THE ASSOCIATIONS AMONG PERSONALITY FACTORS, THE THEORY OF PLANNED BEHAVIOR AND VOTING

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Student:  Blair Nicole Lynch

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__________________________, Graduate Coordinator

Jianjian Qin, Ph. D. ______________________________  Date

Department of Psychology
Abstract

of

THE ASSOCIATIONS AMONG PERSONALITY FACTORS, THE THEORY OF PLANNED BEHAVIOR AND VOTING

by

Blair Nicole Lynch

The Theory of Planned Behavior (TPB) (Ajzen, 1991) and personality were used to predict intention to vote in the 2010 California general election. The TPB considers Attitudes, Subjective Norms and Perceived Behavioral Control beliefs in relation to intention and subsequent action. Personality was measured using the Big Five Questionnaire (John and Srivastana, 1991). Extraversion, Conscientiousness and Agreeableness were assessed in relation to intention. The participants (N = 64) were able to participate using an online research website (surveymonkey.com) that required them to complete the measurements before Election Day and return after Election Day to indicate their voting action. The findings show that attitude was a significant in predicting intention (p < .01) over subjective norms and perceived behavioral control, and that intention is a significant predictor of voting action. Overall, the findings suggest that intention (p < .01) and attitude (p < .05) are the only significant predictors of voting action and affiliation is the only significant predictor of intention (p < .01).

Keywords: theory of planned behavior, personality, vote, intention

Lisa Bohon, Ph. D.

Date

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Chapter 1
INTRODUCTION

Democracy is the backbone of how American society functions. When individuals cast their vote in an election, they are becoming part of the democratic process of America. American society is composed of many different cultures and values which influence the political climate. However, individual factors such as personality, attitudes, and intention can also influence voting. In the present research, I investigated the nature of individual characteristics that are associated with voting.

Theory of Planned Behavior

The Theory of Planned Behavior (TPB) uses a series of components that comprise intention to predict behavior. The TPB was originally developed by Ajzen in 1985. The theory was designed to predict and explain human behavior in specific contexts. It is based on the idea that behavior is a function of three beliefs about the specific situation. These three beliefs are attitudes (A), subjective norms (SN) and perceived behavioral control (PBC) (Ajzen, 1991).

Attitude is the overall beliefs about something—the evaluative opinion the individual holds in regard to the behavior in question. It is measured through the combination of the direct attitude beliefs and the salient behavioral beliefs (Ajzen, 1991). Subjective norms are the beliefs that one holds about the normative expectations of others and consists of perceived pressure, approval or disapproval from the influential people in one’s life (Chatzisarantis & Hagger, 2008), the pressure to engage in the given behavior,
and the individual's motivation to comply (Ajzen, 1991). Perceived behavioral control is the belief about the perceived ease or difficulty in engaging in the behavior, as well as any previous experiences with carrying out the specific behavior and any anticipated hindrances. The influence of PBC depends on the strength of the control beliefs and the power to combat any resistance to the intended action (Ajzen, 1991).

The more favorable the attitude and subjective norms are for the specific context, and the greater the perceived control, the stronger the intention to behave will be for the specific individual. The theory is situation specific and the three contributing factors are not constant for any individual (Ajzen, 1991). This means that every new situation requires relevant information to form the best predictor of behavior. The TPB is illustrated in Figure 1.

*Figure 1. Illustrated Theory of Planned Behavior.*
Research by Harder and Krosnick (2008) examined psychological studies that focused on why people vote and found that the psychological disposition of an individual shapes his or her motivation to vote, and is influenced by the individual’s motivation and ability [or difficulty] in relation to the specific vote. This finding supports the idea of perceived control having an influence on voting behavior because PBC encompasses motivation and perceived difficulty when being examined as an influence on intention. The research shows that aspects of PBC are measured in other studies, and parts of TPB are present, even when the model itself is not being utilized.

