAmericans was necessary to prevent Munich's violence from being replicated on U.S. soil.

However, both data available in the early 1970s and the information that emerged from Operation Boulder indicate that the above justifications lack merit.

[^3]In 1972, there were no acts of terrorism that were verified as having been perpetrated by Arab-Americans, suggesting that there was no precedent for the U.S. to initiate such an extensive domestic surveillance program. ${ }^{10}$ In addition, through every investigation that was instigated under Operation Boulder, zero violations of United States law were ever discovered. ${ }^{11}$ Because the surveillance campaign was both groundless and fruitless, contemporary and current minority advocates argued that other motivations had given rise to Operation Boulder.

## TRUE MOTIVATIONS

Pro-Israeli movements likely contributed to the perpetration of Operation Boulder, though the U.S. government preferred to emphasize the national security justifications for the surveillance program. The timing of a Zionist information campaign against Arab immigrants provides support for the assertion that the U.S. utilized Operation Boulder to strengthen its ties to pro-Israeli advocate groups. Shortly before the surveillance operation was launched, Zionist organizations based in the United States warned authorities that Palestinians associated with Arab guerilla warriors could be among the immigrants and Arab-Americans pursuing education in the United States. Around the same time, Near East Report,

[^4]a Zionist lobbying organization, publicly reported that Arab students were circulating Palestinian "propaganda" in the U.S. ${ }^{12}$ As the operation progressed, the United States government explicitly acknowledged that it was collaborating with the Israeli government on Operation Boulder, and domestic Zionist groups such as the Jewish Defense League boasted close involvement with the surveillance campaign. ${ }^{13}$ In additional, bidirectional information exchanges between pro-Israel lobbies and U.S. government officials reinforced the political motivations behind Operation Boulder. Up to two years before the operation was launched, U.S. government officials sought information on Arab political activism, and some of the first sources they turned to were U.S.-based Zionist organizations. ${ }^{14}$ Conversely, as Operation Boulder progressed, government agencies often provided American pro-Israel groups with information on prominent Arab-American political activists. ${ }^{15}$ Evidence of communication and collaboration between U.S. officials and Zionist groups aligns with the logic of the situation: pro-Israel forces would, naturally, want Palestinian activists in the U.S. to be surveiled. Intelligence gathering on Arabs would benefit the Israeli side of the Israeli-Palestinian conflict by providing insider insight into Arab political activism and strategy. Further, the fear of prosecution by U.S. officials likely

[^5]deterred Arab-Americans from political activity, which would benefit the Israeli side of the political equation.

Suppression of Arab political activity was also a prominent, though unspoken, goal of Operation Boulder. Arab-Americans engaged in political activity with the goals of influencing both domestic and foreign policy, as liberalizing immigration laws convinced many Arab-Americans that "interest group politics" could lead the U.S. to pursue a "more even-handed approach to the Middle East. ${ }^{\text {¹ }}{ }^{16}$ Organizations such as the National Association of ArabAmericans focused on pressing the U.S. government to back Palestinian interests in the Middle East. They believed that tolerance for Arabs abroad would spill over to expanded rights for Arab-Americans. ${ }^{17}$ Other political groups focused on improving the welfare of Arabs in America, and they pursued this goal by engaging in the political process and rising within the government. ${ }^{18}$ The United States, partially because they backed Israel in the Israeli-Palestinian conflict and did not want pro-Palestinian forces pressuring them or rising in their ranks, supported the suppression of this political activity. Michael Fischbach posits that surveillance was used first to scope out, then to flatten, the Arab-American

[^6]political landscape. He notes that U.S. government surveillance focused on the extent of the associations between Arab-Americans and "Arab political organizations abroad." In-person surveillance and interviews that took place in Arab enclaves allowed the FBI to gather information on the political atmospheres and leaders of certain communities. Fischbach suggests that the U.S. government was deeply concerned about Palestinian influences on U.S. politics and society, writing, "[T]he latter concern, that of Arab viewpoints reaching American ears, was of equal concern as alleged security threats." ${ }^{19}$ Michael Suleiman argues that tactics such as early-morning visits and interrogations were intended to create a "chilling effect," and that they "intended to intimidate and silence political debate about Middle East issues. ${ }^{20}$ The focus on politically active Arabs instead of any actual perpetrators of violence combined with the imposing tactics employed suggests that U.S. government interests were political, not security-related. Further, the surveillance's focus on discovery of more targets and its failure to uncover any evidence of legal violations by Arabs in the U.S. indicate that the core goal of Operation Boulder was creating enough fear to suppress, or chill, Arab political activity.

