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Who Votes and Why: Economic and Psychological Predictors of Political Participation

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WHO VOTES AND WHY: ECONOMICAL AND PSYCHOLOGICAL PREDICTORS OF POLITICAL PARTICIPATION

by

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Abstract

At the centre of democracy lies the right to vote. The United States of America is considered to be an emblem of democracy, so voting is naturally a topic of discourse in colloquial spheres especially given the long fight for equal voting access. In general, voting is a way for citizens to advocate their needs, interact with contemporary society, and prove their affiliation with their country. That being said, the individual reasons to vote differ from citizen to citizen, but patterns may still exist which is why it is important to explore which variables can predict voting outcomes. By doing so, the various dimensions of voting behaviour can be understood on a deeper level. The first chapter of this thesis uses data from the National Longitudinal Survey of Youths of 1997 (NLSY97) to investigate how educational predictors through an economic lens are related to the propensity to vote. The second chapter of this thesis designs a study to test relationships between different psychological phenomena, specifically assimilation, individualism-collectivism, and locus of control and the likelihood to vote for Asian Americans specifically. This is because they are one of the fastest growing populations in the US yet have some of the lowest voter turnout rates. Both portions of the thesis aim to compare how voting behaviour differs for ethnic groups from an interdisciplinary perspective. Results suggest that age, household size, sex, marital status, and high school diploma attainment are predictors of voting behaviour, but further research must be done to solidify these findings since they only partially support previous literature. This research is important because voting behaviour is still a foreign concept in the fields of psychology and economics, so this combined thesis will add to the growing body of literature already in place from two new perspectives.

Keywords: Asian Americans, voting behaviour, education, economics, assimilation, individualism, locus of control.

Chapter 1: Economic Predictors

Throughout history, voting behaviour has consistently been a topic of contention in the American sphere given the struggle individuals have had to go through in order to achieve voting rights. In the 1780s, when the founders of the United States created the Constitution, it was left to individual states to determine who qualified (or didn't qualify) to vote in elections (Carnegie Corporation of New York, 2018). Initially, it was a specific demographic: White male landowners, although this did change throughout time.

After the American Civil War, the Fifteenth Amendment of the Constitution was ratified in 1870 which ensured that people were not to be denied the right to vote on the basis of "race, colour, or previous condition of servitude," but states still held the power to oversee elections as they saw fit (National Low Income Housing Coalition, 2020). For example, Mississippi became one of the first states to instil a 'grandfather clause' that restricted voting to anyone whose grandfather was qualified to vote prior to the Civil War. This tactic, aimed to suppress voting, cut the percentage of eligible male Black voters from over 90 percent to less than 6 percent in 1892 (National Low Income Housing Coalition, 2020).

Other restrictive voting tactics included poll taxes, literacy tests, and English-language requirements which were implemented to shut out Black, immigrant, and low-income populations, all of whom were "denied the education and economic opportunities needed to clear these hurdles," (Mckeever, 2020). Not all women were eligible to vote on the federal level until 1920 when the Nineteenth Amendment was ratified, yet restrictive voting policies still made it difficult for certain women to vote in general. For the next 70 years, individual state governments continued to use voter suppression tactics to create hegemonic voting patterns (Mckeever, 2020).

In March 1965, the struggle for equal voting rights came to a breaking point of sorts where civil rights activists like Martin Luther King Jr, Rosa Parks, and John Lewis marched

from Selma, Alabama, to Montgomery, Alabama to spotlight the issue of Black voting rights and were brutally attacked by law enforcement officials and others with batons, tear gas, and whips (Carnegie Corporation of New York, 2018; Mckeever, 2020). Inspired by the voting rights marches, President Lyndon B Johnson signed the Voting Rights Act, which barred many voter suppression tactics states used and established provisions that required states and local jurisdictions with a history of restrictive voter discrimination to submit changes in their election laws to the US Justice Department for preclearance (Carnegie Corporation of New York, 2018).

Throughout the 1970s and 1980s, Congress expanded the Voting Rights Act. Extensions included protections for members of language minority groups, increasing accessibility to polling centres for the elderly and the disabled, and allowing for mail-in voting. When the historic *Shelby County v Holder* case came to light, it repealed the component of the Voting Rights Act which required certain states to submit voting legislation for preclearance, which means that there was no federal legislation that mandated certain accommodations. Since then, states have been allowed to alter their voting policies as they see fit including citizenship or identification requirements, shortened early voting periods, and purging inactive names from registered voting lists (Mckeever, 2020). It is difficult to discern the long-term effects of *Shelby County v Holder*, but it raises questions of who votes in both federal and municipal elections and why they vote.

For example, Elene Holodny (2018) of Business Insider asserts that the 6.1 million American adults who were prohibited from voting in the 2016 election because they had a felony conviction on their record could have very well changed history if given the opportunity. The majority of these individuals had already served their sentences and had returned to their homes, yet most US states restrict their voting rights. According to The Sentencing Project, as cited in Holodny, 2.5 percent of the total voting-age population were

affected which equates to a value that is greater than the population of Missouri. This was the single largest group of eligible voters who were barred by law from participating in elections (Holodny, 2018). Currently, the Fourteenth Amendment grants states the authority to deny voting rights to those with criminal convictions, and it is then up to the states to decide whether these rights are to be restored afterwards. The Sentencing Project also predicts that 77 percent of the disenfranchised voters are not actually in prison but are under probation or parole or have even completed their sentences (Holodony, 2018). Holodny suggests that there is an interaction between race and disenfranchised voting based on municipal legislation where people of colour are often arrested and convicted disproportionally in comparison to their White counterparts. She questions what would have happened if these individuals were granted the right to vote, especially in terms of the heavily contested 2000 election between George W Bush and Al Gore in the state of Florida (Holodny, 2018).

Aside from disenfranchised felons, Morris et al. (2022) of the Brennan Centre For Justice suggests that state lawmakers are introducing restrictive voting policies that make it disproportionately harder for voters of colour and voters with disabilities to cast ballots. Using Arizona as a case study, Morris et al. assert that shortening the window for a voter to add a missing signature on mail-in ballots harms members of the Navajo Nation more so than other groups given that there are no county seats on the Navajo Nation. “Thus, voters may have to travel hundreds of miles to add a missing signature by 7 p.m. on Election Day instead of five business days after, as was initially agreed to in a settlement with the Arizona secretary of state’s office,” (Morris et al., 2022).

In addition, Sarina Vij (2020) of the American Bar Association argues that voter ID laws have underlying racial biases and prevent racial minorities from participating properly. Though it may seem equitable for voters to present their ID on Election Day in order to cast a ballot, obtaining this proof of identification may be costly and require a birth certificate

which may possess its own hurdles. Those who struggle to provide a valid ID card tend to be younger, less educated, impoverished, and nonwhite (Vij, 2020). An example of these laws include Georgia's "exact match" policy where an individual's voting status may be suspended if the name on their driver's licence or their Social Security records does not exactly match that on their voter registration form. Vij reports that 80 percent of the 51,000 individuals this law affected in 2018 were African American.

To parlay these assertions into real life figures, the US Census Bureau compiled a report of the levels of voting and registration in the November 2006 congressional election, the characteristics of citizens who reported either registering or voting in said election, and the reasons why some registered individuals did not vote (File, 2008). The data in this report were based on responses to the 2006 Current Population Survey Voting and Registration Supplement which was administered to the civilian noninstitutionalised population in the US.

In 2006, 68 percent of voting-age citizens were registered to vote out of which 71 percent reported voting, indicating that the likelihood that an individual will vote once registered is high (File, 2008). That being said, this likelihood differed amongst race groups and Hispanics where non-Hispanic Whites had the highest registration rate at 71 percent, followed by Blacks (61percent), Hispanics (54 percent), and Asians (49 percent) respectively. The voter turnout rates followed a similar trend.

The US Census Bureau reported that amongst the voting-age citizen population, 3 percent more of women voted in the Congressional election and were similarly more likely to vote than men. In addition, marital status also determined registration and voting behaviour where married individuals were more likely to register and to vote, and, out of the unmarried voting-age citizens, widowed individuals were more likely to register and vote. Across these marital statuses, women were still more likely to vote (File, 2008).

In order to be voting eligible, one must either be born a citizen or naturalised. These statuses have also impacted voting behaviour where a larger percentage of native citizens (69 percent) were registered to vote, and native citizens also had a higher voting turnout (49 percent) in comparison to naturalised citizens (File, 2008). Higher levels of educational attainment and income also increase the likelihood of registration and voting. Veteran status is interesting because, although veterans were more likely to register and to vote than nonveterans, female veterans were less likely to vote than their male counterparts which is not the case for nonveterans as seen above.

The US Census Bureau also showed that region played a part in likelihood to register and likelihood to vote in 2005, as citizens residing in the Midwest were more likely to register and to vote than those living in other regions. At the state level, Maine, Minnesota, South Dakota, and Iowa had the highest levels of voting registration in the country (roughly 78 percent) while Hawaii, Nevada, and Utah shared the lowest registration rates at about 56 percent. Minnesota and South Dakota had the highest civilian voting rates at 64 percent while Utah, West Virginia, and Texas had the lowest voting rates at 37 percent (File, 2008).

Out of the 40 million citizens who were not registered to vote in 2006, 48 percent reported that they were not interested in the election or were not involved in politics. 14 percent reported that they did not meet the registration deadline. Other reasons include ineligibility, lack of knowledge on the registration procedure, having a permanent illness or disability, or the belief that their vote would not make a difference. 29 percent of registered voters reported that, though registered, they chose not to vote. Reasons for which include scheduling conflicts (27 percent), an illness/disability (12 percent), a lack of interest or concerns that their vote would not create change (12 percent), travel (11 percent), disliking the candidates or issues (7 percent), forgetting (6 percent), uncertainty about the voting process (4 percent), and inconvenient polling centres (3 percent) (File, 2008).

Based on this data, it seems as though socioeconomic status, ethnicity/race, sex, marital status, region, and veteran status are all contributors to an individual's decision to register to vote and to vote in congressional elections. Other research, such as that in Ansolabehere & Hersh (2011), has found that gender, race, and age do not correlate with political participation in the same manner as previously thought. Their research is based on the theory that it is people's access to "resources" that drive their political participation. The term "resources" is not defined by Ansolabehere & Hersh, but it can be inferred that it is an umbrella term for monetary resources and its associated opportunities, such as high levels of educational attainment. If an individual is disadvantaged or discriminated against in society, they are less likely to participate due to their lack of "resources" (Rosenstone & Hansen, 1993; Verba et al., 1995, as cited in Ansolabehere & Hersh, 2011).

Ansolabehere & Hersh partnered with Catalist, a data vendor to Democratic politicians and liberal interest groups that collects voter registration records, filters them, and provides a dataset of registered voters to its political clients. Their study used Catalist's data on the 2008 general election as recorded on voter files by election officials. They used citizen population estimates from the Census Bureau's full population estimates by gender, race, and single year of age for 2009 along with the American Community Survey (ACS) to generate the percentage of each age-gender-race cohort that are citizens to weight the population statistics accurately (Ansolabehere & Hersh, 2011).