The Theory of Planned Behavior has been used to successfully predict real world behaviors; for example, it has been used to predict political behavior. One such study used the theory to predict state legislator’s intentions to vote on tobacco control. It was predicted that the intention-voting relation was dependent upon the level of perceived behavioral control the participant experienced. The results indicated that a relation does exist between PBC and intention-voting. Overall, those who had higher intentions were 9.5 times more likely to vote in comparison to those with low intentions (Flynn, et al., 1997).

**Personality Factors**

Personality has been studied in relation to the psychology of politics on many different occasions and is found to be a reliable predictor of political participation and political party affiliation (Caprara, Barbaranelli and Zimbardo, 1999; Caprara & Zimbardo, 2004; Digman, 1990; Schoen & Schumann, 2007). Early research about personality and politics focused on psychoanalysis, however, today the political
psychologies are focusing on the Big Five factors of Personality (Caprara & Zimbardo, 2004). The five factors are: Extraversion, Agreeableness, Conscientiousness, Neuroticism and Openness (Digman, 1990).

The five factors were later detailed and discussed in order to understand what each of the factors represents within the individual’s personality (John & Srivastavna, 1999). Extraversion is noted as the opposite of introversion and includes gregariousness, assertiveness, excitement seeking, enthusiasm, and being outgoing. Agreeableness is the opposite of antagonism and includes trust, forgiveness, altruism, compliance, modesty, and – being straight forward but not demanding. Conscientiousness is having direction; it includes competency; and being efficient, organized, and thorough, self-disciplined, and deliberate. Neuroticism is defined as the opposite of emotional stability and encompasses anxiety, hostility, depression, impulsiveness, and vulnerability. Lastly there is openness, which is seen as the opposite of closedness to experience. Openness includes being curious, imaginative, artistic, and excitable, and having unconventional values (John & Srivastavna, 1999).

Gordon Allport (1945) found that personality is closely related to participation and gave rise to the research of personality factors influencing political participation. Personality has mostly been studied in relation to political party affiliation and voting behavior in terms of motivation and values (Caprara, Barbaranelli & Zimbardo, 1999, Barnea & Schwartz, 1998); however, the current research is designed to assess any relation between personality and intention and use it as a predictor of behavioral intentions and action.
A link between personality and voting behavior was found by Schoen and Schumann (2007) when they discovered that each factor of personality is linked with different political agendas. The research found that openness was indicative of liberal views because of their openness to change. Conscientiousness was indicative of obedience to social rules, and therefore would represent either party given their adherence to the rules they follow. A high level of neuroticism indicated a support for welfare policies, while low levels supported social and economic liberalism. Agreeableness was positively correlated with a support for collective society. Lastly, extraversion did not show associations with political attitudes or vote choice and the relations were argued to be hard to predict since no aspect is logically related to political involvement.

As mentioned earlier, Harder and Krosnick (2008) found that an individual’s psychological state influences the development of his or her motivation, ability and likelihood of voting. Furthermore, the repeated use of personality in predicting political behavior assures its reliability and association to politics, and allows it to be utilized as a moderating variable when assessing intention and action based on the Theory of Planned Behavior. Therefore, I believe that personality can be assessed as an influence on the intention, motivation and desire to participate in an activity, and more specifically, voting.

TPB has been used in conjunction with personality to enhance the prediction of real life behaviors. For example, Chatzisrantis and Hagger (2008) studied intention to continue with a physical activity. The goal was to understand the role of personality as a
moderator of intention in the continuation of engaging in physical activity. The results showed that conscientiousness moderated the effect of intention to engage in the physical activity, however, other personality factors were not effective predictors (Chatzisrantis & Hagger, 2008). Despite the underwhelming relation between some personality factors and intention in this specific study, it can still be argued that personality has an important association with the intention to engage in physical activity, and might also have an impact on intention to vote.

The present study was designed to use personality and the Theory of Planned Behavior to predict intention to vote, and then studied the association between intention and actual voting behavior. Although the TPB is not widely used to study voting behavior, it is the type of situation for which it was developed. Moreover, personality was added to investigate any increases in predictive power.

