

Social Media Styles: The Influence of Emotion on Persuasion through Twitter

by  
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Given the unique nature of interpersonal interactions via microblogging sites (such as Twitter), it has become clear that a new generation of political candidates will need to appeal to a new generation of voters by way of an entirely new mechanism: Social networking sites (SNS's). In order to address the question of which types of emotional appeals are most effective in persuading voters on platforms such as Twitter, the present study utilizes three topically similar arguments, with different types of emotional appeals. Participants (N = 463) were given either a fear-inducing, hope-inducing, or emotionally neutral message, in either the format of a tweet, or the format of an informational campaign mailer (2x3 design). They were then asked about the hypothetical candidate who was credited with the message either on the tweet, or on the postcard that they viewed. While no significant effect was found of visual SNS cues (Twitter format or control) on argument effectiveness, the fear-inducing condition resulted in a more positive image of the candidate, and greater persuasive force. However, when controlling for participant-identified experience of fear this trend reverses, and moderating variables such as party affiliation indicate that co-partisanship may drive how emotional appeals are experienced within the context of each specific argument.

Key Words: Social media, political psychology, heuristic-systematic model, Yale model, message characteristics, audience characteristics, source characteristics, Twitter, SNS, fear, information processing.

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## **Social Media Styles: The Influence of Emotion on Persuasion through Twitter**

In elections past, political differences between voters and nonvoters has created two unique demographics for political campaigns to target; those who will vote (but are on the fence regarding the specific electoral options), and those who may already have a preference for one candidate or another, but will not go to the polls on election day. And while much of the news-media is dominated by stories of independent or undecided voters, some scholars have come to the conclusion that mobilizing partisan nonvoters is a far more productive exercise than attempting to persuade those in the middle (Vavreck, 2014). However polarized the public may seem, there are still undeniably voters whose decisions cannot be traced back to party lines. This presents a unique, albeit small demographic for candidates and campaigns alike who are interested in courting the “centrist” or “moderate” vote.

Online networking sites provide a potential solution to the problem of the undecided voter. Novel pathways of persuasion and communication (as they have since the invention of the radio, and then the television) always seem to offer new elements to political discourse. Social media has already proven to be a dominant force for mobilization. For instance, the Arab Spring Uprising of 2011, though certainly rooted in decades of mistrust of government, was enabled by recent developments in social networking, as bloggers and laypersons were able to disseminate and consume ideas and news stories at an incredible rate, accelerating the pace of political discourse, and arguably the pace of political change (Eltantawy & Wiest, 2011). However, it is also important to remember that most of us think of Facebook or Twitter as a black hole for political debate; a place where rational, evidence-based arguments are exchanged for more compelling, flashier one-liners (Duggan & Smith, 2016) This is especially true for microblogging social networking sites (SNS) such as Twitter, which utilizes a 140-character cap

on posts to incentivize brevity and simplicity. There is some evidence to support the authenticity of these assumptions, as some studies have found that as few as 20% of SNS users have ever changed their minds as a result of a political discussion on social media (Pew, 2016). Further research has proposed the possibility that any change in political attitude as a result of SNS use may be mediated by differential motivation to seek new information (Lee & Meyers, 2016); which is to say that the small portion of people who change their minds may be using social media with the *intent* to hear a larger diversity of opinions.

In any case, it is clear that social media presents a new market of information; distinct from older forms of information distribution in any number of ways. And with this new market, comes a new opportunity for the “salesmen” of political information: Candidates, and campaigns. At the time of this writing, former President Barack Obama has more than 87 million followers on Twitter. Whenever there is a message he wishes to articulate, or a political image that he wants to distribute, it costs exactly zero dollars to do so, and he is guaranteed to reach a significant portion of his support base. This introduces an entirely new dynamic into the ages-old art of persuasion and political discourse, and warrants a profound expansion of the scientific literature addressing the efficacy of such mediums, specifically as it pertains to politics.

Though comprising only a narrow frame of any society’s political communication, platforms like Twitter and Facebook are more frequently the epicenter of cultural conversation than they ever have been before, and the influence that this change may have on the quality or quantity of political rhetoric must be evaluated. Specifically, this analysis will examine the interface features of microblogging in addition to the inherent traits of the microblogging audience, in order to assess how best to frame a particular message. In sum, this paper seeks to provide evidence to address three distinct questions: (1) What emotional styles of argument in

social media propel the greatest change in opinion? (2) Are these styles different than they may be through other forms of political communication? And, (3) does this difference (or lack thereof) do a service or a disservice to the political discourse?

### **News Dissemination; the Old School vs. the New School**

If we are to understand the potential political impact of SNS's in the context of the old media model, we must first recognize the distinctions between the two. Gainous and Wagner (2014) outline a series of important differences:

(1) Content Origins: Unlike newspapers, radio shows and television programming, social media offers multidirectional information flow. Facebook allows not only for the distribution of news stories by journalists and public figures, but also the reactions and counterreactions of everyone to whom it's distributed. The internet is not just consumed by users; it's *produced* (at least in part) by its users. In this way, the actual origins of any thought, perspective, or even statistic may become unclear. What is more, when the public at large is dependent on one specific source of information (one particular daily news broadcast, the Sunday paper, etc.), those organization or individuals who own the supply of news have ultimate control over how that message is framed, and by extension, how it is consumed. When a candidate gives a two-hour-long speech, it is up to the news directors, journalists, and the companies that pay them to sound bite-ify and contextualize whatever was said. However, in today's world of instant communication the raw footage might be readily available to the public at large, for their own selective consumption...

(2) Self-Selected: This brings us to the second important distinction. New media allows us to search for our own "facts." Bakshy, Messing and Adamic (2015) found that Facebook

users—through the various mechanisms at their disposal—frequently prune their own social media experience (whether consciously or unconsciously), thus homogenizing the perspectives to which they are exposed. As a result, self-identified conservatives and liberals are less likely to maintain cross-partisan “friendships” (referring to the feature of Facebook in which two individuals may view each other’s content, and interact with one another online) than they are with their likeminded peers. While this particular study was limited to Facebook, one can see how the same principle may apply to new media forms as a whole. As we have moved from an information paradigm of streamlined, limited content to one of wider variety and interconnectivity, the consumer has more options from which to choose. If people tend to select news sources that comport with their own personal philosophy or values, then it would not be unreasonable to imagine a self-constructed world of ideologically consistent information. As a point of reference, about 40% of social media users have changed their settings to block or unfriend someone because of a political disagreement (Pew, 2016).

(3) Scope and Immediacy: With increased portability of electronics, consolidation of memory storage, and accessibility to the internet, the flow of information from the news media to the consumer is constant in today’s world. While older newspapers had limited space (a newspaper can only be so many pages), and TV news is limited by the time of the broadcast, news dissemination via Twitter, Facebook, or electronic news outlets are subject to no such restrictions. Not only can news stories or SNS posts be made available at any time of the day (as opposed to just on Sunday mornings, or from 6:00pm-7:00pm minus commercials), they can be continuously edited, updated, and discussed in real time. Many news organizations such as the New York Times and CNN have applications that will provide the consumer with news alerts on specific topics at any time of the day, maintaining this omnipresent connection. What’s more,

while old guard news outlets are often restricted by location, social media is not. Oregonians and Floridians are just as closely connected as are two members of the same household through social media. This allows for ideas to proliferate and spread at a rate that would have been unfathomable to the local newspapers that dominated the 20<sup>th</sup> century.

(4) Filtration: Due to the interactive nature of social media, the information filtration system can either be viewed as more, or less comprehensive, depending on your perspective. In one sense, a candidate or elected official may be more direct with his or her constituents via social media, effectively cutting out the middle man in the informational transaction. However, it could be argued that the addition of millions of new voices to a conversation previously dominated by a select few journalists offers a far more comprehensive filter for news of any kind (political or otherwise). It can generally be said that social media offers more direct communication for candidates, *and* a more diverse range of “spins” on whatever message is being communicated. Donald Trump famously took advantage of this feature of social media to bypass traditional forms of media. To use his words, “[Twitter] is a modern-day form of communication...It allows me to give a message without necessarily having to go through people, where I’m giving them the message, and they’re [reporting] it differently than what I mean” (Trump, 2017)<sup>1</sup>.

All of these differences point towards a new landscape of information consumption. And for the 60% of Americans who check Facebook daily (Greenwood, Perrin & Duggan, 2016), no doubt many of these elements have become associated with social media use itself. It is not inconceivable to expect that individuals who regularly use SNS’s have established internal

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<sup>1</sup> Please note: This sentence was altered, not to change its meaning, but because the original quotation was given in interview format; words were only modified or added to facilitate coherency of the ideas being expressed.

information processing mechanisms, tailored to fit a unique atmosphere. Fischer and Beuber (2010) have proposed a variety of behavioral and cognitive changes associated with Twitter use, including altered social interactions, and modified cognitive processing loops. And, while this study was qualitative and focused primarily on entrepreneurs, it would not be surprising to find that such cognitive modifiers extend to the public at large.

### **Current Use of Social Media in Politics**

Rainie et al.'s (2012) comprehensive overview of social media and political engagement through Pew Research Center found that of the roughly 60% of American adults who actively use social media, about two thirds have used their account for some type of politically motivated activity. About a quarter of Americans follow a political candidate on social media, and about a third have posted their own unique political or social issues-related content. In short, the public at large is already using SNS's for the purpose of political discourse, even in the absence of active campaigning. However, it should also be noted that many social media users have become disillusioned with the integration of politics into social media. A more recent analysis shows that 37% of social media users are "worn out" by the proportion of political content on their SNS news feeds, and that political discussions over social media platforms are angrier, less informative, less policy focused, less respectful, and less likely to resolve political differences than more traditional mechanisms of political dialogue (Duggan & Smith, 2016).

