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Socialism's Specter: The Effect of Persuasion on Implicit Attitudes Towards Socialism

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**SOCIALISM'S SPECTER: THE EFFECT OF PERSUASION ON IMPLICIT
ATTITUDES TOWARDS SOCIALISM**

A Master's Thesis

Presented to

The Graduate College of
Missouri State University

In Partial Fulfillment

Of the Requirements for the Degree
Master of Science, Experimental Psychology

By

Amber Yanez

August 2020

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SOCIALISM'S SPECTER: THE EFFECT OF PERSUASION ON IMPLICIT ATTITUDES TOWARDS SOCIALISM

Psychology

Missouri State University, August 2020

Master of Science

Amber Yanez

ABSTRACT

Anti-socialist propaganda and media have swayed individuals to skepticism and fear about socialism. The propaganda, however, does not reflect necessarily the truth about socialism, in its persuasion against it. Media often uses persuasion techniques to influence opinions and beliefs. The primary focus of this study was to assess whether persuasion could be used to persuade participants' implicit attitudes towards socialism. Participants were persuaded with pro-socialism content, anti-socialism content, and neutral content; and then completed an Implicit Association Test. It was hypothesized that the participants in the pro-socialism condition would have an implicit bias towards socialism, the participants in the anti-socialism condition would have an implicit bias towards capitalism, and the participants in the neutral condition would have implicit biases congruent with their political leaning. Political leaning (conservative or progressive) and being in the pro-socialism condition were found to be significant predictors of implicit bias towards socialism. Progressives were more likely to have a bias towards socialism and conservatives in the pro-socialism condition acted against the persuasion, thus having a strong bias towards capitalism. Overall, the results of this study provide evidence that persuasion can be used to sway implicit attitudes towards socialism, however, the persuasion effect is dependent upon political leaning.

KEYWORDS: persuasion, socialism, capitalism, political leaning, Implicit Association Test, implicit attitudes, conservative, progressive

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In the interest of academic freedom and the principle of free speech, approval of this thesis indicates the format is acceptable and meets the academic criteria for the discipline as determined by the faculty that constitute the thesis committee. The content and views expressed in this thesis are those of the student-scholar and are not endorsed by Missouri State University, its Graduate College, or its employees.

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I dedicate this thesis to my husband, Cody.

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INTRODUCTION

A specter has haunted the American consciousness – the specter of Socialism¹. This sentiment echoes Karl Marx in his introduction to *The Communist Manifesto* (Marx and Engels, 2005) wherein he exposed the fear of communism’s rise in Europe as the movement concomitantly progressed. Similarly, in the United States today, leftist ideologies are ascendant. The U.S. has its own history of fear and skepticism toward socialism. Such fear has led to anti-socialist propaganda and political campaigns declaring “America vs. Socialism” (Nguyen, 2020). Anti-socialism has been ingrained in the American education system and social imagination. America’s fraught relationship with communism is tied up with some of its most significant historical events. From the Civil War to the World Wars, from the founding of the railroads to the golden age of American industry, socialism, and elite reaction against it, have tangibly and intangibly shaped the nation we are today.

For the purposes of this study, the term socialism will be preferred due to the more severe negative connotations associated with the term communism in the American consciousness. These terms will be discussed at greater length below. The purpose of this study is to assess whether persuading individuals with positive and negative historical accounts about socialism, will influence implicit attitudes towards it. The purpose of the following literature review was to examine anti-socialist propaganda and the definition of socialism. The literature review is three-fold: First, to explore the potential unreliability of propaganda to accurately depict the realities of socialism. Second, to examine the surrounding media influence, persuasion, and implicit

¹ Reference to the opening statement of *The Communist Manifesto* by Karl Marx and Frederick Engels (1888).

attitudes in order to establish the foundation for this research study. Based upon the research reviewed, there is evidence that media influences opinions about the information displayed, thus having the ability to persuade individuals to have specific beliefs about politics. And third, based upon the relevant research on persuasion and implicit attitudes, the rationale for this study will be presented.