Their analysis found that across all racial groups, women were registered to vote at higher rates than men. The gap in registration rates differed by race where it was 2 to 3 percentage points for White Americans and Asian Americans but 14 to 16 percentage points for Hispanic Americans and Black Americans (Ansolabehere & Hersh, 2011). The same effect was seen when it came to voter turnout. It is interesting to note the interaction between race and gender since women were more likely than men to vote in general, but the overlay of

race further deepened the difference in registration and voting rates, as Black women were found to vote at a higher rate than White men. Once age is added to create a three-variable interaction, the results of their analysis showed that the relationship between age and political participation was not linear and varied per racial group (Ansolabehere & Hersh, 2011). A suggested reason for these gaps in participation between minority men and women is felony disenfranchisement laws, which were touched upon previously, that disproportionately affect men of colour. Socioeconomic status and marital status hint at other explanations as Black and Hispanic men are less likely to be well-educated, wealthy, and married which, in turn, may lead to lower participation rates.

Though their analysis was rigorous, further research needs to be done in this field in order to confirm their results. Ansolabehere & Hersh, surprisingly, found that African American women had high registration and voting rates across gender, sex, and racial categorisations which contradicts the opportunity/resource based model they posit previously since African American women are at a disadvantage due to the interaction between their race and sex.

Uhlaner et al. (1989) conducted a California-wide survey of 574 Latinos, 335 blacks, 308 Asian Americans, and 317 non-Hispanic Whites in 1984 to determine ethnic patterns of political participation. Their questions of interest included: (1) Do members of different ethnic and racial groups differ in the amount and type of their participatory activity? (2) Do any differences that are found reflect ethnicity directly, or are they an indirect product of ethnicity, such as group-based mobilisation, or are they simply the result of a random correlation between ethnicity and other factors, such as socioeconomic status? (3) What does political participation look like for noncitizens and what does this suggest? And (4) What will future political participation look like given the changing demographic and political spheres? (Uhlaner et al., 1989).

The results of Uhlaner et al.'s study suggest that Black Americans participate at a similar level as their White counterparts, or even at a higher rate if income and education are controlled while Latin Americans and Asian Americans participate on a much smaller scale. In addition, the results of their study provide further support for the idea that high socioeconomic status, high levels of educational attainment, age, and gender all impact propensity to vote. Uhlaner et al. conclude that the difference in political participation across ethnic groups could be due to cultural factors, such as the cultural norm to avoid political involvement, or a learned attitude that electoral politics are unimportant, but further research must be conducted to solidify this hypothesis.

Through a socio-physical lens, Bazargan et al. (1991) compared the impact of the physical and psychological condition on voter turnout among elderly Black Americans and White Americans by using data from the Aging in the Eighties national survey to examine the impact of health rating and life satisfaction as well as other socio-psychological characteristics on voting turnout. Through multiple logistic regression, they found that for White self-assessment of health is significantly related to voting behaviour, whereas among Black Americans life satisfaction shows significant impact on turnout. Moreover, socioeconomic status, age, and organisational activity proved to have significant impact on elderly White American turnout while education was a significant predictor for Black participation (Bazargan et al., 1991).

This study will compare predictors for voter turnout across ethnic groups to determine which variables are statistically significant as predictors but also how voting behaviour differs for minority groups and their White counterparts. Educational variables, specifically, will be analysed to predict political participation which will then be connected to how theories of assimilation processes, individualism-collectivism, and locus of control impact voting behaviour as well. There is little economic and psychological research on this topic,

hence the study is imperative in the overarching struggle to mobilise US citizens to vote. Additionally, it will create more clarity on a highly contested topic and will allow for political candidates to campaign better due to their deeper understanding of voting behaviour which is related to concepts in decision making and risk.

Data

The data used for this study comes from the National Longitudinal Survey of Youths of 1997 (NLSY97), conducted by the US Bureau of Labour Statistics, which is a panel series data set of 8,984 individuals born between 1980 and 1984 living in the United States at the time of the initial survey in 1997. The participants were between the ages of 12 and 16 as of December 31st, 1996. Interviews were conducted annually from 1997 to 2011 and every two years since then. The NLSY97 aims to collect information on participants' labour market behaviour and educational experiences. The survey also contains information on participants' demographics and backgrounds to help researchers assess the impact of schooling along with other predictor variables on labour market experiences. Data from the NLSY97 is also used to determine how an adolescent's experience is connected to their career trajectory, government program participation and family formation. Data were selected from October 2010 to June 2011 (Round 14).

Computer-Assisted Personal Interviews (CAPI) were conducted for each round. CAPI is an in-person data collection method where an interviewer uses a technological instrument (such as a laptop) to code participant answers. The software automatically guides the flow of the electronic questionnaire where certain items are selected based on previous responses. The software also prevents the interviewers who are manually inputting the answers from entering invalid values and warns about implausible answers. The CAPI system has a set of checks within the software which aim to lower the probability of inconsistent data during an interview but also overtime since this is a longitudinal study in design. Interviews

were either conducted in-person, which was preferred, or over the telephone. During sensitive portions of the interview, a participant would record their answers directly into the software (if conducted in-person) rather than through the interviewer. There was also an audio option for these sensitive questions where participants were allowed to use headphones to listen to the question and the answer choices before answering. Theoretically, this audio component improves response quality if a participant's literacy is in question. If the interview was conducted over the phone, the interviewer would ask all questions regardless of sensitivity. The questionnaire was also made available in Spanish to accommodate bilingual participants, and the Spanish version was administered if requested.

Missing data, or a non-response, occurred for a number of reasons. First, certain participants may not participate in the survey for that year, hence all the information for that participant is missing for that round. This could be due to various reasons such as refusal to participate, an inability to contact the participant, or if the participant was deceased. The data is coded as a (-5) if so. Second, missing data can occur if a respondent either refuses to answer (-1) or does not know the answer (-2). The interviewers are trained to distinguish between the two based on the verbal response from participants. The interviewing protocol encouraged interviewers to try to convert a non-response either by soothing the concerns behind a refusal to answer (e.g. by assuring confidentiality and privacy) or by prompting respondents with cognitive aids. Only if these techniques were ineffective would an interviewer code a response as "refusal" or "don't know." Third, missing data could be due to a "valid skip" (-4). This means that a participant was not asked a certain question given that it may not apply to them. If there was a problem with the CAPI software where a participant was (or was not) asked a question that did (or did not) apply to them, the missing data were flagged as an "invalid skip" (-3).

The original sample was actively selected to represent the civilian, noninstitutional population of the US within the selected age range (12 to 16 years old) with an oversampling of Hispanics and non-Hispanic blacks. Participants and their parents were administered a questionnaire that covered a range of topics including prior work experience, education, work-related attitudes, and other labour and human capital issues. The original sample contained interviews from 8,984 respondents of which 51 percent were men (4,599) and 49 percent were women (4,385). Demographically, 51.9 percent of participants (4,665) were non-Black/non-Hispanic, 26 percent (2,335) were Black non-Hispanic, 21.2 percent (1,901) were Hispanic/Latino and the remainder were Mixed Race. To select the sample, interviewers screened 75,291 households in 147 primary sampling units that did not overlap. A primary sampling unit is a metropolitan area or, in nonmetropolitan areas, a single county or group of counties. In addition, there were two types of samples – a cross-sectional sample and an additional oversampling of specifically Black and Hispanic participants.

The NLSY97 uses the demographic categories Black, Hispanic, Mixed Race and non-Black/non-Hispanic to describe the sample. The participants were first asked if they were ethnically Hispanic, after which they were asked their race. This was then recoded into these four demographic categories. The NLSY97 uses these four categories when describing the data, hence for the purposes of the investigator's comparative analysis, this study will also use these categories.

The data used for this research was from Round 14 where data were collected from October 2010 to June 2011. The sample consisted of 7,479 participants which translates to a 83.2 percent retention rate of which 3,765 (50.34 percent) were male and 3,714 (49.66 percent) were female. Of this, 27.32 percent were Black, 21.45 percent were Hispanic, 0.96 percent were Mixed Race and 50.27 percent were non-Black/non-Hispanic. These figures can be seen in Table 1.

Table 1

Demographic data of Round 14 of the NLYS97

		Frequency	Percentage
Sex			
	Male	3,765	50.34
	Female	3,714	49.66
Race/Ethnicity			
	Black	2,043	27.32
	Hispanic	1,684	21.45
	Mixed Race	72	0.96
	Non-Black/non-Hispanic	3,768	50.27

Note. This table shows a demographic breakdown by sex and race/ethnicity for the participants. Data are from the Round 14 (October 2010 to June 2011) surveys conducted with the National Longitudinal Survey of Youth 1997 cohort.

Given that this research focuses on the voting behaviour of ethnic minorities using educational variables, it was necessary to further filter the sample to exclude those ineligible to vote such as noncitizens, those under the age of 18, and anyone who had been arrested previously, as most states do not allow those who have been previously incarcerated to vote. In order to ease further data analysis, participants who reported any form of missing data were also excluded to avoid misinterpreting the data through a recoding process. This reduced the sample significantly to 1,336 participants (82.14 percent decrease). A detailed breakdown of the sample characteristics in terms of age, sex, race/ethnicity, region metropolitan status, and marital status can be seen in Table 2. To give an overview of the sample, 56.96 percent were female, 31.41 percent were either Black or Hispanic with 66.69 percent as non-Black/non-Hispanic, the majority of participants were based in the South

(41.69 percent) and in Urban areas (73.35 percent) as defined by the 2000 Census Standards. In addition, all participants were between the ages of 25 and 31 and the majority reported that they were married (70.36 percent).

Study Objectives

This study aims to analyse how educational predictors impact voting behaviour for different ethnic groups. Multivariable probit regression models were be applied to the data set to determine the strength and relationship between the predictor variables and voting outcomes. The predictor variables of interest include: sex, age, race/ethnicity, parental education attainment, region, naturalisation status, high school degree attainment, gross family income, household size, college type, marital status, metropolitan status, and registration status.

Not all of these variables were used in the regression model – specifically, college type, registration status, and naturalisation status were dropped. College type was dropped as a variable during the initial data filtering process since a significant proportion of participants refused to answer or were unsure. Instead of further filtering those participants by removing the non-response participants, which would have cut down the sample by a larger proportion, college type was also dropped as a predictor. Registration status was also omitted for the same reason as college type (high levels of missing data during the initial filtering process) but also because there is an implicit assumption that in order to vote, one must be registered, which creates a conditional relationship between the two. By including such a variable, one sacrifices potential statistical power, hence it is better to exclude it. Naturalisation status was not used because the subsamples for each (naturalised or native-born) were not equally distributed since there was a much larger proportion of natural-born citizens regardless of demographic groups. This inequality makes data analysis ineffective.

Parental education was also difficult to account for in that NLYS97 asked for both biological and residential parental education. There was confusion as to how to recode this variable into a singular unit, as certain answers were either missing or repetitive – both of which are problematic. For example, a participant may have recorded the same level of education for both their residential mother and their biological mother. This could be because they are one in the same, or it could be because a participant has both types of mother who coincidentally have the same level of educational attainment. Without talking to the participant myself, it is impossible to determine the justification for such a code. Biological parental values were chosen for this study on the basis that there have to be a biological parents even if they are not a part of the same household as the participant. Furthermore, the variables were recoded to specify whether the biological parent had completed high school or not as a dummy variable.