Regarding candidates for public office and elected officials, social media is used for a variety of purposes, ranging from campaign announcements to informational livestreams to personal messages from candidates to constituents. Gainous and Wagner (2014), in looking through archived and compiled Twitter data, found that the plurality of tweets from 2010

congressional candidates were campaign announcements, with negative and attack tweets, tweets highlighting the personal characteristics of the candidate, and policy tweets all making up a relatively equal proportion of the remaining Twitter usage. Challengers were found to tweet more than incumbents, and Republicans were more likely to tweet than Democrats (though, it should be noted, in 2010 many challengers *were* Republicans). What's more, Republicans "went negative" on Twitter with a disproportional frequency to Democrats. Further analysis of the 2016 presidential election reveals that though the candidates all tweeted with similar frequency, Donald Trump received, on average, four times more retweets (or "shares") per post. Other distinctions between the two major party candidates can be seen in the content that was posted itself. For example, Secretary Clinton more frequently provided links to her website, and included videos in her posts, while Donald Trump provided links to news media, and was more likely to retweet or interact with the public (Pew Research Center, 2016). It is presumed that, given the variety of different candidates now using social media, each candidate will use resources like Twitter and Facebook in unique ways. However, the effectiveness of these techniques has yet to be examined in greater detail. After all, there is almost certainly a disconnect between a tweet (or persuasive message of any kind)'s perceived effectiveness, and its actual impact. While Donald Trump won the 2016 presidential election, he did so with record-low approval ratings, and (more specifically) with an estimated 28% of Americans agreeing with his use of Twitter (Suffolk, 2017); the point being that the ultimate predictor of whether or not a candidate is elected is the intent of the people to vote, and not necessarily personal likeability on Twitter.

So, was Donald Trump's antagonistic social media campaign strategy effective? Or did he simply win *in spite* of the bad press he received from his Twitter activity? In order to address

this question, we must analyze what might make a social media post effective. To do this, future research will have to address characteristics such as brevity, simplicity of language, positive or negative attitude, timing, emotional evocations, or pessimistic/optimistic perspective. The present study focuses primarily on the last two factors.

### **Persuasion; a Tridimensional Approach**

Aristotle famously divided persuasive rhetoric into three categories: pathos, logos, and ethos (empathetic, logical, and credibility appeals respectively). (Aristotle, n.d.) Of course, his works predated modern social psychology by several centuries, but an eerie glow of his rhetorical outline still exists in the literature today. At the heart of Aristotle's argument was that there were three "technical means of persuasion," which included an appeal the credibility of the speaker (source characteristics), the validity of the argument (message characteristics), or the emotional state of the audience (audience characteristics). This tri-fold approach to understanding social influence remains generally intact today, though certainly the details have changed.

The Yale Model of persuasion, developed in the middle of the 20<sup>th</sup> century, differentiates between the parenthetical mechanisms mentioned above; source characteristics, message characteristics, and audience characteristics (Hovland, Janis & Kelly, 1953). Normally, most variables that influence the persuasiveness of communication can be categorized as a function of "who" is doing the speaking, "what" the message being communicated is, and "to whom" the message is directed; referred to as the three W's of persuasion<sup>2</sup>. Put into the context of Twitter, we notice immediately that the "to whom" is unique compared to other forms of communication.

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<sup>2</sup> Incidentally, Aristotle also differentiated between the speaker, subject, and person addressed.

The Twitter atmosphere is comprised of a demographically distinct subset of the American populace, who are self-selected into a exclusive environment, and who may be more or less convinced than the voters as a whole by a particular type of argument or candidate. Additionally, the “what” is frequently limited by character counts, and the simplicity of the language that must be used to convey a particular sentiment. Furthermore, information is not disseminated through the sieve of major news-media outlets, but is freely accessed and modified by the users, so it logically follows that the “who” may also be unique.

### **Dual Processes**

Of course, the Yale structure does not address the specific characteristics of a message, sender, or recipient that may lead to more effective communication of a perspective or idea. Both Petty and Cacioppo’s (1986) elaboration-likelihood model (ELM) and Chaiken’s (1980) heuristic-systematic model (HSM) attempts to divide persuasive appeals into two basic routes; the central (systematic) route, and the peripheral (heuristic) route<sup>3</sup>. Both of these theories provide evidence to suggest that our evaluation of a persuasive argument is simultaneously funneled through two interconnected systems of analysis. The individual who is being persuaded must then attend to one system, or another, and the one to be relied upon can be predicted based on the circumstances of the communication.

The systematic, or “central” route of persuasion, can be thought of as Aristotle’s ideal form of political discourse; it relies solely on the quality of the argument. A message recipient may ask themselves, “Does outcome B logically follow premise A?” or, “Do the results of this study, or the contents of this message conform to the personal experiences I’ve had, or the previous research I have encountered?”

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<sup>3</sup> Note that while these two principles were researched and assessed independently, this paper will use the terms interchangeably, with “peripheral” and “heuristic,” as well as “central” and “systematic” being synonymous.

The heuristic, or peripheral route represents what we would generally call stereotype-based, or schematic decision-making. It involves reliance on generally surface-level features of a communicative message such as the attractiveness of the speaker, or the length of the argument being made. These are known as heuristics. Generally, we think of arguments that are long as being well-researched, much in the same way that we're more likely to believe people when they speak quickly, and without stuttering (Petty & Cacioppo, 1986).

It should be noted here that these two pathways can intersect, and one is not always superior to the other. While systematic processing may provide a more solid foundation in reality, it is also taxing, and resource-intensive compared to simple, categorical thinking. However, for the purposes of this discussion, we will assume that a message is beneficial to public debate if it promotes reliance on central cues, as heuristics are frequently inaccurate in public policy. For example, the evidence indicates that there is little-to-no difference in illicit drug use between blacks and whites, and that whites are, in fact, far more likely to sell drugs. However, blacks are disproportionately likely to be arrested for drug sale or possession (National Research Council of the National Academies, 2014). Whether this is due to systemic factors, or the personal biases of those in law enforcement, the evidence suggests that someone, somewhere in the process from arrest to incarceration, is likely operating under a false heuristic about the relationship between drug use and race. This is not to say that all heuristics are incorrect, or that they are unethical or irrational; simply that utilization of this pathway is a more vulnerable part of the process of persuasion.

The overarching point here is, of course, that it isn't always possible to reconcile each and every influence on the persuasive communications procedure, as there are many intersecting factors, and it may be difficult to tell which cues any one person is relying upon in their response

to a persuasive message or stimulus. However, there are some determinates that have been found to influence which of the two processes we are more likely to engage in. For instance, in order to engage someone through the central route of persuasion, that individual must have both the motivation to expend the additional effort required to think critically, and they must have the capacity to do so (Petty & Cacioppo, 1986).

This first of these two components—motivation—is especially relevant to the world of politics; for example Chaiken (1980) demonstrated that the personal relevance of a message can have a powerful impact on which mode of analysis is used in decoding a persuasive message. Specifically, researchers manipulated the date of a proposed change to the academic year (next year vs. five years from now for high relevance vs. low relevance), as well as the strength of the messages, and the perceived likability of the source. It was observed that those in the high personal salience condition were more likely to be persuaded by the quality of the argument, while those in the low salience condition were more likely to rely on the likeability of the message sender. These findings were further supported by a similar study done by Petty, Cacioppo, and Goldman (1981), which utilized a comparable natural variation in personal relevance (grade in school) in order to examine the impact that motivation has on which specific pathway the audience may attend to in their analysis of a persuasive message. Again, the researchers crafted strong and weak arguments and manipulated the credentials of the speaker

(the source), and again it was found that when the issue was personally relevant, more central cues such as argument strength were prioritized over the personal qualities of the source. This research is important because it demonstrates how a political candidate may tailor his/her message to the audience in order to improve its effectiveness. For example, if a candidate were speaking at a coal factory about energy independence and clean energy, they would want to rely on logic, reason, and real-world data. Whereas if the same speech were given to computer

**Figure 1:** An example of an appeal to peripheral cues, in response to a general lack of *ability* on the part of the public.



executives in Silicon Valley, it may be more effective if the speaker relied on peripheral cues like sheer number of arguments, credibility (passing him or herself off as an energy expert), or by modifying their general demeanor to appear more genial.

Other factors can also alter or influence the degree to which we utilize our dual-system of information-processing. The capacity (or “ability”) to understand and weigh the costs and

benefits of an argument must be present in order to engage in systematic processing (Petty & Cacioppo, 1986). For instance, a real-estate developer in Florida may have the motivation to understand the potential impact of sea-level rise on the housing market, but she may not have the capacity or knowledgebase to understand convection cells in the atmosphere, Earth’s energy budget, or the refractory index of various gases in the troposphere. For this reason, making a

systematic argument detailing the reality of climate change that rests on comprehension of those premises would probably fall on deaf ears. For this reason, the environmental lobby frequently must rely on appeals to more peripheral arguments, such as preservation of natural beauty, and the all-too-famous polar bear sitting on a melting patch of ice (see **Figure 1**, page 12).

### **Unifying the Components of Persuasion**

Motivation and ability are examples of audience characteristics; traits shared by the audience of a persuasive message that influences their receptivity to one particular type of argument. While the central and peripheral routes of persuasion do not necessarily have to be activated by audience characteristics, there are several other features of an audience that may preferentially activate one system over the other. Sears (1986) describes at length how college-age teens and young adults are more susceptible to social influence for a wide variety of reasons, including a still-forming sense of self and stronger compliance tendencies. This indicates that age (or at least life-stage/maturity) could also play a role in how persuadable an audience may be. It goes without saying that contemporary politicians have (whether intentionally or not) sought to exploit that phenomenon; post-election analytics have demonstrated that the youth vote was critical to President Obama's reelection campaign, with as many as 80 electoral votes dependent on the 18-29 age demographic (CIRCLE, 2012). Conveniently, this demographic is also disproportionately likely to use social media, which adds to the many layers of potential variables influencing the efficacy of persuasion through SNS's.

The source of a persuasive message can also be an entry point for those wishing to modify the opinions of the audience. The most famous example of a source characteristic influencing the decision-making of a layperson is Milgram's (1963) study on obedience. While there was no true control in Milgram's experimental design, there can be little doubt that

Milgram's design was intended to create an atmosphere of heightened credibility (on the part of the experimenter). Milgram found that under specific conditions (with the experimenter wearing a lab coat, so as to imply expertise) he could induce more than half of laypersons to administer what they believed to be a lethal dose of electricity to a complete stranger. A candidate's optics, analogously, have a critical impact on how he or she will be received by the public. However, artificial manipulation of one's perceived credibility can have more dubious long-term impacts. Havland and Weiss (1951) demonstrated that while in the short term, people tend to disregard the information that they consume from noncredible sources, over time the information may permeate and fester so as to create mild long-term impacts. This "sleeper effect" was later described by Pratkanis et al. (1988), to be the result of differential decay factors between the information, and the faulty source. Put another way, because the information learned may have been shocking, interesting, relatable, or simply notably untrue, it may stick in the audience's mind long enough for the information to be disassociated from the source itself. So, while we may remember an article we saw on Facebook about how vaccinations cause autism, we will likely forget (or care less about) the fact that it was shared with us by a friend who we know to be a conspiracy theorist, after a significant amount of time has passed. And thus, as time goes on, a weaker argument gains strength.