Another clandestine objective of Operation Boulder consisted of destroying Arab networks of internal community support: government officials

[^7]used targeted tactics in order to entice Arab-Americans to turn on one another, effectively deconstructing communities. For instance, when U.S. officials visited Arab-Americans' houses and demanded to begin interrogations, they questioned not only their target but also the family and friends of the target. This mode of questioning encouraged Arab-Americans to report any possible wrongdoings of their own close relations, as well as shifting blame and resentment towards the original target for supposedly causing the poor treatment enacted by government officials. ${ }^{21}$ Younger Arabs faced even further pressure to report the activities of those they knew due to the career- and life-altering threat of being deported before obtaining a university degree. ${ }^{22}$ Via these tactics, U.S. government officials intended to build up a "network of informers" to assist their investigations. Government agencies intended not only to separate communities in order to inhibit the formation of political momentum, but also to alienate Arab-Americans involved in politics from the rest of the Arab-American community that formed their possible support base. ${ }^{23}$ Operation Boulder's aims to undercut community ties serve as another method of creating a chilling effect, as the destruction of communities tends to inhibit mobilization towards political activity.

Some separation of communities did happen through Operation Boulder's successful cultivation of a network of informants. A number of Arab-Americans,

[^8]either because they did not know the law or because they believed they had nothing to hide, complied with illegal lines of questioning and implicated people close to them, leading to a cycle of more and more illicit interrogations. ${ }^{24}$ As a result of intimidation tactics applied by the federal government, pressure and subsequently shame circulated about the Arab-American community and threated to close down Arab-focused sources of scholarship. For instance, many university cultural and intellectual programs that studied the Middle East faced pressure to close down due to the intense scrutiny being applied to their activities and those of their scholars. The assumption that Arab scholarly views were unreliable or unsound stemmed from the U.S. government's concerted effort to discredit proArab political views, and this doubt decreased the scholarship produced by the Arab-American community. ${ }^{25}$

However, though something of a chilling effect was achieved, the U.S. government ultimately failed in tearing apart Arab-American communities: overall, political mobilization and community cohesion resulted from Operation Boulder. Originally, the generation of Arab-Americans and Arab immigrants that was affected by Operation Boulder lacked a substantial ethnic identity. Instead, the most prominent characteristic shared by Arab-Americans in the 1970s was their assimilation into American culture, and most Arab-American communities

[^9]held only fractured pieces of their cultural identities. ${ }^{26}$ As a result, most ArabAmericans shared few characteristics with one another and experienced a general separation. However, Michael Fischbach writes that this disconnect was overcome by the Arab-American response to Operation Boulder: Arab organizations and Arabs in the U.S. banded together to protest the surveillance as a form of discrimination and a violation of rights. ${ }^{27}$ The community response was characterized by an unprecedented cooperation between political, social, and cultural Arab organizations. For instance, members of the Association of ArabAmerican University Graduates (AAUG) published an ad in the New York Times condemning Operation Boulder as discriminatory. Even Arab organizations that had never before engaged in political activities and did not focus on MiddleEastern issues, such as Arab-American social clubs, attached their names in support of the advertisement. Elaine Hagopian attributes this change to the organizations' perceived "responsibility to the community," suggesting that the events of Operation Boulder connected organizations to new causes and created a cohesive Arab-American community. ${ }^{28}$ Other organizations took on roles beyond their original intentions in order to help foster and protect the Arab-American community. For instance, the members of the AAUG with legal training formed a committee on civil rights to combat illegal harassment. Although the AAUG

[^10]never intended to be a body that dispensed legal advice, the pressure exacted by the U.S. government motivated AAUG members to pool resources and provide services to the Arab-American community. ${ }^{29}$ Changes such as those that occurred within the AAUG indicated organizations' willingness to expand beyond their original missions in the service of the broader Arab community, suggesting more community cohesion and cooperation.

Overall, the U.S. government deployed surveillance tools under Operation Boulder in a targeted effort to appease Zionist interests by destroying ArabAmerican political activity and community networks. Though some degree of a chilling effect did occur, the discriminatory practices perpetrated by Operation Boulder eventually led a previously fractured and disconnected immigrant group to band together in solidarity, create resilient social and political networks, and formally protest the actions of the U.S. federal government.

