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Attempts to Debias Wishful Thinking in the 2016 U.S. Presidential Election

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Abstract

People's preferences for a particular outcome can influence how they perceive the likelihood of that outcome over other outcomes. For example, a football fan who strongly desires his team to win an upcoming game may be overly optimistic in the likelihood that his team will, in fact, win the upcoming game. This phenomenon is referred to as wishful thinking or the desirability bias. Previous research has examined many factors that could potentially decrease wishful thinking (e.g., incentives for accuracy, enhanced instructions to be unbiased). Surprising to some, most of the previous attempts to decrease wishful thinking have been unsuccessful. For example, even when give a relatively large incentive to make an accurate prediction, their desires still influenced their predictions. The current study expands previous literature by examining how additional and accurate information might influences wishful thinking. We predicted that providing participants with additional accurate information would decrease the amount of wishful thinking they demonstrate in predicting the outcome of the United States 2016 Presidential Election. Among other questions, participants were asked to indicate which candidate they preferred to win the election. Then, participants were either given no additional information, accurate and current polling information, or election expert opinions. Participants then predicted who they thought would win the election. Inconsistent with my hypothesis, the study found that providing additional information did not decrease wishful thinking. This study is consistent with other failed attempts to decrease wishful thinking and highlights how influential people's preferences can be to the judgments they make.

Attempts to Debias Wishful Thinking in the 2016 U.S. Presidential Election

When thinking about the future, it is common that people will desire one outcome over another. People's preferences for an outcome can influence their perceptions of the likelihood of that outcome over others (Krizan & Windschitl, 2007). For example, a football fan's desire to see his or her team win an upcoming game might influence this fan's prediction as to whether the team will, in fact, win the game. Previous research confirmed that people are likely to overestimate the likelihood of an event that has a personally desired outcome—that is, people often exhibit wishful thinking (Krizan & Windschitl, 2007). While people have been shown to demonstrate wishful thinking in a wide variety of contexts, relatively few studies have examined factors that might help mitigate the influence of people's preferences on their expectations. The current project examined the influence of candidate preference on people's outcome predictions of the 2016 U.S. Presidential Election. Importantly, I examined if providing participants with additional information about the possible outcomes could impact the amount of wishful thinking they exhibited when predicting the outcome of the election.

As noted above, wishful thinking—also referred to as the desirability bias—occurs when people's desires influence their predictions of unknown outcomes (Krizan & Windschitl, 2007). Before describing the background research on wishful thinking, it is important to note that wishful thinking is not simply being over-optimistic about the future. There are a number of factors that can cause a person to be overly optimistic, even in the absence of personal preferences (Fischhoff, Lichtenstein, Slovic, Derby, & Keeney, 1981). For example, people may believe they are less likely to suffer from a certain disease due to a lack of knowledge regarding the factors that make one susceptible to developing the disease. Rather than having a preference for one outcome over another, a person's inadequate information about the development of the

disease could cause his or her heightened sense of optimism. Another example of optimism that is not necessarily caused by a preference for a particular outcome could be the behavior/beliefs of gamblers in games of roulette. The gambler may be overoptimistic that the marble will land in the desired position due to a misconception or error of the gambler, rather than a personal preference (Jarvik, 1951). In other words, there are many reasons as to why someone might be overly optimistic about the future with people's preferences only being one of those reasons.

Much of the previous research on wishful thinking has used the marked card paradigm to examine the bias. Marks (1951) developed the marked card paradigm to examine how desirability and objective probability influenced children's perceived likelihood of pulling a picture card from a stack of blank cards. Importantly, to manipulate desirability, on some of the rounds the children would gain points if the card pulled happened to be a picture card. On other rounds, the children would lose points if they pulled a picture card. Before pulling a card, the children were asked to predict whether they would pull a picture card or not. Participants were more likely to predict a picture card when the card was associated with winning points. In other words, children's expectations for pulling a picture card were higher when they wanted to pull a picture card. Furthermore, as the probability of pulling a picture card increased, expectations of doing so increased in both the desirable and undesirable conditions. Taken together, this shows that children are sensitive to objective probabilities but are also influenced by their preferences for one outcome over another.

Whereas children have been shown to exhibit wishful thinking (Marks, 1951), adults are not immune to being biased by their preferences. Windschitl, Smith, Rose, and Krizan (2010) used an updated version of the marked card paradigm to examine wishful thinking in young adults. In an attempt to reduce the likelihood of demand characteristics and experimenter bias,

the researchers changed the task so that the experimenters were unaware of the benefit of pulling a marked card. Earlier marked-card paradigms had allowed for the experimenter to be aware of the benefit and could have possibly influenced the way in which participants responded.