This fallibility of judgments made based on credibility may be excessively present on social media, especially with the rise of fake news outlets. Fake news is comprised of stories about events or character traits of public figures that are objectively and verifiably false; stories written with the intent of deception, and with no journalistic principle or investigative research. It has been estimated that, on average, Americans remembered roughly four times more of these stories that portrayed Donald Trump in a more positive light than did the same for Hillary

Clinton (Allcott & Gentzkow, 2017) during the 2016 election. The likelihood that this type of misinformation could have swayed the vote is small, though certainly the effect that such stories may have had on the quality of debate in the public discourse shouldn't be minimized, especially with the knowledge that some of these advertisements may be cognitively dismissed, but temporally impactful. What's more, social media provides an ideal platform for noncredible arguments to be distributed, given that "trending" topics, hashtags, and news stories do not discriminate by factual accuracy, but (by definition) are popularized based on the rate of promulgation.

Political candidates seem to be well-aware of the impact that adjustment of their own characteristics can have on their likability, and their ability to persuade voters. Grimmer (2013), building off of the work done by Richard Fenno in the 1970's and 80's, found that there are quantifiable differences between candidates who are ideologically aligned and misaligned with their constituents in terms of how these candidates choose to frame their persuasive appeals (avoiding issues and talking appropriations, or vice versa). This of course, reflecting Fenno's (1979) findings that politicians behave and portray themselves differently when in the capital than they do when at home, as they are attempting to persuade different audiences. In this way, good politicians use their source characteristics as a reactionary persuasive mechanism to changing audience characteristics.

While the source and audience of social media certainly provide an interesting series of parameters within which persuasion may take place, the primary focus of this study lies in the characteristics of the message itself. Specifically, the structure and emotional intonation that the message seeks to evoke will be manipulated and examined, though first the relationship between emotion and persuasion must be better understood.

## **The Specific Role of Emotion**

Perhaps the most well-known and commonly recognized form of emotional persuasion in politics is called “fear-mongering,” which is defined as the “action of deliberately arousing public fear or alarm about a particular issue.” However, the inherent assumption contained therein is that this type of persuasion causes people to make decisions that they may not ordinarily make; worse decisions, or spontaneous, illogical decisions. American politician and climate activist Al Gore even went so far as to call fear the “most powerful enemy of reason” (Gore, 2007). The research is far more nuanced on this particular question, however. It is important to understand the distinction between fear and other emotions before either can be analyzed. In comparison with other negative emotions (or unpleasant emotions), fear involves a greater state of arousal. Furthermore, fear is differentiated from other negative-valence emotions such as anger and disgust based on the object or person towards which the emotion is directed; anger is more likely to occur when discomfort is felt about the past, and its source known. Fear is more closely associated with the unknown and potential unpleasantness in the future. Logically, it makes sense then that fear would involve a greater state of arousal than anger, as it is more adaptive to prepare for eminent threats than it is to respond to previous ones.

So, does this heightened state of arousal and negative valence predict someone will use a heuristic or systematic approach when under the spell of anxiety? We know that those who are more motivated and more personally interested in a topic are more likely to utilize central cues in their analyses than are those who are apathetic or unaffected by the outcome. With this said, our intuition tells us that rash decisions (those made when emotional arousal is high) are not good ones. As it turns out, the risk-avoidant nature of fear (and the risk-seeking nature of anger) may be the root of a discrepancy in how we process negative-valence arguments, insofar as anger may

lead to heuristic analysis, while fear leads to more systematic analysis (Lerner & Keltner 2001). However, there is an important caveat: Anxiety can also serve as a distraction, as anyone who has ever taken a high-stakes examination can attest. For example, in the aftermath of the terrorist attack on September 11<sup>th</sup>, 2001, Huddy, et al. (2005) found via telephone-survey that those who were more anxious were also more likely to engage in information-seeking behaviors such as watching TV, reading newspapers, and talking to friends and family about their concerns. These are all behaviors that we would associate with systematic processing. However, their actual recall of the information they were supposedly acquiring was worse than that of their less-anxious peers. This seems to indicate that while fear may drive us to seek a more logical solution to a perceived threat, our capacity to find that solution may simultaneously be limited by the same stimulus. In this case, the authors also found that fear may have been detrimental, as more anxious individuals were also more likely to support the war in Iraq. Today, the 75% majority who felt that invading Iraq was necessary at the time, has since become a slim minority (Gallup, 2017). This is the epitome of what we might call a “fear-induced, rash decision.”

In spite of the nuanced response that the public may have to political fear, there are certainly ways of tailoring fear messaging in order to make it more effective. Leventhal, Watts, and Pagano (1967) first demonstrated one of these methods in a study seeking to find more effective strategies of reducing smoking rates. Three unique conditions were used, one in which a fear stimulus (a graphic video of a diseased lung) was presented to smokers, one in which an instructional pamphlet for quitting was presented, and one in which both were provided. Unsurprisingly, the fear + pamphlet condition yielded the best results. This has led social psychologists to conclude that fear can be made more effective in its impact on behavior by pairing it with a solution, or a resolution for the crisis causing the fear. That finding has been

instinctually used by advertisers for generations, as products are consistently sold with the tagline, “do you ever worry about what would happen if [insert potential threat here]? Well no need to worry, we have the solution! And it’s only \$19.95 plus shipping and handling.” The NRA has been especially adept at this tactic, frequently using the slogan, “Choose to refuse to be a victim.” The phrase outlines a threat (you could be a victim) and then provides a solution to the problem (purchase or own a gun), all in seven simple—albeit discordantly versified—words. At the writing of this paper, the first available link on the NRA’s home website says “Our rights are under attack like never before. Join today” (NRA). Again, a threat is outlined, and a solution is presented to resolve the discomfort that accompanies the anxiety.

Though this methodology may be used to elicit desired behaviors, the connection between fear and direct attitude change is different. Brader (2005) found that while fear may lead people to attend to contemporary or alternative information, more positive emotions prompt the opposite response; dependence on previously held beliefs. That finding would seem to indicate that fear would be the ideal emotion to pair with a persuasive message, if the message contradicts something that the audience holds to be true. Fear could “shock” or “startle” someone out of their prior convictions, by inciting attendance to novel information, while hope and enthusiasm simply activate pre-existing party loyalty. The same study, which used a more realistic implementation of political advertisement (in the middle of another activity, which was ostensibly the focus for participants) also provided some evidence to suggest that while fear may facilitate persuasion, it also may reduce the accurate recall of information.

## **Present Study**

In conjunction with the questions of interest, the present experiment attempts to assess three unique hypotheses:

- 1) Those who experience fear will be more likely to be persuaded by political messaging than those who experience hope.
  - a. This effect will be exaggerated when social media cues are primed.
- 2) Those who experience fear will be more likely to vote for a candidate who is not in their own party than those who experience hope.

Hypothesis (1) emanates from the NRA-style use of abbreviated fear and resolution. This type of messaging has not only been effective for campaigning, but will suit a microblogging environment well, as the conditions are already biased towards brevity. Hypothesis (2) is a result of the differential processing of fear and hope, which can produce reduced loyalty, and increased loyalty to previously held ideas respectively.

## **Methods**

In order to test these hypotheses, a two (social media cues or no social media cues) x three (fear condition, neutral condition, or hope condition) design was constructed. An initial pilot study was carried out to address the issue of manipulation validity, though this study failed due to a formatting error in the survey that invalidated the results. As a replacement (to ensure that the fear condition was eliciting a fear response, and the hope condition was eliciting a hope response), after reading the message assigned, participants were asked which emotion they felt the message best conveyed. A chi-squared analysis of these results indicated that different emotions were indeed experienced in different conditions,  $\chi^2(8) = 232.98, p < .001$ . The surveys in question were conducted through Mechanical Turk (MTurk), and took place over the course of

a week between April 10<sup>th</sup> and April 17<sup>th</sup>, 2017. Research was funded by the Honor's College at Oregon State University, and each participant was paid \$0.30 for their participation.

## **Participants**

In total, 597 individuals were recruited through Amazon's MTurk survey service (described below). There were two basic attention checks spread throughout the survey (one of which stated simply to select the third option), and after eliminating those who did not pass both attention checks, the sample in question was reduced to 463 (240 female).

MTurk is an affiliate of Amazon, which allows participants to fill out surveys in exchange for Amazon credits. As such, it is the very definition of a convenience sample, given that every single participant opts in to the pool of potential test-takers. Any results, therefore, should be treated cautiously in terms of its generalizability. However, Mullinix, Leeper, Druckman & Freese, (2015) found that such convenience samples *can* provide generalizable information, though certainly that information is more valuable when compared across convenience samples, and not simply within them. Berinsky, Huber & Lenz (2012) found that while there are certainly distinctions between MTurk samples and other, more population-based sampling methods (age to name just one), MTurk is reasonably representative in comparison to other commonly used methods of social science research. Additionally, MTurk leans young, left, and educated, which is not dissimilar to the biases within social media use. This makes MTurk an even more appealing option insofar as sampling methods are concerned.

With respect to demographic similarities, **Table 1** shows how the sample demographics stack up in comparison with nationwide statistics, based on data requested as a part of the present study. Generally, the MTurk sample is better educated, younger, and more liberal than the population as a whole.

All participants were at least age 18, in order to ensure that only those who were of legal age to vote would participate in the study. The behavioral and emotional responses of those who cannot vote are, of course, of less interest under these circumstances.