I used the political party to understand if being associated with a political party is related to intention to vote and subsequent action. All individuals who were registered or identify themselves as a member of a political party were considered affiliated, and those who did not note any such membership were not considered affiliated.

**Hypotheses**

Overall, I hypothesized that intention would be a good predictor of voting behavior. In addition, I predicted that personality would have a strong interaction with the aspects of intention, through its relation to specific aspects of attitude, subjective norms, and perceived behavioral controls.
H₁: I predict that the TPB will be able to predict intention to vote and the act of voting (H₁a). Furthermore, that the influence of PBC will have the strongest influence on the act of voting (H₁b) based on the model developed by Ajzen (1991).

H₂: I predict that extraversion will have a significant interaction with intention to vote, through the component of attitude. This is consistent with research by Schoen and Schumann (2007) who found that extraversion is related to a person’s attitudes regarding politics.

H₃: I predict that agreeableness will have a significant interaction with intention to vote. This is consistent with research by Schoen and Schumann (2007) who found that individuals with high scores for agreeableness are found to show support for the collective society. This relates directly to the subjective norms and its measurement of the influence of other people’s belief on the participant as well as their motivation to comply (Ajzen, 1991).

H₄: I predict that conscientiousness will have a significant interaction with intention to vote, through the component of subjective norms and the motivation to comply. This is consistent with the findings of Schoen and Schumann (2007) who found that conscientious individual’s are more obedient to social rules.

H₅: In each election cycle, voters are motivated to participate by the candidates, specific propositions, and perceived outcomes. In this research, the specifics pertaining to this election are unknown, however, it is predicted that being affiliated with a political party will have a strong relation with intention to vote and vote action.
Chapter 2
METHODS

Overview

The purpose of this research was to understand how the Theory of Planned Behavior, personality factors, and political party could be used to predict and assess intention to vote. Intention to vote was then used to predict actual voting behavior (action). Predictor variables were attitude about voting, subjective norms, perceived behavioral control, intention to vote, and personality traits (neuroticism, extroversion, openness, agreeableness and conscientiousness), and political party affiliation measured using self-report (indicating membership as a Democrat, Republican and others). The criterion variable was voting behavior.

Participants

A convenience sample was selected from the California State University, Sacramento subject pool as well as undergraduate students in communication and ethics courses at Sacramento City College after obtaining permission to recruit participants from their instructors. The CSUS students were able to find the study online through the psychology department’s research website which detailed the instructions for finding the online inventory, and the SCC students were recruited during the first few minutes of their classes and given a flyer that contained information identical to that found on the CSUS website. All of the participants were treated according to the ethical and confidentiality guidelines outlined by the American Psychological Association. This
included being fully informed prior to beginning their participation, being allowed to withdraw at any time, being assured that their answers and identity were kept separate and confidential, and they were fully debriefed at the end of their participation.

A total of 106 participants completed the first survey and 84 returned to complete the follow up. Out of the 84 participants, 21 did not have a matching identifier so the responses were omitted, bringing the total number of participants to 63. The participants were predominantly female (70%) and had a mean age of 22 years. Those who participated were more often affiliated with a political party (86%) than not (14%). Of the 64 participants, 30 (47.6%) did not vote and 33 (54.2%) did vote and less that 13% said there was a slightly strong to strong influence of participation in the study on their decision to vote. The responses collected for the first phase were collected between October 25th, 2010 and November 1st, 2010 and the second phase responses were collected between November 2nd, 2010 and November 13th, 2010 to allow the respondents enough time to return as well as enough time for the data to be thoroughly analyzed before being submitted for review.