Literature Review

Anti-Socialist Propaganda. Propaganda is defined as “ideas, facts, or allegations spread deliberately to further one’s cause or to damage an opposing cause” (Propaganda, n.d.). Deemed a subcategory of persuasion (Marková, 2008), propaganda is often biased and misleading because information is presented selectively with the purpose of portraying a specific message (Mull and Wallin, 2013). More importantly, propaganda is often vital to the structure of an institution as it serves the purpose of achieving the ideological goals of the institution (Marková, 2008). Propaganda is often associated with politics and is a means for advancing a political agenda (Mull and Wallin, 2013). Propagandized communication can be delivered through syntax, semantics, phonetics, word order, symbols, images, body language, and insinuations (Marková, 2008). It can be explicit and direct, as well as implicit and indirect. Oftentimes, propaganda produces an emotional reaction in its targets (Marková, 2008). Common methods of propaganda include advertisements, public service announcements, movies, music, books, and posters. Propagandized material can be broadcasted via news channels, radio programs, commercials, magazine ads, and posters.

While propaganda has been utilized for centuries (Mull and Wallin, 2013), during the Cold War, the U.S. promulgated an anti-communist campaign. The “Red Scare” ripped through the United States with such ferocity that various leaders spoke out about the “un-American-ness”

of communism in an attempt to protect America's freedom as they understood it. FBI Director J. Edgar Hoover spoke of communism as a prison that intends to trap, torture, and brainwash humanity, as well as poison America (Hendershot, 2003). Joseph McCarthy and the House Un-American Activities Committee investigated communism in America which led to the reputational ruin and unemployability of its subjects such as the infamous Hollywood backlisting (History, 2020). Public service announcements and posters perpetuated the anti-communist agenda. Popular culture was also integral in carrying out America's political agenda during the Red Scare (Hendershot, 2003). Movies, television shows, and books depicted anti-communist messages, both explicitly and implicitly. In popular culture, communists were often portrayed as evil masterminds, morally corrupt, poor, weak, or brainwashed drones (Hendershot, 2003; Schroeder, 2007). Americans, on the other hand, were depicted as loyal, strong, naïve but ultimately triumphant, and patriotic (Hendershot, 2003; Schroeder, 2007). The anti-communist propaganda contributed to the fear and hatred of communism in America.

What is Socialism? Socialism, in the classical Marxist sense, is a political and economic theory that calls for the redistribution of wealth primarily by turning over the means of production to the ownership of the workers (Marx and Engels, 2005). For Marxists, the goal of socialism is to achieve a classless, moneyless, stateless society called communism. Any action aimed at moving the needle in that direction, would also qualify as a socialist program. Nearly all socialists accept Marx's underlying critique of capitalism, however, not all socialists are Marxists or communists. For many, socialism is any program or society that empowers and enriches the lives of working people and promotes fundamental justice and equality. John Roemer (1994) wrote, "I believe socialists want (1) equality of opportunity for self-realization and welfare, (2) equality of opportunity for political influence, and (3) equality of social status."

Essentially, socialism aims to eliminate the class structure that allows for hierarchical importance of humanity. Socialists seek to have a system that abolishes injustices and allows for the flourishing of all humanity (Roemer, 1994). There is a misconception that the redistribution of wealth means everyone will be allotted the same amount of money and possessions despite work ethic.

A common refrain, usually within the United States, is “under socialism we are all equally poor.” However, Marxist socialism seeks to resolve the contradiction between the laborers that create value and the owners who hoard that value. The aim is to allow laborers to receive the full benefits of the value they create. While many socialists believe in extending a helping hand to non-working members of capitalist societies, mainstream socialist theory fundamentally rejects laziness and unearned wealth. The quintessential motto for socialists and communists is “from each according to their ability, to each according to their need” (Marx, 1875).

Many believe socialism is flawed fundamentally and cannot exist, especially considering the destruction of the communist system in the Soviet Union. John Roemer (1994) suggested, on the other hand, that socialism actually has the capability to exist and flourish. A study by Shirley Ceresteo and Howard Waitzkin (1986) about the quality of life in capitalist and socialist countries, found that citizens of socialist countries showed more favorable physical quality of life outcomes compared to those of capitalist countries. This study suggests that socialism has been untruthfully represented in propaganda and media; in reality, it can succeed and set the stage for a better quality of life.

Media Influence. Media is an important tool for delivering information, both opinions and facts, to vast amounts of people. Information is constantly being delivered via newspapers,

television broadcasts, social media, magazines, podcasts, and advertisements. Herman and Chomsky (1988) theorized the Propaganda Model which asserts that media is controlled by large, wealthy corporations and serves the purpose of advancing the ideologies and agenda of the elite. The Propaganda Model, according to the authors, discusses how media functions, but not whether it is effective (Herman and Chomsky, 1988; Klaehn, 2009). According to the Propaganda Model, status, wealth, and dominating ideology, filter media to assist elite progression (Herman and Chomsky, 1988; Klaehn, 2009; Herman, 2000). The Propaganda Model reinforces the notion that media is biased and promotes an agenda.