**Table 1:** *Demographic Comparison between Sample Data and National Data*

	Sample	Census/Gallup
Gender		
Male	48.2%	49.1%
Female	51.8%	50.8%
Race		
White	78.4%	77.1%
Black	7.8%	13.3%
Asian	5.0%	5.6%
Latino	4.5%	17.6%
Party Identification		
Democrat	38.2%	28%
Republican	28.9%	29%
Independent	29.8%	40%
High School Graduates	99.1%	86.7%
College Graduate	57.8%	29.8%
Income (median)	\$40-60,000	\$53,889
Voting Age (median)	38 years	~45 years

## Materials and Procedure

Once participants had identified and selected the survey on MTurk, they read a brief description of study, and the risks involved, and then were asked to certify that they were of legal age of consent to participate in a research study. The survey consisted of 17 pre-manipulation demographic questions, ranging from gender to political affiliation, to parents' education. The purpose of the broad demographic section was to identify any possible moderators for whatever trends would or would not be found in the dependent variables. Other variables collected

include: Frequency of social media use, party affiliation of parents, past electoral decisions, subjective and income-based measures of socioeconomic status, and age.

*Independent Variables:* The two primary independent variables were, of course, the Twitter/control variable, and the emotional manipulation variable. Every participant was exposed to just one of the six possible combinations. The two emotional conditions were manipulated from the base message provided in the neutral condition (see **Appendix A**). Attempts were made to keep every condition at a similar length, and level of argumentative complexity congruent across condition. The fear condition reads, “Unless we act now, the middle class will be demolished and the poor will be at the complete mercy of the rich,” and the hope condition reads, “With perseverance and dedication, we can end poverty, and provide everyone with the opportunity to be wealthy.” In each case, participants were told that the quotation was from a candidate for the House of Representatives who was running in their district.

To distinguish between Twitter and non-Twitter conditions, half of these messages appeared to be a popular tweet with 1.1 million likes and 258,000 retweets. These numbers remained constant. The final phrase of the quotation remained the same across emotional conditions, though between Twitter and non-Twitter, the phrase changed from “Help us close the income gap!” to “Help us #CloseTheIncomeGap!” This hashtag was intended to also elicit whatever unconscious associations the participant may have had with social media. The imagery was kept constant across conditions, as tweets and non-tweets alike depicted a white, middle-aged male standing in front of an American flag. In the pilot version of these images, the candidate was smiling, but upon further consideration the image was switched for one with a more neutral expression, so as to prevent the sending of mixed emotional messages (it’s hard to call a message fear-mongering when the picture is of a smiling businessman).

At the end of the survey, after the primary three dependent variables had been assessed, participants were asked to identify the party of the candidate to whom they were exposed. This was done to establish two demographics; one who identified as ideologically similar, and one who identified as ideologically dissimilar to the candidate. Once all of this information was gathered, additional questions were asked regarding the participants' attitudes towards the tweets used by the presidential candidates of the 2016 presidential election.

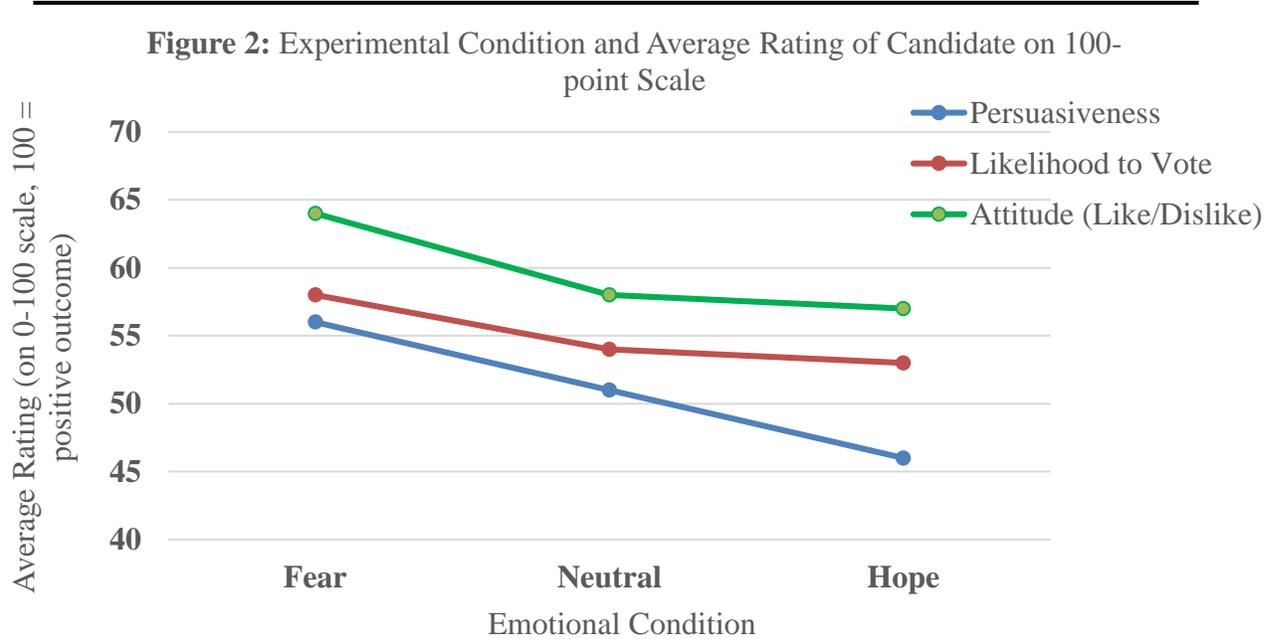
*Dependent Variables:* Immediately after reading through the condition, participants were asked to select the correct topic of the quote on the previous page (attention check one). They were then asked to rate, on a sliding scale, how much they liked the candidate (0 = strongly dislike, 100 = strongly like), how likely they would be to vote for the candidate (0 = extremely unlikely, 100 = extremely likely), and how persuasive they found the argument (0 = unpersuasive, and 100 = persuasive). Another attention check followed in conjunction with two manipulation checks; one asking about the overall "tone" of the message (from negative to positive), and one asking what the predominant emotion was that the message conveyed.

Once all data had been gathered, participants were informed that the candidate that they had learned about was fictional, and they were generally debriefed with respect to the intent and the objectives of the study. They were then asked if they would like their responses withdrawn after receiving that information. Only participants who passed both attention checks, provided their consent, and indicated that they wanted to remain in the study after learning about its true motivations were included in the data that were analyzed.

## **Results**

In a vacuum (setting aside the Twitter manipulation), the fear condition produced better

results than either the neutral or the hope conditions. As can be seen in **Figure 2**, there was significant evidence to indicate a difference between the three conditions for persuasiveness,  $F(2, 460) = 4.772, p < .01$ , and attitude,  $F(2, 460) = 5.619, p < .01$ . However, the same one-way



ANOVA did not reach significance for voter likelihood,  $F(2, 460) = 2.232, p > .10$ . When compared directly to the hope condition (ignoring the neutral in an independent samples t-test), those who were put into the fear condition had statistically significantly higher ratings on persuasiveness,  $t(311) = 3.50, p < .001$ , higher ratings on attitude,  $t(311) = 2.12, p < .05$ , and a higher average likelihood to vote,  $t(311) = 2.99, p < .01$ . This indicates that, without factoring in the effects of Twitter, fear seems to be the most effective tactic in procuring votes, and positive sentiment directed towards a candidate.

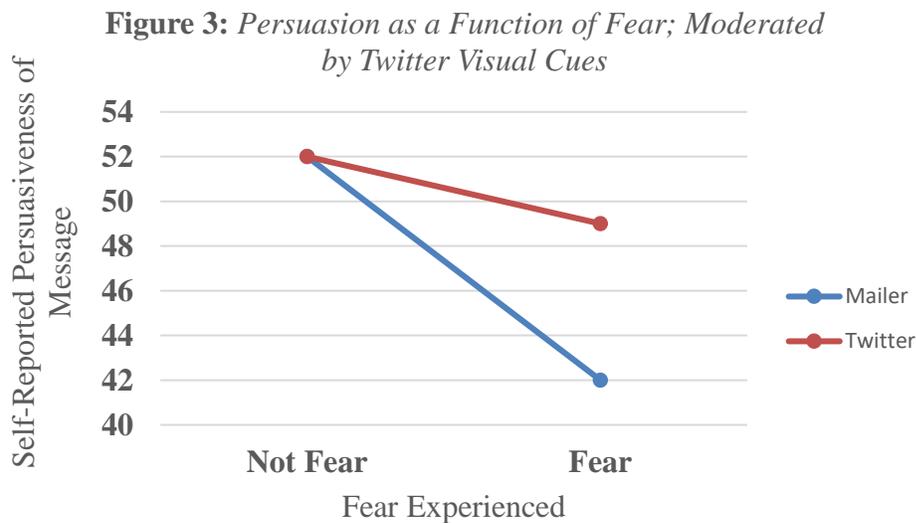
When the same analyses are run with respect to the Twitter manipulation, the data are less definitive. On average, the Twitter message reached a persuasiveness scaler rating of 51.70 (SD = 26.85), compared to 50.12 (SD = 27.11) for the mailer version. This difference was found to be insignificant at the  $\alpha = .05$  level,  $t(461) = -.630, p > .05$ . Percent likelihood to vote for the candidate showed the same trend, with an average score of 55.19 (SD = 24.73) for the tweet, and

55.08 (SD = 26.43) for the non-tweet, which was also statistically insignificant,  $t(461) = .048$ ,  $p > .05$ . The audience for the Twitter message also demonstrated no statistically different liking or disliking of the candidate, with a mean difference of .622 points on a 100-point scale (SD<sub>pooled</sub> = 22.14) also being minimal,  $t(461) = .302$ ,  $p > .05$ . All of this is to say that absent of interactions with emotional conditions, arguments made in the form of a tweet are not inherently more or less persuasive than those made through traditional forms of political communication.

**Table 2:** Two-Way ANOVA analysis comparing Emotion Condition, Twitter Condition, and three outcome variables (Persuasiveness, Attitude & Vote Likelihood).