**Materials**

**Big Five Questionnaire—Personality Factors**

Personality was measured using the Big Five Questionnaire, as developed by John (1991). It measures personality by assessing five main factors: Extraversion, Neuroticism, Openness, Conscientiousness and Agreeableness. The questionnaire consists of 44 items that are representative of the different factors. Responses are made on a five-point scale in which the participant can indicate how much the items reflect
their self-perception (*strongly agree – strongly disagree*). The BFQ is found to be a sound measure of the five factors of personality, and uses a Lie (L) scale to account for the Social Desirability response (Digman, 1994). Construct validity is upheld with high correlations to other personality measurements such as the NEO-PI (mean \( r = .68 \)) (John, Naumann & Soto, 2008) in other samples from different cultures (Caprara, et. al., 1999) and the Cronbach’s alpha scores for each of the five subscales ranged from .82 to .86 when tested for reliability (John, et. al, 1991). Furthermore, a chronbach’s alpha of the five domain scales with the current data showed that the questionnaire has a high internal validity and reliability with alpha scores ranging from .77 to .80.

**Theory of Planned Behavior Questionnaire—Intention**

Attitude, subjective norms, perceived behavioral control and intention were measured using instructions from Ajzen (http://people.umass.edu/aizen, 2006) which have been modified to measure intention to vote in the 2010 California general election. The items were developed according to the Theory of Planned Behavior. The measurement consists of 42 items which have a 7-point response scale with anchors that vary depending on how the question is worded, making it specific to one of the three components of intentions: attitude, subjective norms and perceived behavioral control. See Appendix A for a complete version of the developed questionnaire. The anchors range from good-bad, to extremely possible-extremely impossible, to true-false, with a center anchor of neither, and included other anchors depending on the wording of the question and the component being measured. The range of response options identify the direct attitude, subjective norm beliefs and perceived behavioral control as well as the
underlying behavioral beliefs, normative and power beliefs of those the components, respectively. The responses range from strongly agree-strongly disagree to extremely likely-extremely unlikely depending on how the question is worded. A Cronbach’s alpha analysis was conducted to be sure the newly developed TPB questionnaire was reliable. Upon the initial analysis, certain items measuring direct attitude and perceived behavioral control beliefs were found to not significantly contribute to the individual subscales and were thus omitted from the analysis. Before the items were omitted, the alpha levels were .64 for direct attitude and .55 for perceived behavioral control beliefs. After this omission, the alpha levels ranged from .70 to .98 for the subscales of attitude, subjective norms, and intention (see Table 1 for a complete list of alpha levels).

Table 1

<table>
<thead>
<tr>
<th>Salient Beliefs</th>
<th>Direct Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>.74</td>
</tr>
<tr>
<td>Subjective Norms</td>
<td>.70</td>
</tr>
<tr>
<td>Perceived Behavioral Control</td>
<td>.87**</td>
</tr>
<tr>
<td>Intention</td>
<td>.98</td>
</tr>
</tbody>
</table>

Note. The reliability was determined by analyzing the Cronbach’s alpha of each subscale. *Indicates alpha after items were omitted. N = 63. **Perceived behavioral control salient beliefs are the power of those control beliefs (Ajzen, 1991). All significance levels were at the p < .05 level.

Political and demographic information were gathered through self-report from the participants after completing both questionnaires. I asked them for their age, sex, and political party affiliation. Ethnicity was not included because when reading the previous
TPB research, it was not utilized in predicting intention. To report their political party they were simply asked, “Which political party are you a representative of (which party did you designate when you registered to vote)? Example: Republican, Democrat.” Actual voting behavior was determined through the use of a follow up set of questions which not only asked if the participant voted, but asked about any possible impact that answering the questions in the first part of the study had on their desire or intention to vote.

**Procedure**

Participants from the CSUS subject pool were made aware of the research website in their undergraduate psychology courses which requires them to participate in a psychology research study. When they went to the website, the current research was available as “A Study of Politics (Online Survey)” and when they selected this research they were given an overview about the two part participation, and given the dates by which to complete the first survey, as well as the link to complete the first surveys. The participants from Sacramento City College (SCC) were given the same instructions; however, they were on a flyer rather than posted on a website run by the school. SCC students are not allowed to access the CSUS research website.