Although these changes were made, the adults still demonstrated heavy wishful thinking in their predictions.

Whereas wishful thinking consistently biases outcome predictions (e.g., will the card be marked or not), it exerts substantially weaker effects on likelihood judgements (e.g., on a 0-100% scale, how likely is it that the card will be marked; Windschitl et al., 2010). For example, imagine that participants are presented with four blue cards and six red cards and are then told that pulling a blue card results in gaining \$5. When asked to make a likelihood judgement, it is common for the participants to report a 40% chance of pulling a blue card; however, when asked to make an outcome prediction, participants are likely to predict pulling a blue card, disregarding the lower likelihood of doing so.

After running five studies using variations of the marked-card paradigm, Windschitl et al. (2010) argued that a biased-guessing account is responsible for wishful thinking. The biased-guessing account suggests that wishful thinking demonstrated in marked-card paradigms stems from the amount of uncertainty in the judgment being made. When making a likelihood judgment, there may be an objectively correct response. For example, if 4 of the 10 cards are blue, there is a 40% chance a blue card will be pulled. While the outcome is uncertain, the is no uncertainty in the judgment that is being made. On the other hand, when making an outcome prediction, the "correct" response is more arbitrary. Windschitl et al. found that the more arbitrary the situation, the more likely people will guess optimistically. Predicting a situation such as a marked-card paradigm requires a sense of guessing, and when people think that part of

their prediction is somewhat of a guess, wishful thinking was the strongest; however, making likelihood judgements tends to be less arbitrary. Therefore, when participants are asked to do so, wishful thinking was nearly absent.

In addition to utilizing variations of the marked-card paradigm, other researchers have examined wishful thinking in situations involving real-world predictions (e.g., Babad & Katz, 1991; Krizan, Miller, & Johar, 2008; Massey, Simmons, & Armor, 2011). For example, Krizan et al. (2008) examined young voter's preferences and expectations of the 2008 U.S. Presidential Election. They did so at four different times throughout the month before the election. The researchers examined the relationship between participants' preferences for a candidate to win and their predictions about which candidate would indeed win. As expected, participants tended to predict their preferred candidate as the winner of the election. This relationship became even stronger closer to the election date. They also found that the participants' political party identification influenced the levels of wishful thinking in predicting the outcome of the election; the stronger participants identified with their party, the more wishful thinking they demonstrated. It is interesting to note that even when participants were asked about current polls and media coverage of each candidate, they still exhibited wishful thinking for their preferred political party.

Wishful thinking has been shown to be prevalent in both lab-based and real-world contexts, and some recent research has begun examining possible ways to reduce wishful thinking Multiple studies have examined different factors and their influence on wishful thinking. For example, gathering football predictions from National Football League fans, Massey et al. (2011) examined the influence that familiarity and experience had on wishful thinking. Preferences were determined by the participant's favorite team, and familiarity was

measured by the participants reported preseason knowledge of the team. Participants were asked to make predictions throughout the season rather than predicting only one game. Because participants made predictions throughout the season, they gained more knowledge about the team's performance as the season progressed. Therefore, they could have used this knowledge to overcome wishful thinking when making predictions later in the season. Although predictions did get slightly better throughout the season, participants' preferences continued to influence their predictions about the outcomes of the games. This study shows that even with information about past experience, people were still more likely to predict their favorite team as the winner, even when the odds were not necessarily in their favor.

To determine if personal financial threat would influence wishful thinking, Babad and Katz (1991) examined wishful thinking in Israeli soccer fans and bettors. To do so, the researchers asked participants to predict game outcomes while in a soccer stadium watching a game, on a questionnaire while at a betting pole, as well as on actual betting forms in which the participants had invested their own money. Because people pay to bet, one would imagine that predictions would be more rational rather than optimistic. The researchers found that participants still predicted their favorite team to win, even when it was clearly a threat to their financial investment. This was true when participants were asked in each of the three environments, regardless of if their own money had been invested. It appears that people seem to be unaffected by additional information, incentives, and familiarity when making predictions about desired outcomes.