	Sum of Squares	df	Mean Square	F	Significance (p)
<b>Persuasion</b>					
Between Groups	8674.98	5	1734.96	2.423	.035
Emotion	8038.34	2	4016.17	5.613	.004
Twitter	368.79	1	368.79	.515	.473
Emotion*Twitter	314.45	2	157.22	.220	.803
Error	327205.0	457	715.99		
Total	1535659.0	463			
<b>Attitude</b>					
Between Groups	4857.04	5	971.41	2.007	.076
Emotion	4545.418	2	2272.71	4.695	.010
Twitter	32.705	1	32.71	.068	.795
Emotion*Twitter	223.938	2	111.97	.231	.794
Error	221235.4	457	484.10		
Total	1876493.0	463			
<b>Vote Likelihood</b>					
Between Groups	3550.87	5	710.17	1.087	.367
Emotion	2848.75	2	1424.38	2.180	.114
Twitter	3.647	1	3.65	.006	.940
Emotion*Twitter	643.231	2	321.62	.492	.612
Error	298568.8	457	653.32		
Total	1709523.0	463			

This information is corroborated in a two-way ANOVA (**Table 2**) examining the various interactions between conditions, and their relationship to the three predominant outcome variables. In each case, the interaction effect is statistically insignificant. However, within the analysis done for persuasiveness, the emotional manipulation was shown to be of strong significance,  $F(2, 457) = 5.613, p < .01$ , and outcomes were differentiated by emotion insofar as liking or attitude is concerned as well, though this difference between groups was of moderate significance,  $F(2, 457) = 4.695, p < .01$ . It is important to note here that since ANOVA's do not function on the basis of directionality, and are simply implemented to show where a difference may be present, the p-values for these statistics are artificially low. This does, however, provide further evidence that presence of visual Twitter cues does not interact with emotion to facilitate persuasion, liking, or voting behavior; or, at the very least it did not within the confines of this experiment.



However, as was mentioned before, exposure to a fear-inducing stimulus does not necessarily mean that fear will be experienced. The

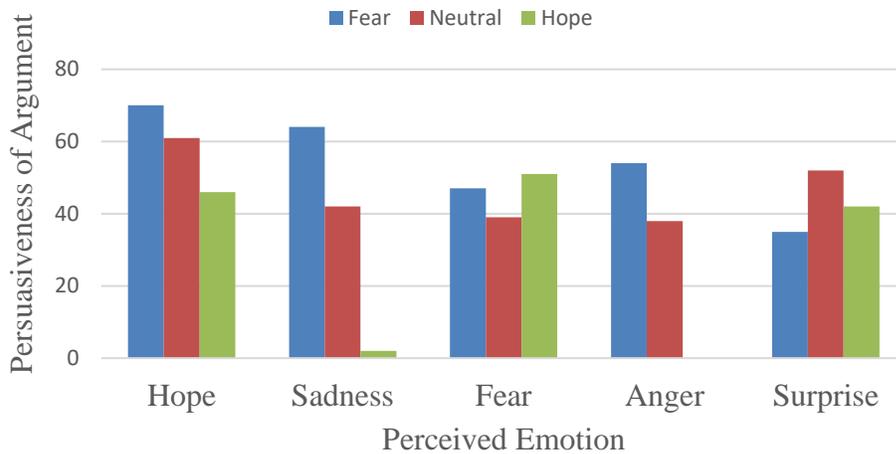
manipulation check also provides us with an opportunity to examine persuasion in these terms; and as it turns out, those who self-reported that they thought the message conveyed fear experienced *less* self-reported attitude shift (persuasion) than those who did not experience fear.

**Figure 3** provides a graphical representation of this relationship, though it should be noted that while the overall downward trend (main effect of fear) approaches significance,  $F(1, 459) = 3.855, p = .05$ , there is no statistically significant interaction effect between Twitter and fear,  $F(1, 459) = .943, p > .05$ , nor is there any main effect of Twitter on persuasiveness.  $F(1, 459) = 1.407, p > .05$ .

In analyzing this data, the question then arose: Why does the fear condition promote persuasion and likability, if fear (which is more frequently felt in the fear condition, as per the manipulation check) itself isn't the reason. Unsurprisingly, this dynamic can be explained by the only three factors that ever seem to influence perceptions of political candidates: Partisanship, partisanship, and partisanship. As it turns out, there is a large subset (33.5%) of individuals who were given the fear condition, but labeled the emotion that they experienced (or felt the message was attempting to convey) as hopefulness. Within the group that received the fear stimulus, those participants who believed that the candidate in question belonged to their same party interpreted the tone to be more than 20% more "positive" than those who believed that the candidate belonged to a different party, and that difference was statistically significant,  $t(156) = 3.087, p < .01$ . This result make sense in the context of the data as a whole, as a statistically significant positive correlation was observed between perceived tone of message and persuasiveness of that message; indicating that those who thought the message was more positive or optimistic were more likely to report being persuaded by it. Therefore, the disconnect between the fear condition and experience of fear and their differential relationships to persuasiveness are explained by a mechanism that passes through both party affiliation and perceived tone of the message.

Post hoc analysis of self-reported emotion and persuasiveness (differentiated by condition) demonstrates that within the fear condition, experience of hopefulness led to more reported persuasiveness of argument (**Figure 5**). This is likely due to the fact that those

**Figure 5:** *Persuasiveness of Argument Based on Self-Identified Emotional Experience; Moderated by Condition*



experiencing hope in a fear condition were self-selected by partisanship, whereas those who experienced hope in the hope condition comprised 144 individuals of the

149 (96.6%) total participants in that condition (**Table 3**). That means that the hope-hope category is generally comprised of people across party, age, and SES, with approximately the same demographics as the sample as a whole. Meanwhile, there is only a small, ideologically similar group driving up the persuasiveness of the message. Incidentally, the interaction between partisanship and reported tone of the fear message approached significance,  $F(4, 148) = 2.118, p = .081$ , though there was strong evidence to indicate a positive correlation relating the degree of positivity with which a participant experienced the fear message, and the persuasiveness of that message,  $r(162) = .527, p < .01$ . Additionally, those who believed themselves to be in the same party as the candidate reported being more persuaded by the fear message than those participants who felt as though the candidate did not belong to their party,

**Table 3: Cross-Tabulation Table of Counts for Perceived Emotion and Emotion Condition**

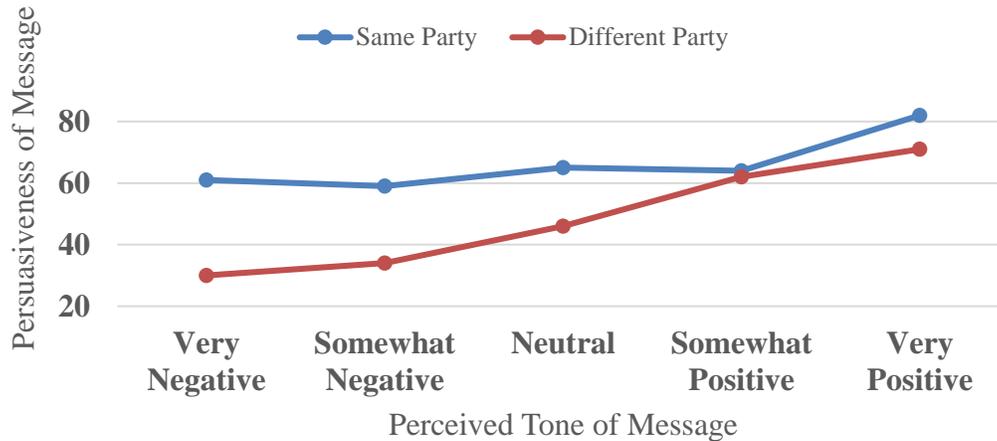
		Perceived Emotion					Total
		Hope	Sadness	Fear	Anger	Surprise	
Condition	Fear	55 33.5% 22.0%	5 3.0% 27.8%	81 49.4% 89.0%	20 12.2% 30.8%	3 1.8% 21.4%	164
	Neutral	76 50.7% 27.6%	11 7.3% 61.1%	9 6.0% 9.9%	45 30.0% 69.2%	9 6.0% 42.3%	150
	Hope	144 96.7% 52.4%	2 1.3% 11.1%	1 0.7% 1.1%	0 0% 0%	2 1.3% 14.3%	149
	Total	275	18	91	65	14	463

\*The first number in every sequence is the count, the second number is the row percent, and the third number is the column percent. So where Hope and Fear intersect in the upper-leftmost corner, 33.5% represents the percentage of those who received the fear condition, who identified hope as the predominant emotion contained therein.

$t(156) = 5.180, p < .001$ . This trend is most easily visible in **Figure 6**, which demonstrates how tone matters less to someone whose partisan identity is not under threat than it does to someone who perceives themselves to be at a fundamental ideological disagreement with the source in question. condition manipulations, gender, age, conservative/liberal ideology (gaged on a slider scale from “left” to “right”), use of social media, perceived tone of message (across conditions), and attitudes towards Donald Trump and Hillary Clinton’s use of Twitter during the 2016 campaign.

Finally, a regression analysis was run to attempt to understand how the persuasiveness of a message may best be predicted, using a variety of independent variables, including both. In sum, the wide base of independent variables accounted for 47.3% of the variation observed in persuasion,  $R^2 = .473, F(11, 427) = 34.898, p < .001$ . However, tone and emotion-condition drove much of this predictive power.

**Figure 6:** Perceived Tone of Message vs. Persuasiveness of Message; Moderated by Partisanship, within the Fear Condition



## Discussion

Many of the results summarized in the above section can be described as both supporting and not supporting the hypotheses made regarding which factors would influence persuasion and voting behavior. A lot of this disagreement stems from a differential understanding of the word “experience.” When a candidate constructs an advertisement specifically designed to arouse a fear response, everyone who reads, views, or hears that advertisement *experiences* the fear stimulus. However, not everyone is guaranteed to experience the same kind of sympathetic nervous system arousal, or the same subjective feelings as a result of that stimulus. That distinction is especially important when the gap between those who report the desired emotional outcome, and the undesired emotional outcome is larger.