[^11]
## REFERENCES

A+E Networks. "1972: Massacre Begins at Munich Olympics." History.com. Last modified 2009. Accessed November 21, 2017. http://www.history.com/this-day-in-history/massacre-begins-at-municholympics

Fischbach, Michael R. 1985. "Government Pressures against Arabs in the United States." Journal of Palestine Studies 14(3):87-100. http://www.jstor.org/stable/2536955

Fujii, George, ed. "H-Diplo Roundtable XIX, 2 on Imperfect Strangers: Americans, Arabs, and U.S.-Middle East Relations in the 1970s." H-Diplo HNet: Humanities and Social Sciences Online. Last modified September 11, 2017. Accessed November 20, 2017. https://networks.h-net.org/node/28443/discussions/194098/h-diplo-roundtable-xix-2-imperfect-strangers-americans-arabs-and Hagopian, Elaine. "Minority Rights in a Nation-State: The Nixon Administration's Campaign against Arab-Americans." Journal of Palestine Studies 5, no. 1/2: 97-114. http://www.jstor.org/stable/2535685.

Middle East Research and Information Project. 1975. "Operation Boulder Ended." MERIP Reports 37:32. JSTOR.

Stork, Joe, and Rene Theberge. 1973 "Any Arab or Others of a Suspicious
Nature..." MERIP Reports 14: 3-13. JSTOR.
Suleiman, Michael W. 1999. "Islam, Muslims, and Arabs in America: The Other of the Other of the Other..." Journal of Muslim Minority Affairs 19(1):3347. EBSCOhost.

# Addressing Gun Violence in the United States 

Sarah House

Sarah House is an undergraduate at Dickinson College studying sociology and studio art. This paper was completed as a final project for Professor Susan Rose's class, "Dealing With Data: Social Problems and Policy." Professor Rose provided generous guidance and support to make this publication possible.

In recent years, discussions of gun violence have appeared frequently in the media. Debates on how the government should address gun violence- if at allhave become key points in political campaigns. Amidst the heated discussion, politicians, journalists and others risk oversimplifying or ignoring key aspects of this issue. Gun violence includes a broad range of activity, and is related to a variety of other issues in complex ways. Policymakers need to carefully examine those relationships to develop effective solutions.

One foundational question to examine is whether gun violence is a serious national issue. Based on historical trends, the current level of gun violence in the United States is nothing remarkable. According to data from Pew, the rate of overall gun deaths is lower than it was in 1993 by $31 \%$ - almost a third. The gun homicide rate fell from 7.0 to 3.4 per 100,000 people between 1993 and 2000, and has leveled off since then (Krogstad 2015). Although the firearm suicide rate is also lower now than it was in 1993, it has been rising in recent years and is now considerably higher than the homicide rate, at 6.7 deaths per 100,000 people.

Although the gun violence rates we are experiencing are not unprecedented in our country's history, they are unusual in a global context. This becomes clear when United States gun violence rates are compared with those of other countries in the Organization for Economic Co-operation and Development (OECD), a coalition of nations which conduct economic policy research and work to improve global living standards. Figures 1 and 2 compare rates of firearm and
non-firearm homicide and suicide across OECD countries which the World Bank defines as "high income". Because they have very small populations, Iceland and Luxembourg are not included. The United States leads the field in both categories: its firearm homicide rate of 3.6 is more than five times that of the next- highest, Canada and Portugal at 0.5 , and its firearm suicide rate of 6.3 is nearly twice that of Finland's at 3.3. Compared with these other high-income countries, gun violence is clearly a problem in the United States.

This large amount of gun deaths contributes to an unusually high overall homicide rate. The United States has a total homicide rate of 5.3; the next highest, Finland, has a rate of only 1.5. The non-firearm homicide rate is also higher in the United States than in most of these other countries - only the Czech Republic has a higher rate - indicating that guns are not the only problem. However, the disparity in gun homicide rates is far more extreme: homicides by guns specifically need more attention in the United States (Grynshteyn 2016).


Figure 1
Source: Grynshteyn and Hemenway 2016


Figure 2
Source: Grynshteyn and Hemenway 2016

It is especially important to note that the gun suicide rate in the United States is much higher than the gun homicide rate: Americans with guns pose more of a threat to themselves than anyone else. Although homicide appears to be more of a problem in the United States compared with other countries, suicide causes many more deaths per year than homicide does and therefore deserves greater


Figure 3
Source: FBI 2013
attention. The overall suicide rate in the United States falls in the middle of the pack: apparently, Americans do not have an unusual tendency to commit suicide. If gun suicide rates can be reduced without being replaced by other methods, specifically targeting guns could significantly reduce suicides.