One may assume when people are presented with larger incentives for accurate predictions that wishful thinking would decrease. In order to test this assumption, Simmons and Massey (2012) had football fans make predictions about upcoming games that either did or did

not involve their favorite team. The researchers manipulated the incentives for making accurate predictions. Specifically, some participants were told they would get \$5 for a correct prediction while other participants were told they would get \$50 for a correct prediction. It was possible that when \$50 was on the line, the participants would carefully evaluate the teams in the game and provide an unbiased prediction of the likely winner. Contrary to this possibility, regardless of incentives (\$5 versus \$50), approximately the same percentage of people predicted their favorite football teams to win. This study demonstrated that incentives for accuracy do not decrease wishful thinking and that most people have a lot of confidence in their biased predictions. This can be troublesome if people cannot set their desires and preferences aside to make accurate decisions and predictions in everyday life.

As discussed above, many previous studies have found that numerous factors have failed to reduce the amount of wishful thinking people demonstrate when making predictions of outcomes. The present research extends this by examining whether providing additional and accurate information influences the strength of wishful thinking in predicting the outcome of the 2016 Presidential Election. In this study, participants were asked to indicate who they preferred to win the election and then to make a prediction as to who they thought would win the election. Before making their prediction, each participant was randomly assigned to either receive no additional information, current and accurate national polling information, or five predictions from political experts. I hypothesized that participants who received additional polling information or election expert opinions would demonstrate less wishful thinking when predicting the outcome of the election than those receiving no additional information. While most previous studies attempting to reduce wishful thinking have failed, the present study hoped that explicitly providing additional information to participants would result in lower demonstrations of wishful

thinking.

Method

Participants

Two hundred ninety-nine participants (48.5% male, 51.5% female, M_{age} = 38.64, SD_{age} = 13.49) recruited from Amazon Mechanical Turk (MTurk) participated in the study. Participants were compensated \$.50 for their participation.

Procedure and Measures

A day before the 2016 U.S. Presidential Election, participants were recruited using MTurk. Participants were first presented with the informed consent document. After agreeing to participate, the participants saw a message explaining that the survey would cover politics and the 2016 United States Presidential Election. Next, participants responded to a number of questions, such as their level of interest in politics, whether they planned on voting in the upcoming election, and whether they voted in the previous election. Many of these served as filler items designed to disguise the purpose of the study. In order to measure participants' preference for the outcome of the election, the participants were asked "Who do you want to win the upcoming U.S. Presidential Election?" The participants responded on a sliding scale ranging from "Want Clinton MUCH more than Trump" to "Want Trump MUCH more than Clinton". The responses were coded on a 0-100 scale with lower score indicating a preference for Clinton and higher scores indicating a preference for Trump. They were then asked their age, highest level of education they completed, and gender.

Next, participants were asked to respond to a 12-item Social and Economic Conservatism Scale (SECS; Everett, 2013). This scale presented politically relevant issues (abortion, limited government, military, religion, welfare, gun ownership, traditional marriage and values, fiscal

responsibility, business, family unit, and patriotism) with a sliding scale ranging from 0 (greater negativity towards each issue) to 100 (greater positivity towards each issue). This scale measures political ideology by assessing participants' feelings on multiple social and economic issues related to conservatism.

Each participant was then randomly assigned to either the control condition (receiving no additional information), current polling condition (CPC), or expert opinion condition (EOC). Those in the CPC were presented with current and accurate polling information regarding which candidate was projected to win (see Appendix A). Participants in the EOC were presented with five political expert opinions (see Appendix B). The experts chosen were real people, and a prediction was attributed to them based on their experience. Specifically, three of the five predictions projected Clinton as the winner in an attempt to roughly match the polling information.

After the presentation of the information, the participants were asked to indicate which candidate (Hillary Clinton or Donald Trump) they thought would win the upcoming United States Presidential Election. Lastly, the participants were asked the degree of confidence they held for their selection, ranging from not at all confident to extremely confident. Finally, the participants read a debriefing statement and were paid for their participation.

Results

Relationships Among Variables

Before testing my hypothesis, I first looked at the relationships among demographic variables (i.e., age, gender, and education), political beliefs, preference for the candidates, and the prediction of the winner of the election. A significant relationship between age and conservatism was revealed, showing that older participants tended to be more politically

conservative. Additionally, a significant relationship was found between conservatism and both preference and prediction. Those with more conservative views tended to prefer and predict Trump over Clinton. Finally, there was a strong positive relationship between participants' preferences for who they want to win the election and their prediction as to who they thought would win the election (see Table 1). This suggests that, at least to some extent, people's predictions were likely influenced by their preferences. In other words, participants exhibited wishful thinking.