Other variables that were dummy coded as dichotomous binaries for the ease of analysis include sex, marital status, high school diploma, and metropolitan status. Marital status and bachelor degree attainment were coded in the typical manner where a score of 1 indicated that the feature was present (either married or had received a high school diploma) and 0 indicated that the feature was absent (either not married or had not received a high school diploma). For sex and metropolitan status, female and urban were used as reference categories. Hence, 1= female, 0= not female, 1= urban location and 0=not urban location.

Gross family income was used instead of participant income or spousal income because the variable accounts for both within its calculation. Including all three variables could lead to a multicollinearity problem (correlation between predictors), so gross family income was chosen as a summary income variable of sorts because it is the sum of the participant's income, their spousal income, and any other sources of income. Furthermore,

the variable was transformed with a logarithmic function to adjust for skewness in the data and create a distribution that is as normally distributed as possible.

Descriptive statistics for the chosen predictor values for Black, Hispanic, and non-Black/non-Hispanic groups are presented as Table 3, 4 and 5 respectively. Mixed Race participants are excluded as they form a very small proportion of the sample (0.90 percent).

For Black participants, the majority were female (56.41 percent), were 30 years old (24.10 percent), lived in the South (69.23 percent) in urban areas (82.56 percent), were married (58.97 percent), had both biological mothers and biological fathers who had a high school diploma or more (85.64 percent and 81.03 percent respectively), had a high school diploma or higher themselves (84.10 percent), and belonged to a household of between 4 to 7 people (54.36 percent). The mean gross family income and standard deviation were calculated at $78,455.70 and $52,326.19 respectively.

For Hispanic participants, the majority were female (57.14 percent), were 29 years old (22.69 percent), lived in the West (39.92 percent) in urban areas (87.39 percent), were married (68.49 percent), had both biological mothers and biological fathers who had a high school diploma or more (57.56 percent and 52.94 percent respectively), had a high school diploma or higher themselves (88.24 percent), and belonged to a household of between 4 to 7 people (49.16 percent). The mean gross family income and standard deviation were calculated at $60,542.74 and $50,636.19 respectively.

For non-Black/non-Hispanic participants, the majority were female (57.13 percent), were 29 years old (22.90 percent), lived in the South (37.60 percent) in urban areas (67.34 percent), were married (73.74 percent), had both biological mothers and biological fathers who had a high school diploma or more (89.64 percent and 86.64 percent respectively), had a high school diploma or higher themselves (92.59 percent), and belonged to a household of

between 1 to 3 people (60.72 percent). The mean gross family income and standard deviation were calculated at $83,371.98 and $1,765.39 respectively.

Model

This study used multivariable probit regression models to define the relationship between the predictor variables of interest and voting outcome as a dichotomous variable. This was done for three of the demographic groups: Black, Hispanic, and non-Black/non-Hispanic. Mixed race was not included given that they factor for such a low proportion of the sample, so any data analysis would be skewed heavily. The probit model is based on the standard normal cumulative density function (CDF) which replaces the linear function, hence it is estimated:

$$E(Y|X_i) = \Pr(Y = 1|X_i) = F(\beta_0 + \beta_1 X_i) = \int_{-\infty}^{\beta_0+\beta_1 X_i} (2\pi)^{\frac{1}{2}} e^{\frac{\beta_0+\beta_1 X_i}{2}} d(\beta_0 + \beta_1 X_i)$$

In this model, higher values of $\beta_1 X_i$ indicate higher likelihoods of $Y = 1$, or an individual voting in a presidential election. Unlike linear regression models, the β values cannot be estimated using ordinary least squares (OLS) since the function is nonlinear in parameter, so instead a method called maximum likelihood (ML) estimation is used. ML estimation is used to choose values for the predictor variables that would maximise the probability of observing $Y = 1$ in the sample with the given X values.

After performing an ML estimation, the slope (β) value was given along with the standard error and the level of significance (p value) for each predictor variable. The slope determines the strength and direction of the relationship between a predictor variable and a dependent variable. If the level of significance is less than 0.05, the relationship between a given predictor and the dependent variable (voting outcome) is statistically significant ($p < 0.05$). If the p value is greater than 0.05, the relationship between the predictor and the dependent is insignificant.

Results

The Stata/SE 17.0 software was used for statistical analysis where probit regression models were first created to test the relationship between voting outcomes in the 2010 presidential election (0= no, 1= yes) and sex, age, biological parental education attainment, region, high school diploma attainment, gross family income, household size, marital status, and metropolitan status. This was done for Black, Hispanic, and non-Black/non-Hispanic participants after which an ML estimation occurred.

For Black participants, only age proved to be a significant predictor for a positive voting outcome where an increase in age is positively correlated with likelihood to vote ($\beta = 0.06, p = 0.02$). The relationships between all predictor variables and voting outcome can be seen in Table 6.

Age was also a significant predictor ($\beta = 0.06, p = 0.02$) for Hispanic participants along with a household size of both 4 to 7 and 8 to 10 ($\beta = -0.14, p = 0.04; \beta = -0.28, p = 0.04$). An increase in age is positively correlated with likelihood to vote but an increased household size is negatively correlated with likelihood to vote. The relationships between all predictor variables and voting outcome can be seen in Table 7.

Lastly, age, high school diploma attainment, and marital status proved to be significant predictors for a positive voting outcome for non-Black/non-Hispanic participants. Age is positively correlated with the likelihood to vote ($\beta = 0.03, p = 0.01$), obtaining a high school diploma is positively correlated with likelihood to vote ($\beta = 0.18, p = 0.01$), and so is being married ($\beta = 0.14, p = 0.00$). The relationships between all predictor variables and voting outcome can be seen in Table 8.

Conclusion

The aim of this study was to determine which educational factors predict political participation for ethnic minorities, specifically Black, Hispanic, and non-Black/non-Hispanic

populations, using data from the National Longitudinal Study of Youth 1997 (NLSY97) by the US Bureau of Labour Statistics. The NLSY97 is composed of data collected from 8,984 individuals between the ages of 12 and 16 living in the United States at the time of the initial survey in 1997. Interviews were conducted annually from 1997 to 2011 and every two years since then. This study uses data from Round 14 which were collected between October 2010 and June 2011, and it aimed to analyse how educational predictors impact voting behaviour for different ethnic groups through multivariable probit regression models.

The educational predictor variables of interest were sex, age, race/ethnicity, parental education attainment, region, naturalisation status, high school diploma attainment, gross family income, household size, college type, marital status, metropolitan status, and registration status. Of these, college type, registration status and naturalisation status were dropped due to fears of an insufficient sample size. The dependent variable was a dichotomous voting outcome binary where 0 = did not vote and 1 = vote in the 2010 presidential election.

The probit regression model for Black participants revealed that age proved to be a significant predictor for a positive voting outcome where an increase in age is positively correlated with likelihood to vote. Although all participants were from the same age cohort (ages 25 to 31), there was enough of a variation in the data to create a significant outcome in voting behaviour. In addition, marital status was significant at the $p < 0.1$ level ($\beta = 0.15$, $p = 0.07$) which suggests that there may also be a positive relationship between marriage and propensity to vote.

For Hispanic participants, age and household size were significant predictors to vote. Like Black participants, age was positively correlated with likelihood to vote, but household size had the opposite relationship. For households between the sizes of 4 to 7 people and 8 to 10 people, there was a negative relationship with a positive voting outcome. This may be due

to the fact that individuals who have more members in their household have less time to vote, so they were not given the opportunity. This theory would be in line with what previous literature suggests. Furthermore, sex was statistically significant at the $p < 0.1$ level ($\beta = 0.12$, $p = 0.06$), which suggests that females may be more likely to vote as well. This finding is also in line with previous literature which finds that females are more likely to vote than other sexes.

Lastly, age, high school diploma attainment, and marital status proved to be significant predictors for a positive voting outcome for non-Black/non-Hispanic participants. Like other ethnic groups, age was positively correlated with likelihood. Obtaining a high school diploma and marriage were both also positively correlated with likelihood to vote.

The results of this study provide partial support for previous findings on the significance of age, sex, marital status, and forms of education attainment on voting behaviour. Although all participants were of the same cohort, so no age effects were anticipated, the results suggest strong relationships between increases in age and likelihood to vote. Additionally, previous literature has suggested that those who are married, female, and have higher forms of education are more likely to vote. It is interesting to note that age remained consistent for all ethnic groups while other predictors varied for certain populations. For example, marital status was only salient at the $p < 0.05$ level for non-Black/non-Hispanic participants. In addition, certain predictors outside of those suggested in the literature were found to be salient as well such as household size for Hispanic participants.

These surprising results may be due to the proportion of participants to the number of predictor variables for each group as the individual samples ranged from 195 to 891. While these numbers are reasonably large for samples, this research used ten predictor variables of which only two – gross family income and household size – were continuous while the rest

were either dichotomous or categorical. Dichotomous and categorical variables can be difficult to use as each category is transformed into a variable of its own; each variable “eats up” a degree of freedom which accounts for error. By increasing the degrees of freedom, the scope for error also increases which creates problems in the model.

In addition, the NLSY97 was not created to determine educational predictors of voting outcomes, so the questionnaire items, the coding system and the methodology in general created difficulties in data manipulation for this study. The ethnic group terminology used is also mildly confusing since Black, Hispanic and non-Black/non-Hispanic are not specific. For example, who is non-Black/non-Hispanic and how do these various ethnic groups who have been lumped into one large population differ individually? Is it plausible that certain extremes attributed to one of the various ethnic groups categorised as non-Black/non-Hispanic skewed the date, thus creating a relationship between variables? In addition, one could be non-Black but Hispanic, yet there is no obvious category in which this individual would be placed.

Therefore, this study should be redesigned and replicated with the intention of determining which educational predictors contribute to propensity to vote with an updated questionnaire, coding system and methodology. Furthermore, the ethnic groups chosen should be more vastly representative of the population of the US and use terminology that is contemporarily relevant. The next chapter of this thesis focuses on Asian Americans specifically, as a group that was not explicitly mentioned by the NLSY97, to determine which psychological predictors can impact the propensity to vote.

Chapter 2: Psychological Predictors

According to the U.S. Census Bureau (2020), Asian Americans – also known as the Asian, Pacific Islander, Desi American (APIDA) community – are one of the fastest growing populations in the United States of America over the last few decades. In fact, between 1990 and 2000, the Asian American population doubled in 19 states, and it is estimated that this trend of explosive growth will continue where Asian Americans are expected to account for 10 percent of the population by 2060 (Junn et al., 2008). These numbers, however, have not yet been translated into political power, as only 37 percent of Asian American adults voted in the 2004 election in contrast to 73 percent of White Americans and 68 percent of Black Americans (Junn et al., 2008). Asian Americans have some of the lowest registration and voter turnout rates amongst different ethnic groups in the US (Xu, 2005).