Hypothesis (1) stipulated that experience of fear would facilitate persuasion, in accordance with research demonstrating a relationship between attitude shift and anxiety. Based on conditional manipulation, this hypothesis seems to have been supported. The fear condition received the highest marks on the persuasion scale, while the hope condition received the lowest,

and the factual/neutral condition in the middle. However, deeper analysis went on to show that when participants were asked which emotions they thought that the message conveyed, those who identified fear as the principal emotion at play actually reported marginally *less* persuasion than those who reported other emotions. There was, however, no significant difference between the Twitter visual cues condition and the control, therefore providing no evidence to support Hypothesis (1.a.). Hypothesis (2) similarly predicted that those who experienced fear would be more likely to vote for candidates with whom they disagreed, or who they deemed to be across the political aisle. There was little-to-no evidence to suggest that this was the case, as hope and fear sentiments produced almost identical distributions in vote percent between those who were co-partisan and those who were cross-partisan.

First, it's important to address the no-finding, and general lack of influence that the Twitter condition had over the dependent variables. This begins with the recognition of an important limitation of this study: Everyone who participated did so on their computer or smartphone. It is entirely plausible—if not likely—that subjects had a SNS open in another tab as they progressed through the survey. While every effort was made to differentiate the conditions by providing visual cues (such as a stamp in the mailer/control condition and the Twitter format in the Twitter condition), attempting to separate social media from an online survey is analogous to conducting an experiment on TV vs. radio advertising by simply turning off the TV screen and playing the audio through the monitor (as if it were a radio). However, it is equally important to recognize that nobody looking at the mailer/control condition would be prompted to think of Twitter, in just the same way that nobody with any experience in social media would look at the tweet and assume it's a post-card or campaign mailer. And in spite of the fact that social media has unique features, and most users feel that it is worse for political discourse than other forms of

political communication, this did not seem to impact the credibility that was afforded to the message. That finding (or lack thereof) has significant potential impacts on how campaigns spend their money. If indeed it is true that there is no degradation in persuasion effects as arguments are framed in a microblogging context in comparison with traditional forms of campaign material distribution, perhaps utilizing features like “sponsored posts” on Twitter and Facebook would be a better use of campaign funds than printing flyers or mailing postcards to potential voters. Future research should seek to further differentiate between mediums rhetoric, in order to assess more accurately which types of argumentation are more effective, as well as the social contexts within which they are more effective.

The emotional manipulation, unlike the Twitter condition, certainly provided different results by category, though these results are confounded by the mechanisms through which they appear to have their effect. In summary, it appears that there are at least two different demographics that interact with a fear-message: Those who agree with the message (or the candidate’s party alignment), and those who do not. In the case of this experiment, participants who agreed were more likely to spin the fear message into a more hopeful one, or interpret the tone as positive. This positive tone resulted in liking, raised agreeability, and a higher likelihood to vote for the candidate. Simultaneously, those who disagree with the message or candidate are more likely to perceive it as it was intended; as fear mongering. Accordingly, this results in marginally less persuasion than those who do cannot or do not recognize the fear within the message. Cognitive dissonance no doubt plays a role in this process as well, as those who are ideologically aligned with a candidate (at least in party name) may think; “This candidate is a Democrat, and I am a Democrat. I would never use fear mongering to manipulate people, and I

would not support someone who did, therefore this candidate must not be using fear to influence people.”

It is clear based on these results that the emotional experience of anxiety is not facilitating emotion in this instance, and there are several explanations as to why this could be. First, the hypothetical candidate was fictional, and therefore unknown to participants as they read the fear message. Context is key in emotion, and without a real-world application, this fear is not as deeply rooted (and therefore motivating) as it may have been for a candidate with whom subjects were familiar. The threats or shouts of a stranger on the sidewalk (who you know to be fictional) mean far less, and have far less real impact than those of a loved one or friend. Second, the question used to divine the emotions of the audience was phrased, not in terms of each subject personally, but in terms of the message: It asked for the “predominant emotion that [the] message conveys.” The problem here is, of course, that a message can convey something to someone who is unreceptive to it. I may be able to identify that political rhetoric is fear mongering, but even that does not necessarily guarantee that I will feel fear when I read it. In this way, the true internal experience of anxiety is even further separated from the conditional manipulation. Third, there is no specific solution or coping strategy provided in the fear condition other than an implication made in the first phrase; “unless we act now...” However, the message does not specify what must be acted upon. So even if attitudinal change was unrealistic, behavioral change may also have been unrealistic to expect under these circumstances.

Systematic processing of fear messages relies on a true fear-response. While the issue of income inequality may mean more to some than it does to others, no one tweet from an unknown source will cause someone to experience a sudden flood of emotion (fear *or* hope) about such an issue. What’s more, income inequality is not the kind of polarizing, hard-hitting topic that we

would expect to be debated over Twitter, as 140 characters is not much when it comes to articulating the nuanced and complex nature of wealth and income distributions. However, it is also possible that those who experienced fear in the present study attended less to the absolutist and flashy rhetoric, and more to the general lack of facts, statistics, or empirical evidence (central cues), resulting in subjects who experienced fear being less persuaded. Future studies should pair these conditions with strong or weak arguments, not unlike some of those described earlier in this assessment. Additionally, further research should address the question of how powerfully emotions are experienced on Twitter, as compared to Facebook, and true face-to-face interactions.

One other major limitation to the findings of this study is the way that the variable “persuasion” was measured; it was self-reported, and not predicated on attitude change or a shift in perspective, and instead it relied on individual’s internal compass for how persuaded they were. This presents a problem because it only reflects how influenced a participant is willing to admit that they were. There are plenty of times that we are influenced in our daily lives and would not be aware of it cognitively, or perhaps we may be aware of it but it might not be socially acceptable for us to have been influenced by that particular argument or stimulus. Perhaps the messages with more negative tones were more persuasive, but participants fell victim to social desirability bias and determined that they were not influenced by more negative-sounding arguments, even if this was not the case.

Furthermore, the variable “difference in political identification” between candidates and participants ignored completely independents, in spite of the fact that they made up a larger portion of the sample than self-identified Republicans. This was done, in part to isolate a more polarized population, and in part due to an error in the question-formulation process. Different

options were available when subjects were asked their own party identification, and that of the candidate, making it impossible to compare anything other than the two consistent options (which were the two major parties). If someone identified as an Independent, but thought the candidate was a Democrat, this was counted as a difference in partisanship. However, the candidate was identified as a member of the Green Party, and the individual identified in the category “other,” there is no way to determine for certain that the two did not belong to the same party.

Finally, it’s important to address discrepancies between the hypothesis testing and the research indicating that it was fear *in addition* to instructions that offered the most motivation. This is to say that this study was intended not to test the previously established relationship between instructions + fear and persuasion, but to analyze how the presence of fear alone could modify the formation of political attitudes. Put simply, testing the capacity to elicit behavior change may be important for the last few days of campaigning, but in the other 8 months of a presidential campaign, changing minds is of greater importance than getting votes that will not be cast until November.

Given these results and limitations, there are still some important conclusions that we can draw from these data. First of all, regardless of subjective emotional experience, there is no denying that fear-empowered rhetoric was the most effective across the board, so candidates should certainly not shy away from attempting to frighten their constituents, even if the actual effect is counter-intuitive. Secondly, if persuasion (as opposed to mobilization) is your goal, the most effective social media posts, based on these results, are ones that elicit arousal, without taking on a negative tone. The results also provided further evidence to suggest that anger and optimism are potentially potent ways of mobilizing and activating the base, as they tended to

enhance party loyalty under the present experimental conditions. Additionally, the simple fact that an argument is located or consumed via social media does not inherently reduce its impact; moreover, arguments do not lose their power to persuade simply because they bypass the traditional means of information dissemination.

Donald Trump, in his campaign for the presidency, had numerous scandals attached to his Twitter activity. Some tweets were inflammatory, while others were simply attention-grabbing. Of the subjects in the present study, 10% indicated that they had read or heard about one of Trump's tweets multiple times per day, and 2% said the same for Hillary Clinton. Over half said that they read or heard about a tweet from Donald Trump at least a few times per week, and about the same percentage said that they read or heard about a Hillary Clinton tweet less than once per month. However, in spite of the dramatically different awareness rates for SNS use between Trump and Clinton, 62% said that Trump's tweets were some degree of "bad" for the public discourse, while 35% said the same of Clinton's tweets. This is all to say that for unlikely candidates whose primary purpose is to promote name recognition (or in the case of Trump, a brand), tweets that are received poorly by the public are not necessarily bad tweets.

The relationship between the public and public officials is constantly changing; modified by new mediums and new mechanisms of communication. But psychology remains constant, and while the players and strategies may continue to change, it is unlikely that the rules of the game ever will.

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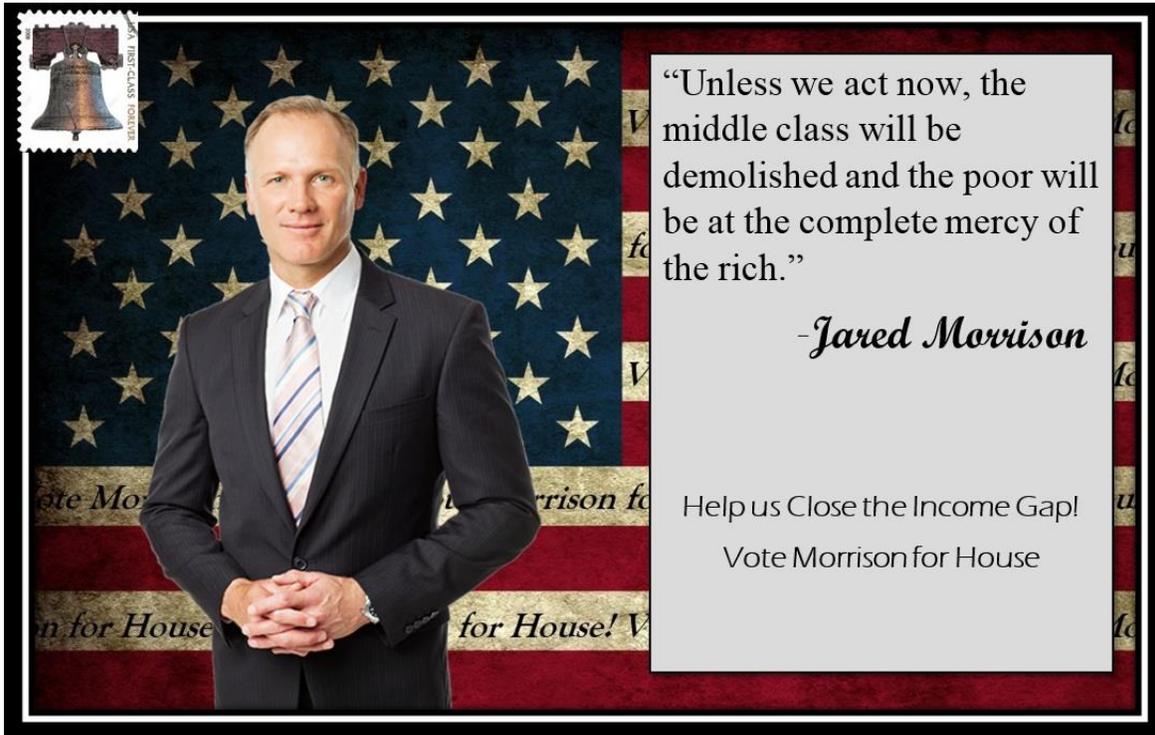
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## Appendix A