Recently, much media and political attention has been devoted to mass shootings. To investigate the impacts of public shootings, including mass shootings, the FBI has conducted a study on "active shooter incidents," in which police are asked to respond to a shooting in progress in a populated area. The frequency of these events may be on the rise: the FBI finds a progressive increase in the number of active shooter incidents per year and the number of fatalities between 2000 and 2013 (2013a:8-9). Figure 3 shows the number of active shooter events and the number of casualties reported to the FBI each year, and increasing trends over time. However, these events are not representative of most gun violence in the United States. Although the apparent increase in active shooter incidents is concerning, overemphasis on this issue threatens to draw public attention from more common incidents.

## FACTORS CONTRIBUTING TO VIOLENCE

## Mental Illness

Politicians and the media frequently associate gun violence with mental illness. Their concern is not completely unfounded, as mental illness can increase the risk of violence. A 1990 survey by the National Institute of Mental Health Epidemiologic Catchment Area (ECA) found that 2\% of those without a mental illness had committed violent acts within the past year, compared with $7 \%$ to $8 \%$ for those with severe mental illness (Swanson 2015:367). Similarly, Van Dorn et
al. argue that "most researchers have concurred that a modest but statistically significant relationship exists between violence and [severe mental illness]" (2012:495). However, the ECA study also found that only $4 \%$ of the risk of violence in the United States could be attributed to mental illness alone. This means that even if the violence rate among those with severe mental illness were reduced, $96 \%$ of violent crimes would not be affected (2015:368).

Other factors complicate the link between violence and mental illness. Van Dorn et al. include substance abuse disorders in their analysis and find that there is a stronger association between severe mental illness and violence when substance abuse is involved (2012:501). They also point out that people may not have these disorders for their entire lives, and their analysis only considers those who have had symptoms of the disorder within the past year. When they make this qualification, they find a much stronger relationship than when those who have had a mental disorder in their lifetime, but may no longer experience symptoms, are included. This is an important consideration for developing policies: if restrictions on access to firearms are to be imposed at all, it might make sense to base them on recent experiences of mental illness rather than past diagnoses.

Regardless of its association with homicide, mental illness is a critical factor in suicide risk. The vast majority of suicide victims- about $90 \%$ - are diagnosed with a mental illness (Dragisic et al 2015:188). Risk of suicide is considerably higher among those who experience depression. Studies have found that between $2.2 \%$ and $15 \%$ of this population eventually die by suicide, as shown in Figure 4 (Friedman and Leon 2007). Those with other mental disorders are also at increased risk: it is estimated that nearly $5 \%$ of those with schizophrenia die by


Figure 4
Sources: U.S. Department of Health and Human Services 2012, Drapeau and McIntosh 2016
The exact suicide rate for each of these populations is uncertain; the above chart presents midrange estimates from a variety of studies.
suicide; that rate is 3 to $10 \%$ among those with borderline personality disorder and 15 to $19 \%$ for those with bipolar disorder type I or II (U.S. Department of

Health and Human Services 2012:115-118). By comparison, suicide causes 1.6\% of deaths nationally (Drapeau and McIntosh 2016). It is important to consider mental illness when designing gun control policies, not because people with mental illness are dangerous to others, but because they are at a much greater risk of self-harm.

## Social Surroundings

Gun violence results from a combination of individual characteristics with multiple environmental influences. According to the American Psychological Association (APA), "gun violence is associated with a confluence of individual, family, school, peer, community, and sociocultural risk factors that interact over time during childhood and adolescence." Because the influences of so many people and institutions are at play, it is impossible to pinpoint which people will ultimately commit violent acts. However, examining which environmental factors increase risk may help us develop safer communities. Citing a wealth of studies, the APA identifies several specific conditions which may contribute to the development of violent behavior. The influence of parents is critical: "low parentchild synchrony and warmth, poor or disrupted attachment, harsh or inconsistent discipline (overly strict or permissive), poor parental monitoring, the modeling of antisocial behavior, pro-violent attitudes and criminal justice involvement, and coercive parent-child interaction patterns" all contribute to children's risk of developing violent behaviors (Dodge and Pettit 2003; Farrington et al. 2001; Hill
et al. 1999; Patterson, Forgatch and DeGarmo 2010). The APA also highlights the importance of the school environment, pointing out that schools in less affluent communities tend to have fewer resources to address their students' needs. They also tend to have strict disciplinary policies and may not have the information to address "problem behaviors" effectively (Edelman 2007). As a result, the students most likely to become involved in violence may find themselves without support and opportunities to find a better path. The community atmosphere is also crucial: people must have access to basic resources and positive personal relationships and feel that their personal safety is secure. High levels of violent activity in a community provide more opportunities for youth to engage in that behavior, and low availability of resources limits opportunities to develop positive, non-violent attitudes and skills.