Given these competing statistics, it is imperative to understand what compels an Asian American to vote. Before continuing, it must be noted that not all Asian Americans are the same. The community is not a monolith and should not be treated as such. For example, their reasons for immigrating to the US may be different – some to further their careers whilst others to escape political persecution. This difference will affect their life outcomes as it would have a ripple effect in terms of their socioeconomic status, educational attainment, and overall experiences. According to Sandhu (1997), Asian and Pacific Islander Americans include more than 40 distinct cultural groups which can be further categorised into three subdivisions: Asian Americans (Chinese, Filipinos, Japanese, Korean and Indian), Southeast Asians (Cambodians, Laotians, and Vietnamese) and Pacific Islanders (Hawaiian, Guamanians, and Samoans). Nonetheless, some Asian ethnic groups are still left out such as Burmese Americans or Pakistani Americans, adding to the argument that the APIDA community is not a monolith and treating them as such is “erratic” and “too simplistic,” (Kim et al., 1992). Because each Asian ethnic group has its own distinctive culture, history, and

reasons for immigration to the US, it is almost impossible to make solid generalisations without creating a deceptive picture of an extremely diverse population (Takaki, 1989). These generalisations have resulted in both the model minority stereotype and the perpetual foreigner stereotype which may affect their political participation. As a "model minority," Asian Americans may feel compelled to vote to adhere to the expectations of the rest of society. On the other hand, feeling like a forever foreigner might dissuade individuals from voting since it may create a mentality of "why vote if I do not belong." These competing constructs can both have profound effects on voting behaviour, so it is necessary to see how they may parlay into voting behaviour.

The model minority stereotype posits that Asian Americans have "made it" in that they no longer face any economic, social or political barriers to success given that their economic and academic success are attributed to hard work and Asian cultural norms (Lee et al., 2008). Takagi (1992) states that the term was first used by sociologist William Peterson (1966a) in a *New York Times Magazine* article where he argued that Japanese Americans are better than any other group in American society including native-born Whites when it comes to being good citizens. Lee et al. (2008) cites another article by Peterson (1966b) focusing on Chinese Americans which appeared in the *U.S. News and World Report* where he concluded that it is the Japanese and Chinese value system of hard work and strong family ties which has allowed them to overcome any racial barriers and achieve economic success in the US.

Many will question why such a stereotype is harmless – after all, being considered successful is a positive attribute. The reality is that this stereotype is misleading and dangerous, as previously mentioned. It functions on vast generalisations about education, income, culture, and history that mask the true diversity within the Asian American community. For example, a Pew Research Centre survey from 2012 reported the main reasons that Asian Americans came to the US for six different ethnic groups. While there

were five main reasons to immigrate – family reasons, educational opportunities, economic opportunities and conflict/persecution – different Asian ethnic groups highlighted different reasons. Only 2 percent of Indian Americans reported coming to the US to flee persecution whilst 38 percent of Vietnamese Americans immigrated for the same reason. In contrast, 37 percent of Indian Americans immigrated for educational opportunities whilst only 10 percent of Vietnamese Americans moved for the same purpose (Pew Research Centre, 2013).

In addition, the stereotype creates interracial tension between Asian Americans and other ethnic groups. According to Lee et al. (2008), when the dominant society puts Asian Americans on a pedestal as a model minority, it promotes antagonism between them and other ethnic groups because an inherent comparison of the successes and failures is created. This contributes to its harmfulness because it pits different groups against one another unnecessarily, and this social dynamic might contribute to uncertainty about social expectations in terms of voting.

The second issue that Asian Americans face that is unique to their racial group is the label of a "perpetual foreigner," where Asianness is not seen as American. As cited in Lee et al. (2008), Tuan (1998) writes that "Whiteness is equated with being American; Asianness is not." In fact, Lee et al. (2008) asserts that Asian Americans may be overlooked when it comes to their right to civic participation and the part they play when it comes to deciding the future of American democracy and legislature. If Asian Americans are not considered when it comes to the role they play in civic participation, they would be dissuaded from participating in general. To contextualise this ideology into empirical research, Devos & Banaji (2005) investigated the extent to which American ethnic groups – specifically, African, Asian, and White – were associated with the term "American." Although Study 1 determined that all participants held strong explicit commitments to egalitarian principles, Studies 2-6 consistently revealed that Asian Americans (and African Americans, though to a lesser

extent) were less associated with the label “American” than their White counterparts. These studies also revealed that this American = White effect was seen in Asian American participants, indicating that they themselves have fallen under the impression that they are a forever foreigner (Devos & Banaji, 2005). By believing that they themselves are foreign or do not belong, Asian Americans may be dissuaded from participating in political activities such as voting.

As previously mentioned, the model minority stereotype and the perpetual foreigner label separate Asian Americans from other ethnic minorities in the US, which is why it is important to analyse their political participation in terms of voting behaviour because these labels and the underlying constructs may affect their voting outcomes. Formal political incorporation is a method in which individuals can claim social membership and advance group interests, so the relationship between assimilation, placement on the individualism-collectivism scale, locus of control, and naturalisation status – all of which are linked to the model minority stereotype and the forever foreigner status – and political participation should be examined especially from a psychological perspective as much research has come from the paradigms of sociology and political science.

Assimilation

It is necessary to explain some of the constructs mentioned in this paper. Assimilation is difficult to define, and Boyer (2001) argues that the term is best understood in relation to other sociological concepts such as cultural diffusion. While *cultural diffusion* is a term used to describe a situation where there is an exchange of customs and norms from one group to another, assimilation is more specific in that there is a clear asymmetry in the exchange where there is a dominant group and a less central one. The dominant group’s identity remains more or less unchanged while the periphery group takes on attributes of the dominant group (Boyer, 2001). Rumbaut (2001) agrees that assimilation, at the individual level, is the

overall changes that make a person of an ethnic group more acculturated, integrated, and allow them to identify with members of another group. Milton Gordon (1964, as cited in Rumbaut 2001), supported the view that assimilation is a linear process with seven stages where the goal was "identificational assimilation," where the individual sees themselves as an "unhyphenated American," and there is an active absence of prejudice and discrimination against this individual. Based on this definition, very few ethnic groups have achieved identificational (pure) assimilation because Asian Americans are still discriminated against today. It is separate from acculturation as argued by Teske & Nelson (1974) who state that acculturation is a two-way process, does not require acceptance by the dominant group, and does not require internal affiliation with the dominant group. Assimilation is unidirectional, requires acceptance by the dominant group, and assimilated individuals must see themselves as part of the dominant group. Therefore, acculturation is a component within assimilation.

Sam & Berry (2006) posit that Boyer's (2001) theory might be relevant for early groups of immigrants to the US, but it does not hold for the more recent waves nor for their descendants. Instead, they suggest that Portes & Zhou's (1993) segmented assimilation theory is more relevant today. The segmented assimilation theory is based on the fact that American society is diverse and divided with an underclass residing in central cities where many immigrant families initially settle. Therefore, these immigrants have many different paths of assimilation given the various groups into which they may assimilate. These paths include traditional upwards assimilation, downwards assimilation and selective acculturation (Xie & Greenman, 2011). Upwards assimilation is defined as increasing identification with the American middle-class, downwards assimilation is the assimilation into the urban underclass, and segmented assimilation is the active preservation of the immigrant's ethnic identity tied with economic integration. If there are so many methods in which an individual

can become assimilated, it means that there is more than one way to become "American," and the "Americanisation" process may not be beneficial (Bankston & Zhou, 1997).

For the purposes of this proposed research, the overall definition of segmented assimilation will be used rather than diving deep into the multiple pathways with an emphasis on the core idea that assimilation is a process where individuals in periphery groups immerse themselves fully into a dominant culture in a nonlinear multidimensional process.

The assimilation of Asian Americans is a hot topic of discourse as Lee & Bean (2010) argue that the group appears to approaching a "near-White" status given the model minority stereotype, which has blurred the Asian/White divide and strengthened the Black/Nonblack separation. Approaching a "near-White" status assumes that Asian Americans are approaching pure assimilation into the dominant group. This argument is made due to the high educational and occupational achievement of Asian Americans as a collective, which stems from exaggerated average socioeconomic measures that mask the true variation between different Asian ethnic groups and restrictive American immigration policies that have targeted highly-skilled professions specifically since the 1960s (Lee & Kye, 2016).

Empirical support for this idea can be seen in Kuo et al.'s (2020) research which tests how Asian Americans' status as a model minority has led to overestimates of wealth equality between Asian and White Americans. Participants were primed with vignettes of either high or low social status Asians after which they were asked to estimate the Asian-White wealth equality. Results show that regardless of priming stimuli, the Asian-White wealth equality was overestimated, but the low social status condition decreased the estimation comparatively. Their results maintain the idea that there is a misconception of where Asian Americans are in relation to White Americans as model minorities even if the Asian American has a low social status. Kuo et al. provide support for the idea that, as model minorities, Asian Americans are assumed to reach parity with White Americans which can

create assumptions in terms of their political participation. Since White Americans are seen as the dominant group in the US, these ideas are linked to Asian American assimilation processes.

On one hand, Nelson (1982) argues that assimilation has little direct influence on political attitudes and participation for individuals, but it is the alliance with one's ethnic group that plays a bigger part. He conducted a survey of members from six ethnic groups (American black, Cuban, Dominican, Irish, Jewish and Puerto Rican) based in New York City, New York, using the Ethnic Block Survey which was created to examine the relationship between ethnicity, assimilation, political attitudes, and participation. The dependent variable, political participation, was operationalised through five acts: voting in municipal elections, signing petitions for community-based projects, joining municipal organisations, contacting local authorities regarding community problems, and attending municipal protest demonstrations. The predictor variables were ethnic group membership, educational level, socioeconomic mobility, and social assimilation. Results show that only education level had a positive relationship with greater political participation, and, holding all other predictors constant, ethnic group membership was correlated significantly with greater political participation. Nelson warns that one must hesitate before generalising these findings to other ethnic groups.

In contrast, Diaz (2012) hypothesises that higher rates of assimilation into a community with a norm of political participation should increase the likelihood to vote. Using data from the 2000 Current Population Survey voting supplement and county data from the 2000 US Consensus, Diaz finds that Asian Americans who are more assimilated into the dominant society are more likely to vote on the basis of their social integration.

Furthermore, Bui et al. (2022) examined how political civic participation (of which voting was a dimension) was associated with assimilation and social contexts in a sample of

middle-aged and older Asian American adults in Central Texas. They hypothesised that assimilation factors and friend network/community attachment would be positively associated with political participation and that a strong friend network/community attachment would moderate the relationship between assimilation and political participation. The results showed that only assimilation factors – length of stay in the US and familiarity with American culture – were positively associated with political participation whilst command of the English language was not enough alone to inspire political participation. In addition, they also found that the relationship between assimilation factors and political participation was moderated by friend network size. Notable results outside of the hypotheses include no gender effect, which goes against previous literature, and there were also differences in political participation based on sub-Asian group identification (Bui et al., 2022).

Given that traditional explanations for differences in formal political participation for ethnic groups lies in differences in socioeconomic statuses (SES), it is interesting to note that Asian Americans, a group that is perceived to have a high SES, have some of the lowest voter registration and turnout rates. Hence, it would be interesting to see if either Nelson (1982), Diaz's (2012) or Bui et al.'s (2020) findings are supported through this proposed research, especially in the context of voting outcomes.

Individualism-Collectivism

Individualism-Collectivism must similarly be examined given its relationship to Asian cultures as a whole. Triandis (1995) defines collectivism as a social pattern of closely linked individuals who see themselves as part of one or more collective (hence the name), are primarily motivated by the norms and duties of said collectives, are willing to prioritise collective goals over individual ones, and emphasise their linkage to other members of their collective. In contrast, individualism is a social pattern of loosely linked individuals who see themselves as separate from a collective, are incentivised by their own ambitions and the

contracts they have with others, emphasise their own goals over the shared goals of a group, and prioritise rational analyses of the pros and cons of associating with others (Triandis, 1995).