The first round of participation consisted of going through four pages on the website link, the first being the informed consent, followed by the BFQ, then the TPB Questionnaire and lastly the demographic information. Upon completing all of these items, participants were automatically redirected to a new site in which they were asked to enter their email address for correspondence about the follow up items. Their emails
were collected on a different site to ensure the confidentiality of their responses and keep them protected under the APA ethical guidelines. The first part of the participation closed at 7:00am on November 2, 2010 when the polls opened to be sure no one could respond after voting on Election Day.

After the first part of the data collection was closed, the emails were collected and a follow up email was sent out asking participants to answer a few follow-up questions. The email gave them instructions similar to the ones they had in the first phase, and provided the link to the follow up items (i.e. “Did you vote in the 2010 California general election?”). Upon completing the questions they were debriefed online, and asked to acknowledge their understanding of the study. They were also given information about how to contact the researcher with any questions. Upon acknowledging the debriefing, they were redirected to another website to collect their emails once again. The email was then used to contact them for their names in order to assign credit to the research website at CSUS or to their instructors at SCC. Only participants who completed both parts one and two were included in the data analysis.
Chapter 3

RESULTS

Those who did not respond to every question were kept in the sample and the missing score was calculated with the mean score for the specific item. This was done to keep the sample size at a number that would still provide enough power to carry out the regression analysis. The missing data was not greater than 3.2% of the respondents for any item in the TPB questionnaire and 4.7% for any item in the BFQ and any individual who did not answer all of the questions was omitted from the sample. The total scores for the direct and salient subscales of attitude, subjective norm and perceived behavioral control were used for the main analyses.

A hierarchical multiple regression analysis was used to assess the ability of the Theory of Planned Behavior (Attitude, Subjective Norms, Perceived Behavioral Control) to predict intention to vote (H1), after controlling for age, sex, party affiliation and influence of the participation in this research. Age, sex, affiliation and influence of participation were entered at Step 1, explaining 31.8% of the variance in intention to vote. After the entry of Attitude, Subjective Norms, and Perceived Behavioral Control at Step 2, the total variance explained by the model as a whole was 39.3%, $F(7,54) = 5.00, p < .001$. Attitude, Subjective Norms and Perceived Behavioral Control accounted for an additional 7.6% of the variance in intention, after controlling for age, sex, affiliation and influence which were not statistically significant, $R$ square change = .076, $F$ change
\((3.54) = 2.24, p > .05\). When looking at the model as whole, the only variable that was statistically significant was affiliation \((\beta = .47, p < .001)\), which was controlled for in Step 1 (see Table 2 for a complete list of beta levels and confidence intervals for each step).

Table 2

Hierarchical Regression Predicting Intention to Vote

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(\beta)</td>
<td>95%CI</td>
</tr>
<tr>
<td>Age</td>
<td>.26</td>
<td>(.04, .59)</td>
</tr>
<tr>
<td>Sex</td>
<td>.05</td>
<td>(-2.36, 3.77)</td>
</tr>
<tr>
<td>Affiliation</td>
<td>.51*</td>
<td>(5.05, 12.94)</td>
</tr>
<tr>
<td>Participation Influence</td>
<td>-.03</td>
<td>(-1.31, 1.04)</td>
</tr>
<tr>
<td>Attitude</td>
<td>.18</td>
<td>(-.02, .19)</td>
</tr>
<tr>
<td>Subjective Norms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Behavioral Control</td>
<td>-.06</td>
<td>(-.24, .14)</td>
</tr>
</tbody>
</table>

*Note. N = 63. CI = confidence interval. Total scores for attitude, subjective norms and perceived behavioral control.

*\(p < .001\).

A logistic regression analysis was conducted to assess the ability of intention to predict vote action \((H_{1a})\) as well as PBC being the strongest predictor of vote action \((H_{1b})\) —over Attitude and Subjective Norms. The model contained four independent variables (Intention, Perceived Behavioral Control, Attitude and Subjective Norms) and vote action as the categorical, dependent variable. The full model, containing all predictors was statistically significant, \(X^2(4, N = 63) = 39.26, p < .001\), indicating that the model was able
to distinguish between participants who reported and who had not reported voting. The model as whole explained between 46.4% (Cox and Snell R square) and 61.9% (Nagelkerke R square) of the variance in vote action, and correctly classified 79.4% of the cases. As shown in Table 3, intention and attitude made a statistically significant contribution to the model. The strongest predictor of voting action was intention recording an odds ratio of 1.57, indicating that those who have higher intention to vote are more likely to have voted than those who did not. The odds ratio for attitude was .92, a value less than one which would indicate those with a more favorable attitude would be less likely to vote, however, given the proximity to a value of one there is room for speculation on this result (see Table 3 for a complete list of odds ratios).