## Availability of Guns

Access to firearms is an especially important factor in the United States. Compared with the OECD countries discussed earlier, the United States has a much higher gun ownership rate, with 88.8 guns per 100 people. The next highest is Finland, with 45.3 guns per 100 people (Rogers 2012). The fact that the United States has both the highest gun ownership rate and the highest gun violence rates seems to indicate a relationship between those two factors. If the two variables are related, however, then higher gun ownership rates should correspond to higher gun violence rates among other countries as well. The United States is such an
outlier that it makes the correlation appear stronger than it really is. When the United States is removed from the dataset, a scatterplot of gun ownership rates and gun homicide rates among all other countries in the study reveals a very weak relationship, as shown in Figure 5. Although gun ownership may contribute to the homicide rate in the United States, it clearly is not the only factor. The relationship between gun ownership and gun suicides is much stronger; even with the United States removed from the dataset, there is a clear positive correlation, as shown in Figure 6. Access to guns seems to increase the threat we pose to ourselves, rather than each other (Grynshteyn 2016; Rogers 2012).


Figure 5
Sources: Grynshteyn 2016, Rogers 2012


Figure 6
Source: Grynshteyn 2016, Rogers 2012
Which policies would be most effective?
A 2003 review of studies on firearm policy by the Centers for Disease
Control and Prevention (CDC) reveals that findings are conflicted. They advise that there is not enough evidence to determine how the reviewed policies affect gun violence. These include laws that restrict access for certain people, impose waiting periods, require licensing and registration, or mandate that a concealed carry permit be granted to any qualified applicant. The CDC notes that the data and methodology used in many studies are flawed and stresses the need for "further high-quality research" (Hahn et al 2003). It has been difficult to complete such research because of a 1996 law which prohibits the CDC from putting funds
toward the promotion of gun control. In response, the CDC has almost completely avoided gun research (Kurtzleban 2016). A logical starting point to addressing gun violence would be to remove these restrictions so that we have more sound research on which to base our policies.

Independent research does indicate that many of the recent, highly publicized policy proposals in response to mass shooting incidents might not do much good. For example, assault weapons and LCMs seem to be a logical target for regulation because they enable someone to kill large numbers of people very quickly. A national ban on several types of assault weapons, passed in 1994, expired in 2004; however, a renewal of the ban might not have made a significant difference. According to most estimates, assault weapons were only used in $2 \%$ of
gun crimes before the ban. Large capacity magazines (LCMs) posed a much more significant problem, as they were used in 14-26\% of gun crimes before the ban was implemented. Although the ban was followed by a further decrease in assault weapons used in crimes, research conducted in Baltimore, Milwaukee, Louisville


Figure 7
Source: FBI
and Anchorage found that they were replaced by increased use of LCMs. These results suggest that a ban on LCMs might do more to prevent violence than a ban on assault weapons. However, the authors suggest that for many crimes the use of LCMs might not increase the number of casualties (Koper et al. 2004). In
addition, such a regulation would not affect the majority of gun crimes. In 2013, for example, $70 \%$ of firearm homicides were committed with handguns (Figure 7).

Politicians and the media have also focused on heavily restricting gun access for the mentally ill. Given the low percentage of homicides that involve mental illness, restrictions purported to protect the public from those with "dangerous" mental illnesses may do more to stigmatize innocent people than they would to save lives. However, the role that mental illness plays in suicide deserves attention. Expanded background checks could be a useful mechanism to avoid providing guns to those at risk of suicide.

The APA also points out that the most reliable predictor of gun violence is violence committed in the past. More consistent background checks on criminal records would help reduce access to guns for these at-risk individuals, regardless of their mental health status. Recent studies have linked a 1995 permit-topurchase law in Connecticut with a $40 \%$ reduction in gun homicides, and the repeal of a similar Missouri law in 2007 with a $23 \%$ increase in gun homicides (Rudolph et al. 2015, Webster and Wintemute 2015). These laws required a background check as part of a permit-issuing process, so they may have had a different effect from background checks alone. Daniel Webster, who collaborated on both studies, points out that the permit requirement in itself may have discouraged illegal purchases (Kurtzleben 2016). Regardless, the study results
indicate that the passage of similar laws could help prevent gun violence in the future.