Test of Hypothesis

For each participant, I examined whether their preferred candidate was the same candidate they predicted to win. To do this, I examined the number of participants who predicted their preferred candidate. For example, if a participant reported that he wanted Clinton to win the election (i.e., his preference score was less than 50) and he predicted that Clinton would win the election, he predicted his preferred candidate. Likewise, if a participant reported that she wanted Trump to win the election (i.e., her preference score was greater than 50) and she predicted that Trump would win the election, she predicted her preferred candidate. Two participants (less than 1% of the sample) were dropped because they reported no preference as to who won the election (i.e., their preference score was exactly 50). Because wishful thinking is the tendency for preferences to shape expectations, participants with no preference for either candidate would not demonstrate wishful thinking. Overall, 77.4% of the participants predicted that their preferred candidate would win the election. As shown in Figure 1, 79.8% of participants in the current polling condition, 76.7% in the expert opinion condition, and 75.5% in the control condition predicted that the candidate they preferred to win would, in fact, win the election. These percentages show that participants demonstrated a general trend of wishful thinking in predicting the outcome of the 2016 Presidential Election. In order to text my hypothesis, I conducted a Pearson Chi-Square Test on the percentages of participants who predicted their preferred candidate in each of the conditions. Contrary to my hypothesis, there was not a significant difference in the percentage of participants who predicted their preferred candidate across the three conditions, X^2 (2, N = 297) = .598, p = .74. In other words, regardless of whether participants received accurate polling information, expert opinions, or no information, they demonstrated similar levels of wishful thinking in their predictions of the election.

Next, I conducted separate analyses on people who preferred Clinton to win the election and people who preferred Trump to win the election. Again, a score on the preference scale over 50 was classified as preferring Trump and a score below 50 indicated a preference for Clinton. Virtually all participants in support of Clinton predicted her to win the election (98.4% in the current polling condition, 94.3% in the expert opinion condition, and 95.5% in the control condition; see Figure 1). A Pearson Chi-Square Test was conducted examining the percentage of participants who preferred Clinton as the winner in each condition; this analysis revealed no significant difference across the three conditions, $X^2(2, N = 184) = 1.46$, p = .48. That is to say, the majority of participants that preferred Clinton to win also predicted her to win even when provided with additional information.

Participants who preferred Trump and predicted him to win were lower (53.3% in the CPC, 48.5% in the EOC, and 37.1% in the CC). Although these percentages were slightly different between conditions, a separate Pearson Chi-Square Test was ran on the percentage of participants that preferred Trump in each condition that revealed the differences as statistically insignificant across the three conditions, X^2 (2, N = 113) = 2.12, p = .35. Thus, regardless of whether the participants received additional information, there were no significant differences

between the three conditions when the participants wanted Trump to win.

Taken together, these analyses show that people's predictions were not influenced by receiving information prior to making their prediction. Furthermore, the lack of sensitivity to the information manipulation did not depend on whether participants had a preference for Clinton or Trump.

Discussion

Previous research has found that people commonly overestimate the likelihood of an outcome that is desirable (Krizan & Windschitl, 2007). Furthermore, most attempts to debias wishful thinking have remained unsuccessful (Massey et al., 2011; Babad & Katz, 1991; Simmons & Massey, 2012). This study examined the impact of providing accurate and additional information on the amount of wishful thinking people demonstrate when making predictions of unknown outcomes. I hypothesized that providing participants with current polling information or expert opinions would decrease the wishful thinking demonstrated when predicting the outcome of the 2016 Presidential Election. However, contrary to my hypothesis, providing participants with information did not decrease the amount of wishful thinking they demonstrated. That is, participants tended to predict their preferred candidate as the winner even when given additional information. For the Clinton supporters, this pattern is perhaps not surprising because the additional information stated that Clinton was likely to win the election. Therefore, the additional information likely bolstered their beliefs about the outcome of the election. For the Trump supporters, however, the additional information contradicted their preferences.

There are a number of possible explanations as to why the additional information failed to decrease wishful thinking. The survey was conducted online, so there is the possibility that participants did not read carefully or pay attention while responding. The sensible patterns found

(i.e., older participants tended to be more politically conservative and more conservative participants tended to prefer and predict Trump over Clinton) suggest that participants were, in fact, paying attention and reading carefully. Furthermore, there were no differences between our conditions for the participants with a preference for Trump. This could be the result of a defensive response from participants. The information presented suggested that their preferred candidate was going to lose, so it is possible they became defensive and ignored the additional information. It is also possible that the participants were already aware of the information provided to them. If the participants already knew of the current polls, providing them with this information would not influence their predictions. Wishful thinking is a strong bias, and it is possible that the amount of information presented was not enough to have an impact on the predictions.