Table 3

*Intention and TPB Predicting Vote Action*

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>S.E.</th>
<th>OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>-.09</td>
<td>.03</td>
<td>.92*</td>
</tr>
<tr>
<td>Subjective Norms</td>
<td>.12</td>
<td>.06</td>
<td>1.11</td>
</tr>
<tr>
<td>Perceived Behavioral Control</td>
<td>-.05</td>
<td>.05</td>
<td>.96</td>
</tr>
<tr>
<td>Intention</td>
<td>.45</td>
<td>.13</td>
<td>1.57**</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 39.26** \]

*Note. N = 63. Predictor variables include overall scores for attitude, subjective norms, perceived behavioral control and intention. OR = Odds ratio.*

* *p < .05. **p < .001.

A second hierarchical multiple regression was conducted to assess the interaction of certain personality factors with aspects of intention (H₂, H₃, H₄). Age, sex, affiliation
and influence of participation were entered at Step 1, explaining 31.8% of the variance in the variance of intention to vote. After the entry of the centered values of Attitude, Agreeableness, Conscientiousness, Extraversion and Subjective Norms were entered at Step 2, the variance explained this far in the model was 42.3%, $F(8,53) = 4.86, p < .001$. This step accounted for an additional 10.6% of the variance in intention to vote, $R^2$ change $= .11$, $F$ change $(4,53) = 1.91, p > .05$. After the interaction of Extraversion and Attitudes (H2), Subjective Norms and Agreeableness (H3) and Subjective Norms and Conscientiousness (H4) were entered at Step 3 the total variance explained by the model as a whole was 44.2%, $F(11,50) = 3.60, p < .01$. The interaction of personality factors and intention sub factors explained an additional 1.8% of the variance in intention to vote, $R^2$ square change $= .018$, $F$ change $(3,50) = .54, p > .05$. The overall model was statistically significant; however, the findings of the overall model in assessing the ability of the interaction between specific personality factors and aspects of intention were not statistically significant. In the final model, the only variable that was found to be statistically significant was affiliation, which was controlled for in Step 1 ($\beta = .47, p < .001$) and not part of the interaction analysis (see Table 4 for complete list of beta levels and confidence intervals for the variables in each model).

The correlation between party affiliation (being affiliated with a party vs. not being affiliated) and intention was investigated using Pearson r correlation (H5). There was a strong correlation between affiliation and intention, $r = .50$, $N = 63, p < .001$, indicating that those who are affiliated with a party would have higher intentions to vote than those who were not affiliated with a political party.
Table 4

*Interaction of Personality and TPB Components*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th></th>
<th>Model 2</th>
<th></th>
<th>Model 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>95%CI</td>
<td>β</td>
<td>95%CI</td>
<td>β</td>
<td>95%CI</td>
</tr>
<tr>
<td>Age</td>
<td>.26</td>
<td>[.04, .59]</td>
<td>.15</td>
<td>[-.11, .46]</td>
<td>.16</td>
<td>[-.10, .49]</td>
</tr>
<tr>
<td>Sex</td>
<td>.05</td>
<td>[-2.36, 3.77]</td>
<td>.05</td>
<td>[-2.33, 3.80]</td>
<td>.06</td>
<td>[-2.40, 4.00]</td>
</tr>
<tr>
<td>Affiliation</td>
<td>.51*</td>
<td>[5.08, 12.44]</td>
<td>.48*</td>
<td>[4.73, 12.44]</td>
<td>.47</td>
<td>[4.38, 12.30]</td>
</tr>
<tr>
<td>Participation Influence</td>
<td>-.03</td>
<td>[-1.31, 1.0]</td>
<td>-.06</td>
<td>[-1.52, .87]</td>
<td>-.03</td>
<td>[-1.42, 1.08]</td>
</tr>
<tr>
<td>Attitude*Extraversion</td>
<td></td>
<td></td>
<td>.12</td>
<td>[-.08, .25]</td>
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<td></td>
</tr>
<tr>
<td>Subjective Norms*Conscientiousness</td>
<td>-.08</td>
<td>[-.37, .18]</td>
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</tr>
<tr>
<td>Subjective Norms*Agreeableness</td>
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<td>[-.29, .27]</td>
<td></td>
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</tr>
</tbody>
</table>