Another promising policy is the implementation of waiting periods, which require a delay between the purchase of a gun and its delivery. This policy aims to obstruct spur-of-the-moment, emotional decisions to kill oneself or others. After the passage of a few days, the rage or depression which inspired the purchaser's lethal intentions might have passed. Luca et al. argue that waiting periods can significantly reduce homicides and may also help prevent suicides. In their research, they compare changes in homicide and suicide rates in states that have implemented waiting period laws to changes in other states during the same period. They associate waiting periods with a $17 \%$ reduction in homicides. They also find a $7-11 \%$ reduction in suicides. However, they caution that the difference in suicides may result from other variables, and that a reduction in gun suicides may only be replaced with suicides by other means (2017:2).

One of the most striking risk factors in the United States is the availability of guns. Australia's gun policy passed in 1996 is a drastic example of an attempt to curb this factor. In response to a mass shooting in 1996, Australia implemented a "gun buyback," which encouraged Australians to turn in their guns for smelting. Although there is no record of exactly how many guns were destroyed, it is likely that the number of guns in the country was reduced by one third (Alpers 2013). One study finds that, in the following years, firearm death rates in Australia
dropped by half (Alpers and Rosetti 2018). Another finds that the suicide rate was reduced by $80 \%$, and the homicide rate saw a similar decrease (Leigh and Neill 2010). There were eleven mass shootings in the ten years before the new policy was implemented, and there has not been another since (Chapman and Alpers 2006). This policy might not be so successful in the United States, given the tenacity with which many on the far right cling to their gun ownership rights. However, its apparent success demonstrates what might happen if the excessive stock of civilian-owned firearms were to be reduced.

The most effective policies to address gun violence may not directly pertain to gun control. The research highlighted by the APA indicates that people are far more likely to commit gun violence when they feel unsafe and unwanted, and when they lack sufficient opportunities to improve their lives. Policies that fund schools in low-income neighborhoods, help families support their children and help local communities support their members can all help to decrease the risk of violence. When life conditions are better overall, Americans are less likely to feel that violence is necessary.

## References

Alpers, Philip and Amélie Rossetti. 2018. Guns in Australia: Total Number of Gun Deaths. Sydney School of Public Health, The University of Sydney. GunPolicy.org, 28 March. Accessed17 April 2018 at: http://www. gunpolicy.org/firearms/compareyears/10/total_number_of_gun_deaths Alpers, Philip. 2013. "The Big Melt: How One Democracy Changed After Scrapping a Third of Its Firearms." Reducing Gun Violence in America: Informing Policy with Evidence and Analysis. Edited by Daniel W. Webster and Jon S. Vernick. Baltimore: Johns Hopkins University Press. American Psychological Association. "Gun Violence: Prediction, Prevention and Policy." American Psychological Association. Retrieved April 29, 2018 http://www.apa.org/pubs/info/reports/gun-violence-prevention.aspx Chapman, Simon, Philip Alpers, Kingsley Agho and Michael Jones. 2006. "Australia's 1996 Gun Law Reforms: Faster Falls in Firearm Deaths, Firearm Suicides and a Decade Without Mass Shootings." Injury Prevention 12:365-72.

Dodge, K. A., \& Pettit, G. S. 2003. "A Biopsychosocial Model of the Development of Chronic Conduct Problems in Adolescence." Developmental Psychology 39:349-371. doi:10.1037/0012-1649.39.2.349

Dragisic, Tatjana, Aleksandra Dickov, Veselin Dickov, and Vesna Mijatovic. 2015. "Drug Addiction as Risk for Suicide Attempts." Materia Socio-

Medica 27(3): 188-191. doi: $10.5455 / \mathrm{msm} .2015 .27 .188-191$.

Drapeau, Christopher W., John L. McIntosh. 2016. U.S.A. Suicide 2015: Official Final Data. Washington, DC: American Association of Suicidology Retrieved April 28, 2018. http://www.suicidology.org

Duwe, Grant. 2017. "Mass Shootings Are Getting Deadlier, Not More Frequent." Politico Magazine. Politico LLC, Retrieved April 11, 2018 https://www.politico.com/magazine/story/2017/10/04/mass-shootings-more-deadly-frequent-research-215678

Edelman, M. W. 2007. "The Cradle to Prison Pipeline: An American Health Crisis." Preventing Chronic Disease: Public Health Research, Practice and Policy 4(3). Retrieved April 29, 2018 http://www.cdc.gov /pcd/issues/2007/jul/07_0038.htm