Individualism and collectivism are cultural syndromes in that they can be found in the presence of subjective culture – shared attitudes, beliefs, norms, roles, values, etc. – for a group who shares a language, time period and geographic location. Location on the individualism-collectivism spectrum is based on subjective culture and geography. While there is evidence of within-culture variance, it is marginal in comparison to the between-culture differences (Triandis, 1993).

There are four dimensions for both constructs which is how they can be differentiated: the definition of the self, personal and communal goals, social behaviour, and outlook on relationships. In collectivism, the definition of the self is interdependent, personal and communal goals are synonymous, social behaviour is guided by norms, obligations, duties and expectations, and relationships are emphasised regardless of whether or not it is beneficial. In individualism, the definition of the self is independent, personal and communal goals differ, social behaviour is based on personal attitudes, needs and beliefs, and relationships are maintained based on rational analysis (Triandis, 1995).

To expand on this idea, Triandis (1995) argues that there are four types of self – independent, interdependent, same, and different – where combinations create additional dimensions of individualism-collectivism on a horizontal-vertical plane. Self is defined as all aspects of social motivation such as attitudes, beliefs, intentions, norms, and values. It is an individualised concept that promotes personalised sensation and perception of environmental stimuli that contributes to different social behaviour (Triandis, 1989). These are horizontal individualism (independent/same), horizontal collectivism (interdependent/same), vertical individualism (independent/different), and vertical collectivism (interdependent/different).

The horizontal-vertical plane emphasises concepts of equality where horizontal cultures have individuals that are equal to one another, hence the same self, while vertical cultures acknowledge a hierarchy or a rank based system, which is the different self (Singelis et al., 1995; Triandis, 1995).

Horizontal collectivism (HC) is a cultural pattern where individuals prioritise their ingroup and see themselves at an equal footing with each member; they are interdependent and see themselves similarly with other members. Vertical collectivism (VC) has the same priorities as HC except they understand that there is a hierarchy in place, so serving and sacrificing for the group is normalised; they are interdependent but acknowledge differences. Horizontal individualism (HI) is a cultural pattern where the individual has autonomy but knows they're at parity with the other members of their group; they are independent but the same as other members. Vertical individualism (VI) has the same autonomous ideology as HI but simultaneously recognises that members of the group are placed on a hierarchy; they are independent and different from one another (Singelis et al., 1995).

All four constructs are cultural syndromes, as previously mentioned, which means that they are subjective culture specific and are bound by geographic, linguistic, and temporal ties (Triandis, 1989). Individualism, regardless of horizontal or vertical direction, is typically high in North American and European cultures while collectivism is high in African, Asian and Latin American cultures. (Hofstede, 1980, as cited in Triandis, 1993). That being said, there will be differences within each culture on the horizonal-vertical plane. For example, a Chinese American and a Latino American might both prioritise their group membership (as they are from collectivistic cultures), but their view on where they stand in terms of the societal hierarchy can differ, suggesting either a horizontal or vertical dimension of collectivism. Hence, looking at the individualism-collectivism spectrum must be analysed

from all the possible planes including horizontal and vertical dimensions since the attributes for Asian Americans as a polylith may differ based on individual variables.

Komarraju & Cokley (2008) studied how ethnicity interacts with individualism and collectivism on the horizontal-vertical plane amongst African American and European American college students. They hypothesised that African Americans would have higher HC and HI measures given that African cultures are said to emphasise cooperation and value harmony. They also hypothesised that European Americans would score higher on the VI measure since European Americans are thought to value competition, power, and achievement. There was no hypothesis given for VC. Participants were asked to complete a 32-item scale which determined individual scores for HC, HI, VC, and VI. The results showed that ethnicity significantly moderated the relationship between individualism and collectivism. African Americans scored higher on HI while European Americans scored higher on VI, which was consistent with Komarraju & Cokley's hypothesis. These findings show support for the idea that there are ethnic differences in individualism-collectivism measurements, and the constructs simultaneously exist on a spectrum but are not mutually exclusive.

Further support for the idea that that differences in individualism-collectivism can impact behaviour can be seen in Le & Stockdale's (2005) research on the relationship between cultural factors and delinquency. American adolescents of Chinese, Cambodian, Laotian/Mien, and Vietnamese descent were surveyed on their self-reported delinquency, levels of peer delinquency (PD), and levels of individualism-collectivism. Results show that individualism was positively related, and collectivism negatively related, to self-reported delinquency which was also partially mediated by PD. Although the variance in delinquency attributed to either individualism or collectivism was small in comparison to PD, it would be poor practice to discount it as trivial. Le & Stockdale's (2005) findings support the idea that

rankings on individualism and collectivism can impact behaviour, hence it is entirely plausible that individuals with different individualism/collectivism measures may have varying voting behaviour.

Voronov & Singer (2002) argue that there are faults in the individualism-collectivism theory, specifically that these labels create fixed and exaggerated ideas of what a culture or society looks like rather than an accurate representation of their intricacies. Additionally, presenting cultures with such stark terms creates comparisons based on value (good versus bad), and it also becomes the go-to explanation for variations in behaviour (Kagitcibasi, 1994). Though Voronov & Singer's (2002) concerns are valid, they are overshadowed by research that shows the validity of individualism-collectivism theory. For example, Hui & Triandis (1986) invited psychologists and anthropologists from different parts of the world to complete a questionnaire that asked individuals to respond to a situation both as an individualist and as a collectivist. The results showed that, across disciplines and across different cultures, there was a universal understanding of collectivism and individualism which was connected to the empirical definitions as well (Hui & Triandis, 1986).

When it comes to the relationship between Asian Americans, individualism-collectivism and political participation, it is difficult to say where an individual is on the continuum and how their positionality would affect their political participation, especially once the horizontal-vertical plane is introduced. Those who are highly individualistic will prioritise their personal goals which may encourage them to vote while higher levels of collectivism could suggest a stronger propensity to do what is right for the group which would also mobilise voting. Once the concepts of equality or hierarchy, in reference to the horizonal-vertical plane, the matter becomes more complicated. Hence, it is important to analyse this construct specifically for Asian Americans and within their subethnic groups.

Locus of Control

According to Rotter (1966a), the role of reinforcement, reward, or gratification is universally recognised as an important component of acquiring and performing new skills or knowledge. However, the perception and reaction towards this reward is highly personalised in that the source or basis of the reward is debated. Rotter suggests that a determinant of the reaction to a reward is whether or not an individual believes that it is the source of their own behaviour versus due to a force outside of themselves. In other words, the causal relationship between an activity and the reward can either be attributed to individual decisions or an external force such as luck or fate. The degrees to which an individual may believe it is their choices that effect their outcomes exists on a scale. When an individual believes that the result of their actions is attributed to their own behaviour or their own characteristics, they have a belief in internal control – an internal locus of control (LOC). Opposingly, if an individual believes that the results of their actions are due to a force outside of the individual such as fate, it is labelled as a belief in external control – an external locus of control (LOC) (Rotter, 1966a). This is known as the Internal-External Locus of Control Theory (I-E control theory).

I-E control theory is based in learning theory where a reinforcement strengthens the expectation that a particular event will be followed by the same reinforcement in the future. As individuals move through life, they recognise which factors contribute to favourable outcomes when they make decisions, so individuals will differ in the degrees to which they attribute rewards to their own decisions on a unidimensional scale (Rotter, 1966). In addition, these expectations depend on the person's attitude towards a situation rather than the situation itself (Fournier & Jeanrie, 2003).

Rotter's (1966a) original research has been examined in a vast number of studies across a wide range of disciplines including psychology, education, medicine, etc. Similarly,

the concept has been used with numerous dependent variables such as professional success, marital outcomes, mental health, smoking cessation amongst others.

For example, Anmol & Rath (2022) examined the effect of locus of control and gender on happiness level amongst Indian adolescents. Adolescents between the ages of 17 and 19 were randomly selected from different educational institutions in Cattack, a city in the Indian state of Odisha, and were asked to complete surveys to determine their placement on the internal-external LOC scale and their happiness. Their results showed that those with an internal LOC reported a higher level of happiness than external LOC adolescents. Girls were also found to have higher mean happiness scores than boys, but no significant LOC and gender interaction effect was found. Their results show that orientation of LOC and gender both moderate happiness.

This wide variety in terms of usage shows how applicable the theory is to various aspects of human behaviour (Fournier & Jeanrie, 2003). While Rotter's original theory is more often found in social psychology and personality psychology, it can be applied to political participation where the reinforcement can be contextualised as a political candidate of choice winning an election, and the acquisition of a new skill or knowledge can be seen as the act of voting.

Using Gore & Rotter's (1963) research that those who see themselves as determinants of their own fate (an internal LOC) are more likely to commit themselves to personal and decisive action, Strickland (1965) asked Black American college students to complete a questionnaire on their participation within the civil-rights movement, their degrees of internal versus external control, and their need for approval (social desirability). In this study, those who are actively engaged in the civil-rights movement are committing themselves to a specific action. She hypothesised that those who are more involved in social action have more internal feelings of control than a group of individuals who are less involved in social

action. The results show that Black students who were active in civil-rights demonstrations have a more internalised LOC than students who had little to no experience in social movements. While the politically active group was found to be older and to have completed more years of schooling than their nonactive counterparts, no significant relationship was found between the internal-external score and age or amount of education. In addition, social desirability was not found to be a significant predictor of social action. Strickland's study suggests that the internal-external LOC measure is a useful instrument to predict social behaviour in general.

Deutchman (1985) also used Rotter's (1966a) theory to hypothesise that those who have an internal LOC would be more politically active whilst those with an external LOC would be less active due to their belief that they cannot control events. Deutchman tested the relationship between I-E control and several dimensions of political activity as well as several aspects of power behaviour. Participants completed a questionnaire that assessed I-E control, political participation, and power. The results showed that there was a significant positive relationship between internal control and voting, specifically, while there was a negative relationship between external control and formal political participation.

In addition, there are cultural differences when it comes to locus of control, as seen in Sastry & Ross' (1998) work where they researched the relationship between Asian cultures and sense of personal control, and the impact of this perceived control on depression and anxiety amongst Asians and non-Asians alike. Sense of personal control is measured as either high or low, where high senses of control are synonymous with an internal LOC and low senses of control are the same as an external LOC. They used survey responses from the US to find that Asian Americans and Asians in Japan, South Korea, China, and India both reported lower levels of perceived control (external LOC) than non-Asians (Sastry & Ross, 1998). Moreover, the sense of personal control had less of an impact on psychological

distress for Asians than non-Asians. Sastry & Ross attributed this to Asian collectivist values as collectivism includes subordination to family and community which may decrease levels of personal control (i.e. more external locus of control).

To connect Sastry & Ross' (1998) work to political participation, one can turn to research done by Fukuzawa & Inamasu (2020) who tested factors related to political participation (contextualised as collective action) in East Asian and Western countries. They hypothesised that internal locus of control would be positively correlated with collective action regardless of geographic location or culture. By analysing data from the 2010 World Values Survey from seven different countries (three East Asian and four Western countries), they found that an internal locus of control was positively related to collective action more so amongst East Asians than amongst Westerners despite potential confounding variables such as lower SES, cultural values or low political interest. Therefore, an internal locus of control may mobilise Asians to vote, and it would be interesting to see how this frame work can be applied to Asian Americans.