Note. N = 63. Total scores for attitude, subjective norms and perceived behavioral control. CI = confidence interval. *p < .001.

Furthermore, a multiple hierarchical regression was conducted to assess the ability of specific party affiliation (Democratic, Republican, and others) to predict intention after controlling for age and sex. The overall model was not significant, accounting for only 7.2% of the variance in intention to vote, $F(4,57) = 1.12, p > .05$. A logistic regression was also conducted to assess the impact of specific party affiliation (Democratic, Republican, and others) on voting action. The model contained the specific party as a categorical independent variable and voting action as the categorical dependent variable. The model was not significant, $\chi^2(5, N = 63) = 3.36, p > .05$.

Additional logistic regressions were conducted to assess the impact of multiple other factors on vote action to see if other variables would better predict voting action.
The first model was set up to examine any possible predictability the three personality factors associated with the components of intention might have had on voting action. The model contained three independent variables (Extraversion, Agreeableness and Conscientiousness) and voting action as the categorical, dependent variable. The model was not significant, \( \chi^2(3, N = 63) = 3.74, p > .05 \).

The second model examined the predictive ability of political party affiliation on voting action, given its significant correlation with both intention and voting action. The model contained political party affiliation as the categorical independent variable, and voting action as the dependent variable. The model was significant in predicting voting action, \( \chi^2(1, N = 63) = 3.83, p = .05 \). The significance level was not very strong, and the model was only able to predict between 6.1% (Cox and Snell R square) and 8.2% (Nagelkerke R square) of the variance in vote action and only classified 60.3% of the cases correctly. Affiliation with a political party did not have a significant odds ratio with a value of 4.71, \( p > .05 \).
The Theory of Planned Behavior was a disappointing predictor of intention to vote and voting action and the influence of personality did not prove to have any influence on the components of intention. The application of the TPB in predicting voting should not be ruled out in the future, given the limitations to this research.

The TPB was hypothesized to be able to predict intention to vote (H1) and the act of voting (H1a) however, this hypothesis was not supported by the data. The model developed to test this hypothesis assessed the impact of attitudes, subjective norms and perceived behavioral control on intention. The model as a whole was significant, which allows for the speculation that with a greater sample size, the theory would be able to predict intention to vote. In addition, intention to vote was a significant predictor of voting action, which supports the TPB overall, and the predictive ability of intention for the specific situation of voting in the 2010 California General Election.

I also predicted that Perceived Behavioral Control would have had the strongest influence on the act of voting (H1b) based on its unique relation to actions outside of the model. This hypothesis was not supported, and it was found that attitude, not perceived behavioral control was a significant contributor to predicting vote action. Previous research has argued that the nature of participation digs into the inner workings of the person’s subjectivity, values and motivation (Allport, 1954). It is conceivable that attitude would relate to these factors and override the influence of the individual’s control in
being able to cast their vote given the fluctuation of influence of the different components of intention depending upon the behavior in questions (Ajzen, 1991).