Farrington, D. P., Jolliffe, D., Loeber, R., Stouthamer-Loeber, M., \& Kalb, L. M. 2001. The Concentration of Offenders in Families and Family Criminality in the Prediction of boys' Delinquency. Journal of Adolescence, 24, 579596. doi:10.1006/jado.2001.0424

FBI. 2013a. A Study of Active Shooter Incidents in the United States, 2000-2013. Retrieved 29 Apr. 2018 https://www.fbi.gov/file-repository/active-shooter-study-2000-2013-1.pdf

FBI. 2013b. Expanded Homicide Data Table 8. Crime in the United States 2013. U.S. Department of Justice. Retrieved April 17, 2018 https://ucr.fbi.
gov/crime-in-the-u.s/2013/crime-in-the-u.s.-2013/offenses-known-to-law-enforcement/expanded-homicide/expanded_homicide_data_table_ 8_murder_victims_by_weapon_2009-2013.xls

Friedman, Richard A., and Andrew C Leon. 2007. "Expanding the Black BoxDepression, Antidepressants, and Risk of Suicide." The New England Journal of Medicine 356:2343-2346. doi: 10.1056/NEJMp078015

Grynshteyn, Erin, David Hemenway. 2016. Violent Death Rates: The US Compared with Other High-income OECD Countries, 2010. The American Journal of Medicine 129(3):266-273. doi: https://doi.org/10.1016 /j.amjmed.2015.10.025

Hahn, Robert A., Oleg O. Bilukha, Alex Crosby, Mindy Thompson Fullilove, Akiva Liberman, Eve K. Moscicki, Susan Snyder, Farris Tuma, Peter Briss, Stephen B. Thacker and Richard E. Dixon. 2003. "First Reports Evaluating the Effectiveness of Strategies for Preventing Violence: Firearms Laws. " CDC. Retrieved April 11, 2018 https://www.cdc.gov /mmwr/preview/mmwrhtml/rr5214a2.htm

Hill, K. G., Howell, J. C., Hawkins, J. D., \& Battin-Pearson, S. R. 1999. Childhood Risk Factors for Adolescent Gang Membership: Results from the Seattle Social Development Project. Journal of Research in Crime and Delinquency 36(3):300-322. doi:10.1177/0022427899036003003

Koper, Christopher S., Daniel J. Woods and Jeffrey A. Roth. 2004. An Updated

Assessment of the Federal Assault Weapons Ban: Impacts on Gun Markets and Gun Violence, 1994-2003. University of Pennsylvania. Retrieved April 29, 2018 https://www.ncjrs.gov/pdffiles1/nij/ grants/204431.pdf

Kurtzleben, Danielle. 2016. "Research Suggests Gun Background Checks Work, But They're Not Everything." NPR. Retrieved April 11, 2018 https://www.npr.org/2016/01/09/462252799/research-suggests-gun-background-checks-work-but-theyre-not-everything

Krogstad, Jens Manuel. 2015. "Gun Homicides Steady After Decline in '90s; Suicide Rate Edges Up." Pew Research Center. Retrieved April 112018 http://www.pewresearch.org/fact-tank/2015/10/21/gun-homicides-steady-after-decline-in-90s-suicide-rate-edges-up/

Leigh, Andrew and Christine Neill. 2010. "Do Gun Buybacks Save Lives? Evidence from panel data." American Law and Economics Review 12(2):462-508. doi: 10.1093/aler/ahq013

Luca, Michael, Deepak Malhotra, Christopher Poliquin. 2017. "Handgun Waiting Periods Reduce Gun Deaths." Proceedings of the National Academy of Sciences. doi: 10.1073/pnas. 1619896114

Patterson, G. R., Forgatch, M. S., \& DeGarmo, D. S. 2010. "Cascading Effects Following Intervention." Development and Psychopathology 22:949-970. doi:10.1017/S0954579410000568

Rogers, Simon. 2012. "The Gun Ownership and Gun Homicides Murder Map of the World." The Guardian. Guardian News and Media Limited. Retrieved April 15, 2018 https://www.theguardian.com/news/datablog/interactive /2012/jul/22/gun-ownership-homicides-map

Rudolph, Kara E., Elizabeth A. Stuart, Jon S. Vernick, and Daniel W. Webster. Association Between Connecticut's Permit-to-Purchase Handgun Law and Homicides. Retrieved April 29, 2018 http://www.taleoftwostates.com/wp-content/uploads/2015/06/Connecticut-Study Rudolph_AJPH201411682_ Final.pdf