Naturalisation

In this study, naturalisation is defined as the legal process by which a non-citizen of a country may acquire citizenship or nationality of that country (Tönsmann, 2017). It is essentially purposefully acquiring a new citizenship. This proposed study argues that naturalisation is associated with an increased feeling of belonging with the dominant culture in which one naturalises to. It is this will to belong that is the underlying psychological concept behind the relationship between naturalisation and voting outcomes.

Allen (2020) argues that individuals find much of their identity, meaning, relevance and life satisfaction based on a sense of belonging within a group. It is human nature to depend on groups for support, validation and consideration and, regardless of group affiliation, there is a positive effect on individual well-being and functioning. Senses of

belonging are complex and unique agglomerations that are highly individualised and are also dynamic in that they can shift rapidly. In fact, Maslow (1943) argues that belonging is one of the five components of motivation theory as seen in his hierarchy of needs. In Maslow's work, a sense of belonging is one of the motivators of human behaviour after meeting physiological and safety needs where an individual will strive for affectionate relations with others to find a place in a group. Without meeting this need to belong, a person gets stuck and cannot progress.

To support the argument that naturalisation and a sense of belonging are connected, Aptekar (2015) conducted interviews in suburban Toronto and New Jersey in 2007 and 2008 to investigate how immigrants explain their decisions to acquire citizenship as a test for inclusiveness and immigrant incorporation and a vehicle for social reproduction. Interviewees were asked questions focused on three themes: 1) the relationship between the perception and conceptualisation of citizenship, 2) the connotations of naturalisation for immigrants, and 3) the association between naturalisation and political prowess (Aptekar, 2015). The results showed that over 80 percent considered voting as an important reason to naturalise along with easier travel. In terms of naturalisation as a social process to increase a sense of belonging, 42 percent of the American immigrants and 55 percent of the Canadian immigrants responded that naturalisation made them feel more American or Canadian (Aptekar, 2015). This research provides substantial support for the idea that naturalisation is associated with creating a sense of belonging.

This sense of belonging creates differences in voting behaviour between naturalised and native-born citizens, as seen in Ong & Nakanishi's (2002) research. They used data from 1990, 1992 and 1994 to compare levels and determinants of voter registration between naturalised Asian Americans and native-born Asian Americans and other populations. The results showed that naturalised Asian Americans had lower voter registration rates than

native-born Asian American citizens. They found that year of entry was the most important factor in determining voter registration rates whilst educational attainment and age contributed to actual voting behaviour. It is worth mentioning that these rates, regardless of citizenship, were still less than their White, Hispanic, and Black counterparts (Ong & Nakanishi, 2002).

To further contextualise this idea through empirical research, Bevelander & Pendakur (2011) tested whether the symbolic act of obtaining citizenship resulted in increased voting participation for Swedish residents who were not citizens by birth. The voting propensities of immigrants (people born outside of Sweden), their descendants (born in Sweden), and native Swedish citizens (those who have citizenship through their parental citizenship status) were tested whilst controlling for socioeconomic, demographic, contextual, and social inclusion related variables.

The results showed that younger citizens and those who are not married were less likely to vote. Education levels as contextualised through both schooling and income also showed to be strong predictor for voting. In addition, being born outside of Sweden or living in a larger city both resulted in lower voting probabilities. Their results showed variation in terms of voting behaviour based on ethnicity where South Asians were less likely to vote but East Asians were more likely to vote. In addition, Bevelander & Pendakur's results showed that citizenship acquisition was a moderate to strong voting predictor for immigrants. They concluded that indicators of social inclusion were statistically significant as measures of peoples' willingness to be involved and be integrated into society especially through citizenship acquisition.

Expanding on this intercultural difference, Kazi (2017) analysed Muslim American voting practices to argue that elections have been a site for Muslim Americans to negotiate a sense of belonging in the US. While Kazi's work focuses on how religious identity affects

voting behaviour, these concepts can still be applied for ethnic minorities due to the intersectionality of the two. Muslim Americans have struggled with their perception by American society due to the uprise in anti-Muslim racism which has created questions on how – or if – Muslim Americans should vote (Kazi, 2017). Additionally, Muslim Americans' unique positionality "on the political agenda" has forced Muslim Americans into complex acts of self-representation to articulate themselves as "American," (Kazi, 2017).

Kazi found that getting involved in politics is a way to enforce the idea that Muslim Americans fit into the patchwork of American society. She cited two testimonies from Muslim Americans who both state that their voting practices are a way for the rest of American society to see that Muslim Americans are one of them. The first stated that if an elected official sees a letter signed by a Hasan or a Muhammad, they would know that active political participants can be Muslim and that they belong. The second stated that his physicality shows his religion which is why it's important to publicly vote to show that people who look like him and his family are Americans too, committed to seeing positive change in their country (Kazi, 2017).

While Kazi's research does not specify the relationship between naturalisation and voting for Muslim Americans, her argument that voting itself creates a sense of belonging fits into the framework presented by Aptekar (2015) above. Therefore, evidence suggests that voting is a mechanism to show how individuals belong which can also be seen when individuals naturalise.

Asian American Political Participation

To contextualise Asian American political participation, Lien et al. (2001) aimed to explain the "puzzle" of low Asian American electoral participation given an opposite expectation based on the high socioeconomic standing. They argue that participation is a three-step process: naturalisation, registration, and turning out, all of which have their own

barriers such as time constraints, lack of information, language proficiency, social discrimination, and lack of familiarity with the US political system. While Asian Americans are naturalising at higher rates than other ethnic groups, there are substantial interethnic group differences for participation rates where Japanese Americans were found to be most likely to vote with Vietnamese and Korean Americans at the other end of the voting propensity spectrum. Lien et al. believe that these differences are due to variations in length of stay, demographic makeup, and condition of the ethnic immigrant.

In general, political participation is influenced by five types of variables: socioeconomic, demographic, social connectedness, political connectedness and political context (Lien et al., 2001). It is not necessary to define socioeconomic and demographic variables, as they are fairly obvious, but the other three variables require more of an explanation through Lien et al.'s framework. Social connectedness is contextualised as factors contributing to residential mobility, marital status, and employment status. Political connectedness is an association with a formal organisation that enhances awareness and participation. Political context includes media coverage, candidate, and party evaluations, significance of office, issue salience, and certainty of outcome (Lien et al., 2001).

Research has found that SES has little to no effect on Asian American participation, in fact, it is more likely that immigration related variables such as English-language proficiency, citizenship status, generational status, and duration of stay in the US may have more of an impact (Lien et al., 2001). Much of this research is connected to the constructs of assimilation, naturalisation, locus of control, and individualism-collectivism, hence why it is important to combine the ideas and analyse results through a psychological perspective.

To expand on the immigration-related variables Lien et al. mentioned, Ramakrishnan & Espenshade (2001) analysed voting participation of different ethnic groups to test the relationship between voting and generational status, duration of time in the US, political

socialisation in the country of origin, geographic location, and language barriers. They found that Asian Americans had the highest voter turnout rate in the third generation or higher in contrast to other ethnic groups whose patterns differ. Additionally, they found that there was no clear relationship between duration of stay in the US and likelihood of voting for Asian Americans. The same goes for past political experiences in countries of origin where it differs based on the ethnic group – for example, fleeing from Communism for Cuban Americans mobilised their political participation but did the opposite for Vietnamese Americans who faced the same problem (Ramakrishnan & Espenshade, 2001). Geographic location is contextualised by proximity to coethnics which was found to have a weak effect in general except for third generation or higher Asian Americans who were more likely to vote in the states with high proportions of coethnics (Ramakrishnan & Espenshade, 2001).

Proposed Study Overview

Controlling for demographic variables, the proposed study aims to explore the relationship between likelihood to vote and assimilation, individualism, an internal locus of control, and naturalisation. In addition, it aims to explore potential interactions between the predictor variables of interest and self-reported likelihood to vote. This study will consist of an online survey administered to Asian American individuals who are eligible to vote in US presidential elections to determine how these psychological constructs can predict their voting behaviour.

The responses of the survey will be separated and examined based on pan-Asian ethnic subgroups to account for the fact that Asian Americans are not a monolith and must not be treated as such. In addition, the survey will be offered in English, Mandarin, Hindi, Japanese, Korean, Tagalog, and Vietnamese to account for potential miscommunication if an individual feels a degree of discomfort with the English language.

Proposed Method

Participants

The participants for this study will be Asian Americans across different ethnic groups who are eligible to vote in the United States of America. This means that they are over the age of 18, meet their state's eligibility requirements, are a US citizen, and are registered to vote. Certain states have further restrictions on voter eligibility related to incarceration status and mental incapacitation. In order to standardise these protocols, participants must also have no previous history of incarceration and should not have been judged as mentally incompetent by a court of law at the time of the survey. Based on findings from previous literature presented previously and the wish to be more conservative in estimates, this proposed study anticipates a small effect size and to achieve a power of 0.8 with $\alpha = 0.05$. This proposed study will also use hierarchical linear regressions and Pearson's correlations in the research design, so Cohen's (1992) analysis requires a sample of 547 participants given that there will be three continuous variables in the regression (the requirement for a Pearson's correlation is less). Although there is no way to guarantee that there will be equal proportions of varying Asian ethnic groups within the sample, the study aims to collect as ethnically diverse of a sample as possible.

This proposed study will be in collaboration with two organisations in order to capture this large sample size: the National Asian American Survey (NAAS) and Asian and Pacific Islander American Vote (APIAVote). The NAAS is a nonpartisan and scientific effort to capture voting behaviour of the APIDA community directed by Karthick Ramakrishnan of the University of California, Riverside. Their 2016 study included 2,543 participants, hence recruiting through them would be beneficial (Ramakrishnan, 2017). The NAAS partnered with various community organisations in 2012 to survey Asian American perspectives on

political issues, so it is possible that the organisation would be interested in this proposed research. APIAVote is a nonpartisan nonprofit dedicated to strengthening and empowering the APIDA community in the US' democracy. Their 2022 Asian American Voter Survey had 1,610 respondents, so a collaboration with them would further expand the study's reach (APIAVote, 2022). Given that the proposed method requires such a large sample size, participants will not be compensated and the proposed study will be voluntary, confidential, and anonymous.

Materials

Control Variables

The proposed study will also ask for participants for their general demographic information, many of which will be used as control variables. Participants will be asked their age, sex, ethnicity, income, region of residence, naturalisation status, level of educational attainment, marital status, and registration status. The exact wording of these questions can be found in Appendix A.

Likelihood to Vote

To measure for an individual's propensity to vote, participants will be asked to rate how likely they are to vote in the next US presential election. The scale used will be a 5-point scale (1= *extremely unlikely*, 5= *extremely likely*). This question can be found in Appendix A.