**Figure 7:** *The Images presented to participants in different conditions:*

*Mailer/Fear:*



*Mailer/Hope:*

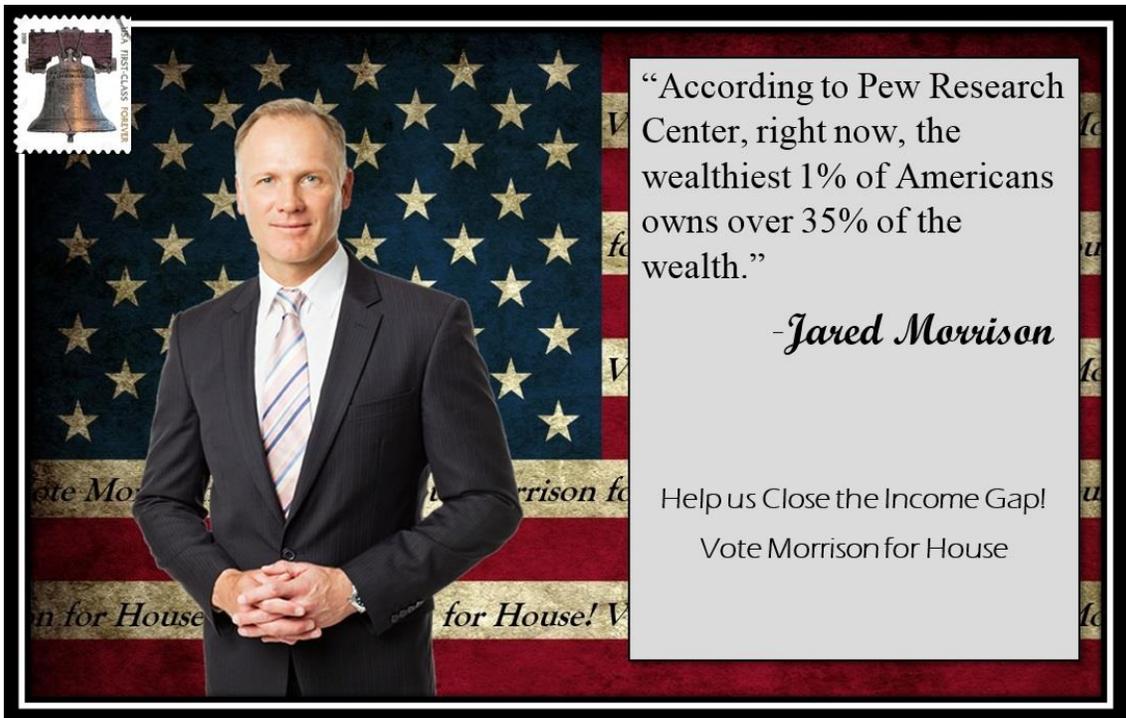


“With perseverance and dedication, we can end poverty, and provide everyone with the opportunity to be wealthy.”

*-Jared Morrison*

Help us Close the Income Gap!  
Vote Morrison for House

*Mailer/Factual:*



“According to Pew Research Center, right now, the wealthiest 1% of Americans owns over 35% of the wealth.”

*-Jared Morrison*

Help us Close the Income Gap!  
Vote Morrison for House

Twitter/Fear:

 **Jared Morrison**  
@morrison4house

Unless we act now, the middle class will be demolished, and the poor will be at the complete mercy of rich. Help us [#CloseTheIncomeGap!](#)



2:49 PM - 30 Mar 2017

15K 258K 1.1M

Twitter/Hope:

 **Jared Morrison**  
@morrison4house

With perseverance and dedication, we can end poverty, and provide everyone with the opportunity to be wealthy! Help us [#CloseTheIncomeGap!](#)



2:38 PM - 30 Mar 2017

15K 258K 1.1M

Twitter/Factual:



Jared Morrison  
@morrison4house



According to Pew Research Center, right now, the wealthiest 1% of Americans owns over 35% of the wealth . Help us [#CloseTheIncomeGap!](#)



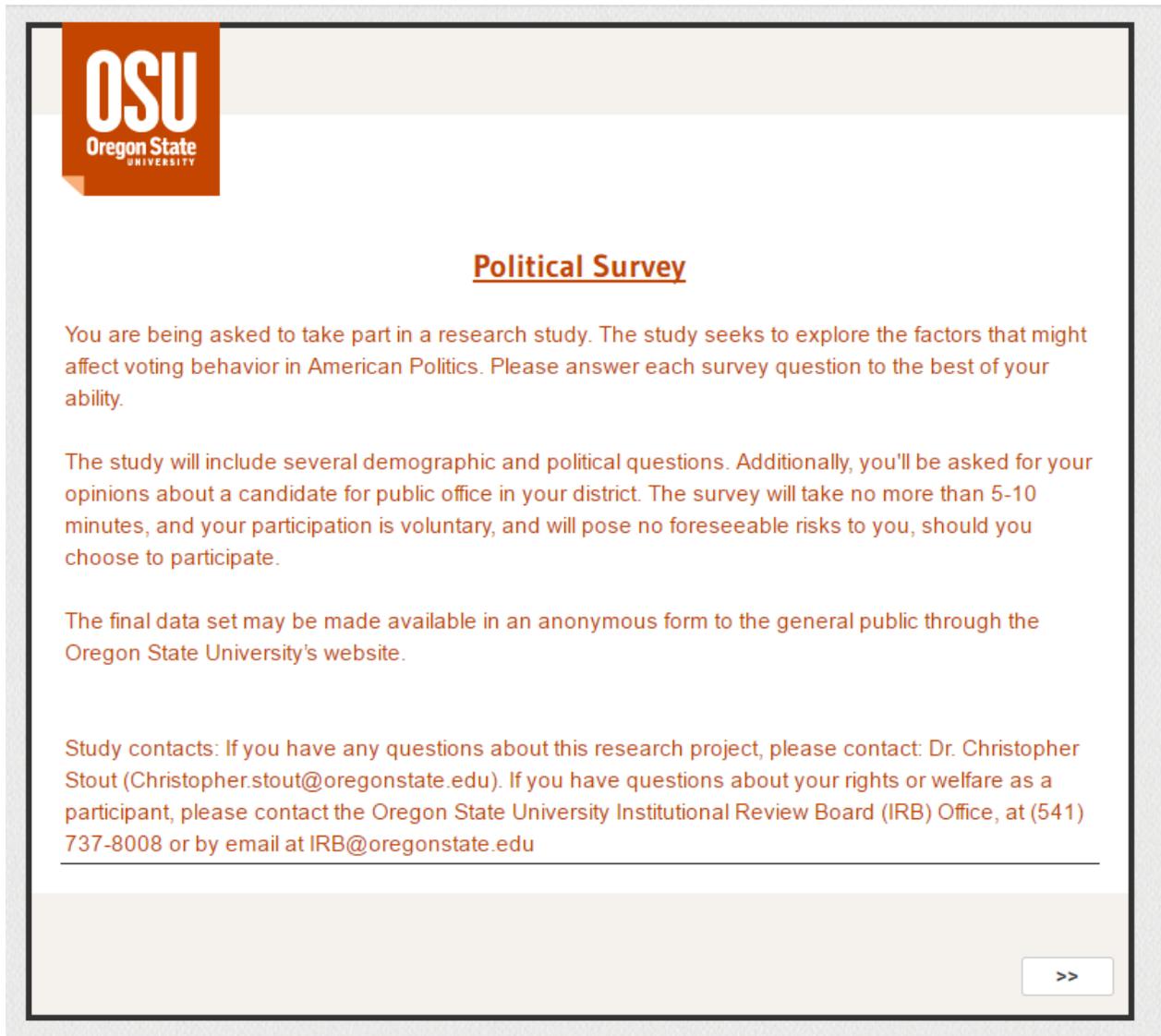
2:43 PM - 30 Mar 2017

↩ 15K   ↻ 258K   ❤ 1.1M

## Appendix B

**Figure 8:** A printout version of the complete survey administered to participants.

Please note that there is a typing error on the question regarding relevance of income-inequality. This data point was ignored entirely due to the error.



The image shows a printout of a survey introduction page. In the top left corner, there is the OSU Oregon State University logo. The title "Political Survey" is centered and underlined. The text explains the purpose of the study, its duration, and the voluntary nature of participation. It also mentions that the data will be made available to the public. Contact information for Dr. Christopher Stout and the IRB Office is provided at the bottom. A navigation button with ">>" is located in the bottom right corner.

**OSU**  
Oregon State  
UNIVERSITY

### Political Survey

You are being asked to take part in a research study. The study seeks to explore the factors that might affect voting behavior in American Politics. Please answer each survey question to the best of your ability.

The study will include several demographic and political questions. Additionally, you'll be asked for your opinions about a candidate for public office in your district. The survey will take no more than 5-10 minutes, and your participation is voluntary, and will pose no foreseeable risks to you, should you choose to participate.

The final data set may be made available in an anonymous form to the general public through the Oregon State University's website.

Study contacts: If you have any questions about this research project, please contact: Dr. Christopher Stout (Christopher.stout@oregonstate.edu). If you have questions about your rights or welfare as a participant, please contact the Oregon State University Institutional Review Board (IRB) Office, at (541) 737-8008 or by email at IRB@oregonstate.edu

>>



I certify that I am of the legal age of consent, and I am willing to participate in this study.

- Yes, I am.
- No, I am not.