One limitation of the study is that I simply examined the correlation between preferences and predictions. Wishful thinking occurs when preferences exert a causal influence on expectations of the outcomes (Krizan & Windschilt, 2007). With the current study design, it is impossible to know for sure whether preferences influenced expectations of outcomes or if expectations influenced preferences. While this is possible, Kizan et al. (2008) found no evidence for bandwagon effects when participants were asked to predict the 2008 U.S. Presidential Election. That is, participants did not seem to shift their preferences to match the candidate perceived most likely to win.

This study provides multiple directions for future research. Rather than using self-report surveys, a future study could examine the influence of providing additional information in other contexts. If defensiveness in participants is contributing to the results, future studies could identify other ways in which to present people with information without causing defensive

responding. For example, when examining wishful thinking in an election, participants could be presented with information containing only polling data and no stated predictions. This would allow for participants to develop their own interpretation of the information. Providing participants with different types of additional information multiple times before asking for predictions may help ensure that some of the information is actually new. Rather than using only polling information, a study could expose participants to actual news reports and election debate coverages. Additionally, this information could be presented multiple times before asking participants to make a prediction. Although providing participants with incentives for accurate predictions has failed to decrease wishful thinking in earlier research, it is possible that future research could examine ways to provide incentives that effectively influence participants to make more accurate predictions.

Conclusion

It seems as though wishful thinking is a bias that is extremely difficult to reduce when making predictions of outcomes. Providing incentives, additional information, and personal investment have all failed to reduce the amount of wishful thinking people demonstrate in outcome predictions. The results of this study can be troublesome in every-day life. The idea that providing people with more information leads to more accurate decisions and predictions is challenged by these results. Our criminal justice system presses the jury with as much available information as possible in hopes for the correct verdict to be chosen. If providing people with additional information does not reduce their bias in predictions, many common systems relying on this idea becomes faulty. These results show the importance of future research on additional information and wishful thinking. It is important that people make the most accurate and informed decision in many circumstances, and biases in decision making can result in negative

consequences.

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Appendix A

A nonpartisan company (FiveThirtyEight.com) collects and combines multiple nationally representative polls. Based on the combination of numerous polls, as of November 6th they have projected that Donald Trump will receive 45.6% of the popular vote and Hillary Clinton is projected to receive 48.3% of the popular vote. Therefore, based on the nationally representative polling data, **Hillary Clinton** is projected to win the presidential election.

Appendix B

Danny Hayes is an Associate Professor of Political Science at George Washington University.

He has expertise in American politics and public opinion. He has predicted that **Hillary Clinton** will win the upcoming election.

Bob Shrum, a Political Consultant and Strategist for John Kerry and Al Gore who has produced advertising for 26 U.S. Senate campaigns, predicts that **Hillary Clinton** will win the upcoming election.

David Plouffe, a Political Strategist and campaign manager for Barrack Obama's 2008 election, has predicted that **Hillary Clinton** will win the upcoming election.

Stuart Stevens, a previous top Political Strategist for Mitt Romney, has predicted that **Donald Trump** will win the upcoming election.

Lynn Vavreck is a Professor of Political Science and Communication Studies at University of California in Los Angeles. She has expertise in campaigns, elections, voter behavior, and public opinion. She has predicted that **Donald Trump** will win the upcoming election.

Table 1

Descriptive statistics and relationships among participant characteristics.

	Mean (SD)	Education	Gender	Conservatism	Preference	Prediction
Age	38.64 (13.49)	05	.11*	.27***	.08	.07
Education	HS/SC: 40.8% AS/BS: 46.5% MA/Higher:12.7%	-	10	01	02	07
Gender	Male: 48.5% Female: 51.5%		-	.05	02	.01
Conservatism	57.84 (19.36)			-	.60***	38***
Preference	61.5% Clinton 38.5% Trump				-	.59***
Prediction	79.6% Clinton 20.4% Trump					-

Note: * p < .05, ** p < .01, *** p < .001; Conservatism scores range from 0-100 with higher values indicating more conservative political beliefs. For both the Preference and Prediction variables, high numbers indicate preference/prediction for Trump. HS/SC = High school or some college; AS/BS: Associate's Degree or Bachelor's Degree; MA/higher: Master's Degree or higher

Figure 1