Assimilation

To measure assimilation, Suinn-Lew's (1992) Asian Self Identity Acculturation (SL-ASIA) scale will be used. Since acculturation is a dimension within assimilation, the SL-ASIA is an appropriate form of measurement for assimilation as well. The SL-ASIA was originally developed by Suinn, Ahuna, & Khoo in 1992 as a 21-item measure to assess the degree of acculturation in Asian-Americans by addressing behaviour, language, identity,

friendship choice, generation level/geographic history, and attitudes. A sample question includes

> "What was the ethnic origin of the friends and peers you had, as a child up to age 6?" where answer choices were: "1) Almost exclusively Asians, Asian-Americans, or those of the same ethnic origin, 2) Mostly Asians, Asian-Americans, or those of the same ethnic origin, 3) About equally Asian groups and Anglo groups, 4) Mostly Anglos, Blacks, Hispanics, or other non-Asian ethnic groups, 5) Almost exclusively Anglos, Blacks, Hispanics, or other non-Asian ethnic groups."

The responses are quantified on a range of 1 to 5 which are then totalled and divided by the number of items to reach a final SL-ASIA score. Lower scores indicate low levels of acculturation while higher scores suggest high levels of acculturation.

Given that the SL-ASIA was created 30 years ago, some of its language is not appropriate such as their use of the word 'Oriental' to describe Asian ethnicities, which is problematic due to the assumption that all Asian Americans fall underneath the East Asian umbrella. For this study, the SL-ASIA has been edited so that 'Oriental' will be replaced with a phrase referring to a participant's ethnic group to achieve the same effect. Past research has shown strong internal consistency (Cronbach's $\alpha = 0.88$) (Suinn et al., 1987).

Individualism-Collectivism

The Individualism and Collectivism Scale (Culture Orientation Scale), which was developed by Triandis & Gelfland (1998), will be used to test for the four dimensions of individualism and collectivism: vertical collectivism (VC), vertical individualism (VI), horizontal collectivism (HC), and horizontal individualism (HI). The four constructs have been previously described in detail and those definitions will be used for this proposed study. Given that individualism-collectivism on a horizontal-vertical plane is not mutually exclusive and exists on a spectrum, all four values will be collected, but only the values for HI and VI will be used in the regression model. These two values will be averaged to create an overall individualism score.

The scale consists of 16-items which are answered on a 9-point scale (1= *never or definitely no*, 9 = *always or definitely yes*). Participants will be asked to use the scale to rate how strongly they agree with each item. An example of an item is "I'd rather depend on myself than others," which is associated with high levels of horizontal individualism. The items are mixed up and then presented to participants after which the scores for each dimension will be calculated by summing the items. Higher scores indicate higher levels of affiliation with each dimension. Past research has shown moderate to strong internal consistencies for each dimension ($0.70 < \text{Cronbach's } \alpha < 0.85$) (Triandis & Gelfland, 1998).

Locus of Control

Rotter's (1966b) Internal-External Control Scale will be used to assess whether people perceive outcomes as contingent on their own behaviour or independent of it. The scale consists of 29 items where participants are asked to mark which of two statements most strongly aligns with their personal beliefs about the world. Six filler items are included to make the purpose of the test seem more ambiguous. Participants will be given two statements per question and asked to select the statement that they more strongly believe to be the case. Each statements is associated with either an internal locus of control or an external locus of control. For example, "Many of the unhappy things in people's lives are partly due to bad luck," is associated with an external locus of control while "People's misfortunes result from the mistakes they make," is connected to an internal locus of control. The results are tallied for each locus of control to determine how the respondent perceives their outcomes. The value for internal locus of control will be analysed. Reasonable levels of internal consistency reliability have been previously reported ($0.65 < \text{KR-20} < 0.8$). In addition, previous findings have suggested acceptable test-retest reliability ($0.60 < \text{coefficients of stability} < 0.85$) (Rotter, 1966b).

Procedure

Recruited participants will receive a link to a Qualtrics survey where they will be asked to confirm that they are eligible to participate in this study in that they are Asian American and are eligible to vote in US presidential elections. Voting eligibility will be asked in a manner where participants will not need to disclose the reasons for being ineligible. Specifically, participants will be asked "Are you eligible to vote in presidential elections in the United States of America (18 years or older, a US citizen, have not been deemed mentally incapacitate by a court of law and are not or have never been incarcerated)?" If the answer to this question is no, participants will be taken to the end of the survey and thanked for their time. If eligible, participants will be asked to provide consent to participate in the proposed study. They will be asked to explicitly agree by ticking a box that denotes their agreement to participate, but they will be allowed to withdraw at any time during the survey duration.

Participants then will be asked to complete the SL-ASIA, the Culture Orientation Scale and Rotter's I-E scale in a randomised order. Next, participants will be asked how likely they are to vote in the next US presidential election using the question format mentioned above. After, participants will be asked questions pertaining to their demographics in regards to their age, sex, ethnicity, income, highest level of educational attainment, marital status, generational status, naturalisation status, voter registration status, and geographic location in terms of state residence. Last, participants will be thanked for their participation and debriefed.

Ethical Considerations

The potential benefits of this study include a deeper understanding of voting behaviours across ethnic groups, specifically for the different ethnic groups that fall under the Asian American umbrella. In addition, it may add to the growing body of literature on an understudied population especially from a psychological standpoint. Participants will be

asked to complete an online questionnaire that is anonymous and confidential which they can complete from the privacy of their own home, hence it can be considered minimal risk. In addition, the survey is not intended to be more dangerous or upsetting than what the participants may encounter in their day-to-day lives. Participation is voluntary and there is no monetary compensation. The data collected will be confidential and anonymous as participants will not be asked for any official identification information such as names or birthdays, and computer IP addresses will also not be recorded. All participant data collected will be stored securely within the investigator's password-protected Qualtrics account on a password-protected computer, and the data will only be accessible to the investigator. Neither protected nor vulnerable populations will be actively sampled from in this study. Prior to the consent form, participants will be asked about voting eligibility which may sensitive in nature after which they may refuse to participate without explanation or penalty. Participants may also withdraw from the study at any given point. This study will not involve deception. Participants will go through both an informed consent and debriefing process.

Anticipated Results

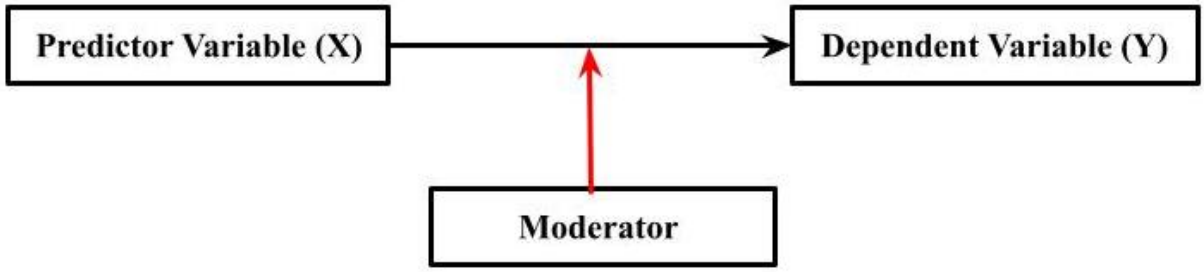
Hierarchical linear regressions and Pearson's correlations will be conducted to explore whether the predictor variables of choice (naturalisation status, generational status, assimilation, individualism, and an internal locus of control) explain a variation in an individual's likelihood to vote after controlling for other variables. This study will also look at the interactions between the predictor variables and how they contribute to likelihood to vote. Specifically, the interactions between assimilation/individualism and naturalisation status will be analysed.

These combined interactions will create moderating relationships between predictor variables and likelihood to vote. A moderating relationship is one where a third variable, the moderator, impacts the strength and direction of the direct relationship between the predictor

and the dependent variable. A pictorial representation of a moderating relationship can be seen below in Figure 1.

Figure 1

A graphical representation of a mediating and a moderating relationship between two variables.



Note. In this graph, the strength and direction between the predictor variable (X) and the dependent variable (Y) is affected by the moderator.

In line with Diaz's (2012) and Bui et al.'s (2022) findings and the fact that assimilation is a measure for how integrated an individual is within the host culture, this study hypothesises that higher levels of assimilation will be positively related to an increased likelihood to vote. In quantitative terms, higher scores on the SL-ASIA will predict an increased likelihood to vote.

Given that individualists, by definition, prioritise personal over communal goals, and their social behaviour is based on personal attitudes, needs and beliefs, this study hypothesises that higher levels of individualism will be positively related to an increased likelihood to vote. A higher composite HI and VI score will predict an increased likelihood to vote.

Similarly, those who have an internal locus of control will be more likely to vote because they believe that favourable outcomes are due to their personal decision, as per the theoretical definition. Therefore, individuals with higher internal locus of control measures will have an increased likelihood to vote.

This study hypothesises that naturalised citizens are more likely to vote than their native-born counterparts, as naturalised individuals have a stronger will to belong to the dominant group which increases their likelihood to vote. This process is moderated by both assimilation and high levels of individualism.

High levels of assimilation will strengthen the relationship between naturalisation status and likelihood to vote while low levels of assimilation will weaken the relationship. In contrast, there is an assumption that native-born citizens are already assimilated to a certain degree, so assimilation will not affect the strength or direction of the relationship. Similarly, high levels of individualism will strengthen the relationship between naturalisation status and likelihood to vote while low levels of individualism will weaken the relationship. This study predicts that high levels of individualism will not impact the strength or direction of the relationship between native-born citizens and likelihood to vote because native-born citizens are accustomed to an individualistic way of life since they were born in the US, an individualistic country.

In order to account for potential correlations between the various predictors of interest, which would suggest a multicollinearity problem, variance inflation factors (VIFs) will be calculated. Multicollinearity suggests that predictor variables in the regression model are related to one another which is problematic because it creates difficulty in determining which predictor is actually impacting the dependent variable. VIFs measure the amount of multicollinearity in a model where increased values on a scale of 1 to 10 suggest a higher possibility that multicollinearity exists. This proposed study will aim for a VIF of 5 or less to allow for low to moderate correlation. If the VIF is greater than or equal to 5, the model will be adjusted by dropping some of the predictor variables.

This study does not have concreate hypotheses in terms of pan-Asian ethnic subgroup likelihood to vote, but data analysis will be conducted for different subgroups based on

participant responses. Since ethnicity will be asked in an open-ended format, it is up to the investigator's digression as to how ethnicities will be categorised. Ethnicities will be cross referenced with countries of origin and then assigned to the respective geographic region – North Asia, Central Asia, Western Asia, East Asia, South East Asia, and South Asia.

Scholarly Merit and Broader Impacts

Asian American political participation has been somewhat of a mystery to this day, especially when analysed from a psychological perspective. The purpose of this proposed study is to provide further clarity on voting behaviour using assimilation levels, individualism levels, locus of control, and naturalisation status as predictor variables. By doing so, this study will add to the growing body of literature by comparing results by ethnic group. Cultural psychology and political psychology are both growing fields of interest, and the results of this proposed study lie in the intersection of the two, so they may be applicable to both fields.

The scholarly merit of this study lies in the fact that it is unique in its methodology given that few psychological studies have used a hierarchical linear regression model to test for these constructs. In addition, the psychological constructs themselves have not been analysed in relation to voting outcomes. The majority of the research finds its roots in sociology, political science, and anthropology, so testing the relationship between political participation and psychological constructs is an area that needs to be further expanded on to display the causal underpinnings of voting behaviour. Furthermore, the majority of studies focus on Asian Americans as a monolith rather than distinguishing between ethnic groups which is problematic, as previously discussed, so this study would break the hegemonic narrative that all Asian Americans are the same by looking at ethnic differences.