Swanson, Jeffrey W., E. Elizabeth McGinty, Seena Fazel and Vicky M. Mays. 2015. "Mental Illness and Reduction of Gun Violence and Suicide: Bringing Epidemiologic Research to Policy." Annals of Epidemiology 25(5):366-376. http://doi.org/10.1016/j.annepidem.2014.03.004
U.S. Department of Health and Human Services (HHS) Office of the Surgeon General and National Action Alliance for Suicide Prevention. 2012. 2012 National Strategy for Suicide Prevention: Goals and Objectives for Action. Washington, DC: HHS. Retrieved April 28, 2018 https://www.surgeongeneral.gov/library/reports/national-strategy-suicide-prevention/full_report-rev.pdf

Webster, Daniel W., and Garen J. Wintemute. 2015. "Effects of Policies Designed to Keep Firearms from High-Risk Individuals." Annual Review of Public

Health 36:1, 21-37. https://doi.org/10.1146/annurev-publhealth-031914122516


[^0]:    (2018) "Gettysburg Social Sciences Review Fall 2018," Gettysburg Social Sciences Review: Vol. 2 : Iss. 2 , Article 1.

[^1]:    ${ }^{1}$ Michael R. Fischbach, "Government Pressures against Arabs in the United States," Journal of Palestine Studies 14, no. 3 (Spring 1985): 88-89, http://www.jstor.org/stable/2536955.
    ${ }^{2}$ Middle East Research and Information Project, "Operation Boulder Ended," MERIP Reports 37 (May 1975): 32, JSTOR.

[^2]:    ${ }^{3}$ Fischbach, "Government Pressures," 91.
    ${ }^{4}$ Ibid., 89-91.
    ${ }^{5}$ Ibid.

[^3]:    ${ }^{6}$ Fischbach, "Government Pressures," 89
    ${ }^{7}$ Joe Stork and Rene Theberge, "Any Arab or Others of a Suspicious Nature...," MERIP Reports, no. 14 (February 1973): 3, JSTOR.
    ${ }^{8}$ A+E Networks, "1972: Massacre Begins at Munich Olympics," History.com, last modified 2009, accessed November 21, 2017, http://www.history.com/this-day-in-history/massacre-begins-at-munich-olympics.
    ${ }^{9}$ Stork and Theberge, "Any Arab," 4.

[^4]:    ${ }^{10}$ Elaine Hagopian, "Minority Rights in a Nation-State: The Nixon Administration's Campaign against Arab-Americans," Journal of Palestine Studies 5, no. 1/2: 101, http://www.jstor.org/stable/2535685.
    ${ }^{11}$ Fischbach, "Government Pressures," 90.

[^5]:    ${ }^{12}$ Ibid., 88-89.
    ${ }^{13}$ Stork and Theberge, "Any Arab," 6.
    ${ }^{14}$ Fischbach, "Government Pressures," 98-99.
    ${ }^{15}$ Hagopian, "Minority Rights," 102.

[^6]:    ${ }^{16}$ George Fujii, ed., "H-Diplo Roundtable XIX, 2 on Imperfect Strangers: Americans, Arabs, and U.S.-Middle East Relations in the 1970s," H-Diplo HNet: Humanities and Social Sciences Online, last modified September 11, 2017, accessed November 20, 2017, https://networks.h-net.org/node/28443/discussions/194098/h-diplo-roundtable-xix-2-imperfect-strangers-americans-arabs-and.
    ${ }_{18}^{17}$ Hagopian, "Minority Rights," 111.
    ${ }^{18}$ Michael W. Suleiman, "Islam, Muslims, and Arabs in America: The Other of the Other of the Other...," Journal of Muslim Minority Affairs 19, no. 1 (1999): 42, EBSCOhost.

[^7]:    ${ }^{19}$ Fischbach, "Government Pressures," 87-90.
    ${ }^{20}$ Suleiman, "Islam, Muslims," 41.

[^8]:    ${ }^{21}$ Fischbach, "Government Pressures," 90.
    ${ }^{22}$ Hagopian, "Minority Rights," 102.
    ${ }^{23}$ Stork and Theberge, "Any Arab," 3-5.

[^9]:    ${ }^{24}$ Fischbach, "Government Pressures," 90.
    ${ }^{25}$ Suleiman, "Islam, Muslims," 38.

[^10]:    ${ }^{26}$ Hagopian, "Minority Rights," 107.
    ${ }^{27}$ Fischbach, "Government Pressures," 90.
    ${ }^{28}$ Hagopian, "Minority Rights," 103.

[^11]:    ${ }^{29}$ Ibid.