Overall, the findings do not correspond with previous research which has found the TPB to be a successful predictor of legislative voting (Flynn, et al., 1997), continuing with an exercise regimen (Chatzisrantis & Hagger, 2008), and even in predicting participation in recreational activities like hunting (Hubres, Ajzen and Diagle, 2001). The lack of support for the predictive ability of the TPB suggests that the findings are a result of the limited power of the analyses used given the small sample size. Perhaps, if the sample size were increased, the TPB-model would have found the TPB successful in predicting intention to vote.

To further improve the use of the TPB in predicting intention to vote, it is believed that the TPB questionnaire should be validated extensively. In this specific study, four items from the PBC direct measure were omitted. The items related to unanticipated events, family obligations, work demands on time, and school demands on time all inhibiting the participant’s ability to cast their vote in the election. Also, two items from the salient attitude measure were omitted—the items asked the participant if voting was important enough to miss work, and important enough to miss out on social plans. All of the items omitted were left out because they decreased the strength of the measure and the remaining items had a strong enough reliability to be used.

The hypotheses regarding personality having an interaction with intention to vote were not supported. Extraversion did not have a significant interaction with attitude in the predicting of intention to vote, agreeableness did not have a significant interaction with
subjective norms in the predicting of intention to vote, nor did conscientiousness. The analysis looked at the associations between the personality factors as they interacted with components of intention. Based on previous research findings these factors were related to specific components of intention (Schoen and Schumann, 2007; Ajzen, 1991).

I believe that the lack of statistical support for the model can be related to limitations in power of the analyses based on the lacking sample size. Since the data was collected in such a short time span the sample size was smaller than it would have been if the online data collection site was available to the research pool at an earlier date. It is also possible that students from CSUS psychology classes had not yet begun to focus on their research participation and by the time they got involved in projects from the research website, this research option was no longer available since it ended a month before the semester in which students needed to complete their participation. In the future, the data collection should begin as soon as possible before the election. If an undergraduate subject pool is used the limitations of having to collect the data within a timeframe set by the academic institution should be considered when determining the time frame of collecting responses.

Although the research is limited in this area, by understanding that personality is a guiding force in political party affiliation based on the research noted above, it is suggested that this research be taken seriously and utilized in the future. By understanding how personality can influence intention to vote, and through which specific aspects of intention (Attitude, Subjective Norms, and Perceived Behavioral
Control) researchers might be able to understand how politicians can get individuals motivated to vote better than before.

The research of political psychology has focused on personality in regards to specific political party affiliation has found strong support for the belief that personality is a strong predictor of which political party an individual will belong to (Schoen and Schumann, 2007; Caprara, Barbaranelli and Zimbardo, 1999; Caprara & Zimbardo, 2004; Digman, 1990) however, the use of personality with regard to predicting intention to vote is novel. The model laid out in this research should not be discredited, however, because the relation between the two is highlighted in political psychology research even though it is not studied directly.

The hypothesis that political party affiliation would have a strong relation to intention with vote was supported by the data. The relation between affiliation and vote action approached significance, and with a greater sample size would likely be supported. Specific party affiliation was also assessed for an influence on intention and vote action and in both cases, no specific party affiliation was found to be a significant predictor. Previous research has found that personality traits influenced political party preference (Caprara, et al., 1999) but has not focused on specific party membership predicting intention to vote or voting altogether. Since this research focused on personality and intention, affiliation was used controlled for to eliminate any possible effect it could have had on intention to better understand the components of intention and personality. However, it is possible that voter turnout is based solely on the items on the ballot and in the future intention could be assessed in relation to specific ballot items.
It is important to note, that given the specific nature of the Theory of Planned Behavior Questionnaire, these predictions are based only on voting behavior in the 2010 California general election and that if voting in any other election were assessed, the three components of intention might have different influence on intention and behavior. As a result of the specificity of the questionnaire, it is feasible that in some uses of the TPB attitudes have the most significant impact on intentions, or that attitudes and perceived behavioral control account for intentions, and yet for others all three independently contribute to the resulting intention (Ajzen, 1991). The models developed here lay the framework for future research to be conducted in forthcoming elections to see if with a greater sample size, and a new version of the TPB questionnaire, personality interacts with intention to vote and voting action.
REFERENCES