The results of this study may be used to distinguish which psychological theories have validity and reliability when it comes to voting behaviour. Moreover, the results may pave

ways for future avenues of research if the findings are inconsistent with the hypotheses presented or previous literature. By separating results based on ethnic group, it may also reveal how ethnic differences can also contribute to differences in voting outcome.

Final Conclusions

The purpose of the study presented in chapter one was to use educational variables to predict voting outcomes from an economic perspective. The data used came from the NLSY97, specifically from the years 2010 to 2011. A total of 1,336 participants were surveyed of which 56.96 percent were female, 31.41 percent were either Black or Hispanic with 66.69 percent as non-Black/non-Hispanic, the majority of participants were based in the South (41.69 percent) and in Urban areas (73.35 percent) as defined by the 2000 Census Standards. In addition, all participants were between the ages of 25 and 31 and the majority reported that they were married (70.36 percent). The results of the probit regression model showed that age, marital status, household size, sex, and high school diploma attainment were statistically significant for the chosen demographic groups.

Given that the NLSY97 did not have data on Asian Americans, the second chapter of this thesis facilitates a deep dive into this population to determine which psychological underpinnings contribute to voting behaviour. The proposed study looks at assimilation, individualism-collectivism, locus of control, and naturalisation status as predictor variables. The results of this proposed study may add to the growing body of literature and help propel further research in the fields of cultural psychology and political psychology.

This thesis aims to combine two unique subjects to create an interdisciplinary analysis of which factors may predict voting behaviour, both in terms of outcome and propensity. By combining the two fields, the research presented may be used to help explain human behaviour when it comes to voting.

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Tables and Figures

Table 2

Demographics of the filtered Round 14 sample used for this study

		Frequency	Percent
Sex			
	Male	575	43.04%
	Female	761	56.96%
Race/Ethnicity			
	Black	195	14.60%
	Hispanic	238	17.81%
	Mixed Race	12	0.90%
	Non-black/non-Hispanic	891	66.69%
Age			
	25	22	1.65%
	26	216	16.37%
	27	227	16.99%
	28	286	21.41%
	29	298	22.31%
	30	283	21.18%
	31	4	0.30%
Region			
	Northeast	161	12.05%
	Northcentral	338	25.30%

	South	557	41.69%
	West	280	20.96%
Metropolitan Status			
	Rural	356	26.65%
	Urban	980	73.35%
Marital Status			
	Single	396	29.64
	Married	940	70.36%

Note. Age has been reported as part of the demographics to show that all participants are over the age of 18. Data are from NLSY97.

Table 3

Descriptive statistics after data filtration for the Black subsample in Round 14 of the NLSY97.

		Frequency	Percentage
Sex			
	Male	85	43.59%
	Female	110	56.41%
Age			
	25	5	2.56%
	26	26	13.33%
	27	38	19.49%
	28	42	21.54%
	29	37	18.97%
	30	47	24.10%

	31	0	0%
Region			
	Northeast	12	6.15%
	Northcentral	31	15.90%
	South	135	69.23%
	West	17	8.72%
Metropolitan Status			
	Rural	34	17.44%
	Urban	161	82.56%
Marital Status			
	Single	80	41.03%
	Married	115	58.97%
Biological Mother's Educational Attainment			
	No high school diploma	28	14.36%
	Over a high school diploma	167	85.64%
Biological Father's Educational Attainment			
	No high school diploma	37	18.97%
	Over a high school diploma	158	81.03%
Participant's Educational Attainment			
	No high school diploma	31	15.90%
	Over a high school diploma	164	84.10%
Household Size			

	1-3	84	43.08%
	4-7	106	54.36%
	8-10	5	2.57%
		Mean	*SD*
	Gross Family Income	78,455.70	52,326.19

Note. The high standard deviation for gross family income is due to a normal distribution with some upper anomalies that weren't removed to show the true variation in gross family income and avoid sampling bias. Data are from NLSY97.

Table 4

Descriptive statistics after data filtration for the Hispanic subsample in Round 14 of the NLSY97.

		Frequency	Percentage
Sex			
	Male	102	42.86%
	Female	136	57.14%
Age			
	25	3	1.26%
	26	39	16.39%
	27	42	17.65%
	28	51	21.43%
	29	54	22.69%
	30	49	20.59%
	31	0	0%
Region			

	Northeast	27	11.34%
	Northcentral	33	13.87%
	South	83	34.87%
	West	95	39.92%
Metropolitan Status			
	Rural	30	12.61%
	Urban	208	87.39%
Marital Status			
	Single	75	31.51%
	Married	163	68.49%
Biological Mother's Educational Attainment			
	No high school diploma	101	42.44%
	Over a high school diploma	137	57.56%
Biological Father's Educational Attainment			
	No high school diploma	112	47.06%
	Over a high school diploma	126	52.94%
Participant's Educational Attainment			
	No high school diploma	28	11.76%
	Over a high school diploma	210	88.24%
Household Size			
	1-3	112	47.06%
	4-7	117	49.16%

	8-10	9	3.78%
		Mean	*SD*
	Gross Family Income	69,542.74	50,636.19

Note. The high standard deviation for gross family income is due to a normal distribution with some upper anomalies that weren't removed to show the true variation in gross family income and avoid sampling bias. Data are from NLSY97.

Table 5

Descriptive statistics after data filtration for the non-Black/non-Hispanic subsample in Round 14 of the NLSY97.

		Frequency	Percentage
Sex			
	Male	382	42.87%
	Female	509	57.13%
Age			
	25	13	1.46%
	26	147	16.50%
	27	144	16.16%
	28	192	21.55%
	29	204	22.90%
	30	187	20.99%
	31	4	0.45%
Region			
	Northeast	120	13.47%
	Northcentral	271	30.42%

	South	335	37.60%
	West	165	18.52%
Metropolitan Status			
	Rural	291	32.66%
	Urban	600	67.34%
Marital Status			
	Single	234	26.26%
	Married	657	73.74%
Biological Mother's Educational Attainment			
	No high school diploma	92	10.33%
	Over a high school diploma	799	89.67%
Biological Father's Educational Attainment			
	No high school diploma	119	13.36%
	Over a high school diploma	772	86.64%
Participant's Educational Attainment			
	No high school diploma	66	7.41%
	Over a high school diploma	825	92.59%
Household Size			
	1-3	541	60.72%
	4-7	345	38.72%
	8-10	5	0.56%
		Mean	*SD*

	Gross Family Income	83,371.98	51,765.39

Note. The high standard deviation for gross family income is due to a normal distribution with some upper anomalies that weren't removed to show the true variation in gross family income and avoid sampling bias. Data are from NLSY97.

Table 6

The relationships between predictor variables and voting outcome for Black participants.

		Slope (β)	*SE*	p-value
Sex		0.03	0.08	0.73
Age		0.06	0.03	0.02*
Region				
	Northcentral	-0.27	0.17	0.14
	South	-0.23	0.16	0.16
	West	-0.29	0.18	0.14
Biological Mother's Educational Attainment		0.15	0.12	0.22
Biological Father's Educational Attainment		-0.09	0.11	0.40
Household Size				
	4-7	0.11	0.08	0.19
High School Diploma Attainment		-0.08	0.12	0.50
Marital Status		0.15	0.08	0.07
Metropolitan Status		0.11	0.10	0.91
Gross Family Income		0.02	0.05	0.73

Note. The Northeast region and a household size of 1-3 were naturally coded, hence they were omitted. Additionally, a household size of 8-10 perfectly predicted a positive voting outcome, so it was removed as well. The significance level chosen for this study is at p=0.05. Data are from NLSY97.

Table 7

The relationships between predictor variables and voting outcome for Hispanic participants.

		Slope (β)	*SE*	p-value
Sex		0.12	0.07	0.06
Age		0.05	0.08	0.02*
Region				
	Northcentral	-0.09	0.11	0.48
	South	0.04	0.11	0.75
	West	0.08	0.11	0.47
Biological Mother's Educational Attainment		0.05	0.08	0.51
Biological Father's Educational Attainment		-0.09	0.08	0.24
Household Size				
	4-7	-0.14	0.07	0.04*
	8-10	-0.28	0.07	0.04*
High School Diploma Attainment		-0.06	0.11	0.62
Marital Status		0.04	0.07	0.54
Metropolitan Status		0.03	0.09	0.74

Gross Family Income		0.08	0.04	0.06

Note. The Northeast region and a household size of 1-3 were naturally coded, hence they were omitted. The significance level chosen for this study is at p=0.05. Data are from NLSY97.

Table 8

The relationships between predictor variables and voting outcome for non-Black/non-Hispanic participants.

		Slope (β)	*SE*	p-value
Sex		-0.03	0.03	0.34
Age		0.03	0.01	0.01*
Region				
	Northcentral	0.04	0.06	0.48
	South	0.04	0.06	0.42
	West	0.06	0.06	0.34
Biological Mother's Educational Attainment		0.04	0.06	0.48
Biological Father's Educational Attainment		0.05	0.06	0.35
Household Size				
	4-7	-0.02	0.04	0.64
	8-10	-0.31	0.19	0.19
High School Diploma Attainment		0.18	0.07	0.01*
Marital Status		0.14	0.04	0.00*

Metropolitan Status	-0.01	0.04	0.75
Gross Family Income	0.03	0.03	0.36

Note. The Northeast region and a household size of 1-3 were naturally coded, hence they were omitted. The significance level chosen for this study is at p=0.05. Data are from NLSY97.

Appendix A

Qualtrics Survey Transcription

Are you eligible to vote in presidential elections in the United States of America (18 years or older, a US citizen, have not been deemed mentally incapacitate by a court of law and are not or have never been incarcerated)?

a. Yes
b. No

You are voluntarily making a decision whether or not to participate in this research study. Please select one of the options below:

a) I am voluntarily making a decision whether or not to participate in this research study. By indicating my agreement, I will be taken to the rest of the study. I certify that I am deciding to participate, having read and understood the information presented.
b) I would not like to participate and wish to be taken to the end of the survey.

The SL-ASIA, the Culture Orientation Scale and Rotter's I-E scale in a randomised order will be presented with their respective prompts and answer choices.

How likely are you to vote in the next US Presidential election?

a) Extremely Unlikely
b) Unlikely
c) Neutral
d) Likely
e) Extremely Likely

How old are you?

What is your sex?

a) Female
b) Male
c) Non-binary
d) Other

Are you Asian?

a) Yes
b) No

What is your ethnicity?

In which region of the United States of America (US Census Bureau) do you reside?

a) Northeast (CT, ME, MA, NH, NJ, NY, PA, RI, VT)
b) Midwest (IL, IN, IA, KS, MI, MN, MO, NE, OH, ND, SD, WI)
c) South (AL, AR, DE, DC, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN , TX, VA, WV)
d) West (AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY)

Are you a naturalised US citizen?

a) Yes
b) No

What is your highest level of educational attainment?

a) 12th grade or less
b) High school diploma
c) Some college, no degree
d) Associate’s degree
e) Bachelor's degree
f) Post-graduate degree

Are you currently married?

a) Yes
b) No

Are you registered to vote in the United States?

a) Yes
b) No

What is your income?