>>



Please select your gender.

- Male
- Female
- Other

Please type your age in years below.

Please select your ethnicity.

- White
- African-American or Black
- Asian or Asian American
- Latino/a
- Middle Eastern
- Mixed Race
- Other
- Prefer not to answer

>>



Generally speaking, do you think of yourself as...?

- Democrat
- Republican
- Independent
- Other

Where do your political beliefs tend to fall, most of the time?

Strongly Liberal      Left of Center      Moderate      Right of Center      Strongly Conservative

Political Beliefs



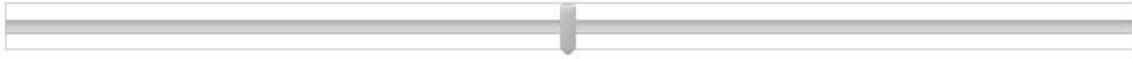
What is the highest level of education that you have completed?

- Did not graduate from High School
- High School Graduate
- Some College, but no degree (Yet)
- 2 year College Degree
- 4 year College Degree
- Postgraduate Degree (MA, MBA, MD, JD, PhD, etc.)

Where do your parents' political beliefs tend to fall, most of the time?

Strongly Liberal      Left of Center      Moderate      Right of Center      Strongly Conservative

Parent #1

A horizontal slider bar with a vertical marker in the center, indicating a moderate political leaning.

Parent #2

A horizontal slider bar with a vertical marker in the center, indicating a moderate political leaning.

What is the highest level of education that has been completed by *either* of your parents?

- Did not graduate from High School
- High School Graduate
- Some College, but no degree (Yet)
- 2 year College Degree
- 4 year College Degree
- Postgraduate Degree (MA, MBA, MD, JD, PhD, etc.)

>>



Generally, do you see yourself as...?

---

- Working/Lower Class
- Lower/Middle Class
- Upper/Middle Class
- Upper Class

What is your household annual income in the past year?

---

- Less than \$15,000 per year
- \$15,000-\$25,000 per year
- \$25,000-\$40,000 per year
- \$40,000-\$60,000 per year
- \$60,000-\$80,000 per year
- \$80,000-\$100,000 per year
- \$100,000-\$150,000 per year
- 150,000-\$200,000 per year
- More than \$200,000 per year

>>

Generally, do you see yourself as...?

---

- Working/Lower Class
- Lower/Middle Class
- Upper/Middle Class
- Upper Class

What is your household annual income in the past year?

---

- Less than \$15,000 per year
- \$15,000-\$25,000 per year
- \$25,000-\$40,000 per year
- \$40,000-\$60,000 per year
- \$60,000-\$80,000 per year
- \$80,000-\$100,000 per year
- \$100,000-\$150,000 per year
- 150,000-\$200,000 per year
- More than \$200,000 per year

>>



Do you have a Facebook or Twitter account?

- Yes, I have both.
- I just have a Facebook Account.
- I just have a Twitter Account.
- No, I don't have either.

>>



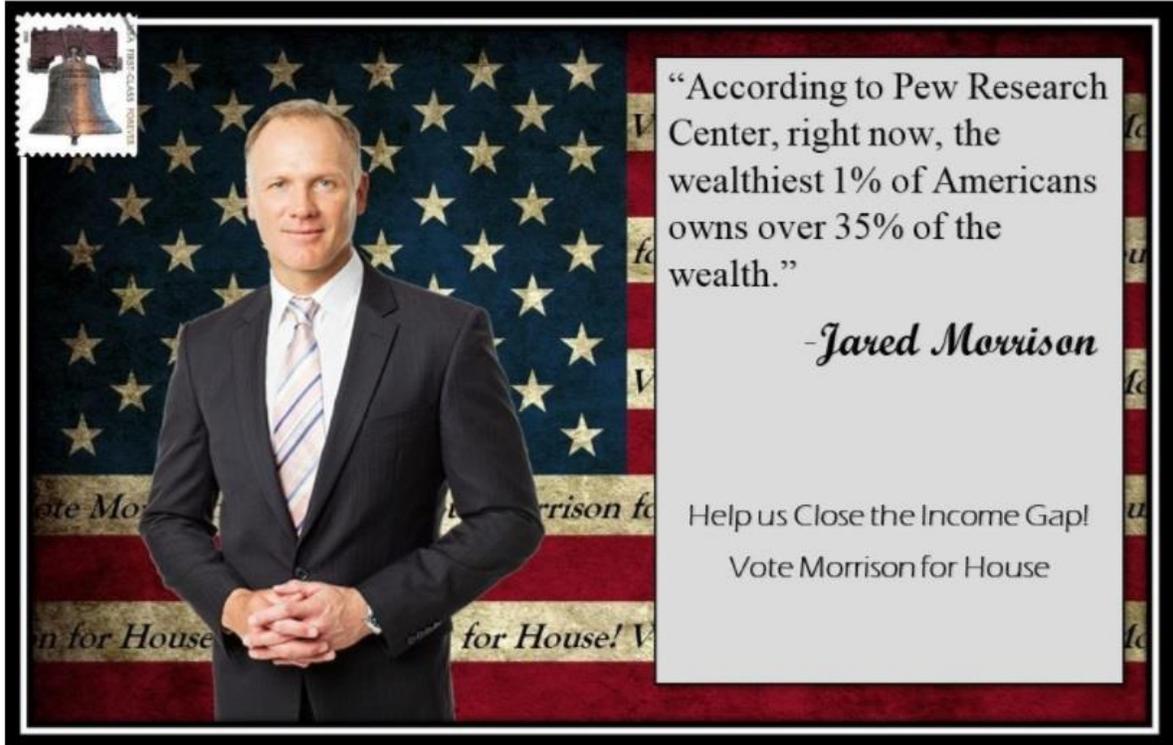
How often do you engage in the following activities on *Facebook or Twitter*?

	Never (less than once per month)	Rarely (about once per week)	Sometimes (several times per week)	Often (at least once per day)	Very often (at least 5 times per day)
I post my own, original content...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I retweet or share content from someone I know.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I retweet or share content from someone I don't know...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I check/browse my social media...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I get my news from social media...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

>>

Suppose the candidate Jared Morrison is running for the House of Representatives in your district. Below is a postcard sent out to his constituents.

Please read the quotation carefully, as the next several questions will refer back to it.



\*Please note: This image will be different depending on the conditions. For alternative images, please see **Appendix A**.



What was the topic of the quote on the previous page?

---

- Moving Jobs Overseas
- Veterans
- Campaign Reform
- Income Inequality

>>



What is your general attitude towards this candidate?

Strongly Dislike      Dislike      Neither Like nor Dislike      Like      Strongly Like

Like or Dislike



How likely would you be to vote for this candidate?

Extremely Unlikely      Unlikely      Neither Likely nor Unlikely      Likely      Extremely likely

Likelihood of voting for Jared Morrison



How persuasive did you find the candidate's argument?

Extremely Unpersuasive      Unpersuasive      Neither persuasive nor unpersuasive      Persuasive      Extremely Persuasive

Persuasiveness of Argument



What political party do you believe this candidate belongs to?

- Democrat
- Republican
- Green Party
- Libertarian
- Other



Generally, how did you interpret the *tone* of this message?

Negative Neutral Positive

Positivity/Negativity



Among the options below, please select the third option ("persuasive") to verify that you are paying attention.

- Unpersuasive
- Somewhat persuasive
- Persuasive
- Very Persuasive

What do you feel is the predominant emotion that this message conveys?

- Surprise
- Fear
- Anger
- Hope
- Sadness

How relevant is the issue of income inequality to your daily life?

- Not relevant
- Somewhat relevant
- Somewhat irrelevant
- Not at all relevant

>>



How often did you read about (or see firsthand) a tweet posted by Donald Trump in the past year?

- Multiple times per day
- Once per day
- Several times per week
- Once per week
- Several times per month
- Once per month
- Less than once per month

Generally do you see these tweets as having been **good** or **bad** when it comes to their effect on the political dialogue of the 2016 election?

- |                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Very Bad              | Somewhat Bad          | Somewhat Good         | Extremely Good        | Unsure                |
| <input type="radio"/> |





How often did you read about (or see firsthand) a tweet posted by Hillary Clinton in the past year?

- Multiple times per day
- Once per day
- Several times per week
- Once per week
- Several times per month
- Once per month
- Less than once per month

Generally do you see these tweets as having been **good** or **bad** when it comes to their effect on the political dialogue of the 2016 election?

- |                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Very Bad              | Somewhat Bad          | Somewhat Good         | Extremely Good        | Unsure                |
| <input type="radio"/> |

>>



## **Debrief**

This debriefing page is designed to tell you about the purpose of the study.

### What Happened

You were just asked to describe how you felt about a candidate after reading a quotation from him either in the form of a Tweet or a Postcard.

The candidate Jared Morrison was fictional, as was his campaign for the House of Representatives.

In order to isolate the effect that social media had on how different messages are perceived, we needed to use a fictional candidate, so you would not have been influenced by any previously held opinions of a candidate you may already have been familiar with.

### What We Are Investigating

The purpose of this study was to understand whether people are more or less persuaded of political messages via social media, as compared with other forms of communication. We also want to understand if different *types* of communication are more, or less effective via social media.

### Overall

You were selected for participation in this study because you volunteered through mechanical turk.

### Study contacts:

If you have any questions about this research project, please contact: Dr. Christopher Stout (Christopher.stout@oregonstate.edu). If you have questions about your rights or welfare as a participant, please contact the Oregon State University Institutional Review Board (IRB) Office, at (541) 737-8008 or by email at IRB@oregonstate.edu

Given this information, I would still like to participate in this study.

---

- Yes, I would like to participate.
- No, I would like my answers withdrawn.



Honors Baccalaureate of Science in Psychology project of Jonah Harris presented on June 2, 2017.

APPROVED:

---

Chris Stout, Mentor, representing the Department of Political Science

---

Frank Bernieri, Committee Member, representing the Department of Psychology

---

Jesús Ramirez, Committee Member, representing University Housing and Dining Services

---

Toni Doolen, Dean, Oregon State University Honors College

I understand that my project will become part of the permanent collection of Oregon State University, Honors College. My signature below authorizes release of my project to any reader upon request.

---

Jonah Harris, Author