Researchers have sought to understand how media endorses an agenda. Scheufele and Tewksbury (2007) suggested news media uses framing, agenda setting, and priming to present a specific message. While the content of the message would not change between media outlets, the manner in which the content was presented, was vital to reinforcing the agenda (Scheufele and Tewksbury, 2007). The framing and prime within the message influences opinions and beliefs about the message (Scheufele and Tewksbury, 2007; Brewer et al., 2003). Researchers have found that news coverage can influence opinions about politicians and political issues (Roskos-Ewoldsen et al., 2008; Brewer et al., 2003; Good, 2008). Media can also promote stereotyping, including racial and gender stereotyping and mental health stigmas (Roskos-Ewoldsen et al., 2007; Chan and Yanos, 2018). Media influence is not solely negative; Kogen and Dilliplane (2019) found that media can influence viewers' willingness to help people in need. Researchers have found that the use of media has the ability to significantly influence its viewers, both negatively and positively.

Persuasion. Persuasion is the process of changing attitudes, beliefs, and behaviors (Persuasion, n.d.). It is often delivered via in-person or mass media communication, whether it

be spoken or written. As noted previously, propaganda is viewed as a form of persuasion and the media uses persuasion to influence its recipients. Individuals and organizations utilize various methods, such as speeches, social media posts, news articles, books, posters, and television, to deliver a persuasive message to their audience. Persuasion can be subtle or obvious, employing emotional or rational arguments, and facts or opinions.

“Who said what to whom?” This is the question that Carl Hovland and colleagues devised when studying how attitudes are changed (Hovland et al., 1953). Three aspects should be considered when using persuasion: the source, the message, and the audience (Benoit, n.d.). It is important to consider these aspects because they can shed light on why persuasion may or may not be effective. The source is who is delivering the message. Researchers have found that credibility and likability are important factors when considering the source of the persuasive message (Hovland et al., 1953; Benoit, n.d.; Smith et al., 2013; Chaiken and Eagly, 1983). Sources deemed to be more credible and more likable have more persuasive influence on their audience than non-credible or unlikable sources.

The message considers the nature of the persuasive message. George W. Hartmann (1936) studied the effectiveness of emotional and rational political flyers on determining the results of an election. He found that while the material in the emotional and rational flyers had an effect on the results, the emotional material had a stronger effect on persuading voters to vote for particular candidates. Slusher and Anderson (1996) found that causal arguments that explained biological causes of AIDS were more persuasive than noncausal arguments (which relied on statistical evidence) when changing beliefs about the contraction of AIDS. Beliefs about how AIDS were contracted were changed when presented with arguments explaining biological causes, rather than arguments using statistics. Swann et al. (1988), found that using a paradoxical

strategy (asking leading questions that “encouraged respondents to make statements that were consistent with, but more extreme than their own viewpoints”) was effective in changing the beliefs of individuals who were highly certain of their beliefs. These researchers have found that the manner in which a message is constructed and delivered, has an effect on changing attitudes.

The audience examines the nature of the audience, which includes personality and the ability or motivation of the individuals (Hovland et al., 1953; Benoit, n.d.). Swann et al. (1988) studied belief change in participants who are low in belief certainty and participants who are high on belief certainty. The researchers concluded that participants who are more certain of their beliefs must be persuaded differently than participants who are less certain of their beliefs. The nature of the audience was considered when constructing the persuasive argument. The nature of the audience can not only have an impact on the effectiveness of persuasion but can also explain why certain persuasive arguments are not effective. Geoffrey L. Cohen (2003) studied the impact of group influence on political beliefs. He found that individual’s political party affiliation can impact beliefs about policies. In the study Cohen (2003) discovered that including information about party positions in a message can have a strong effect on the participant’s beliefs about the policy.

Implicit Attitudes. Attitudes are an evaluation of a person or object. An explicit attitude is one that includes conscious awareness, whereas attitudes that are activated without conscious awareness, are known as implicit attitudes (Greenwald et al., 1998; Petty et al, 2009). The notion behind implicit attitudes is that one is not aware of having a particular attitude. Therefore, these attitudes cannot be measured directly. Petty et al. (2009) concluded measures of implicit attitudes are indirect, automatic, and unconscious. Anthony Greenwald, Debbie McGhee, and Jordan Schwartz (1998) created the Implicit Association Test (IAT) which measures the underlying

automatic evaluation of implicit attitudes. Instead of assessing what people believe, the IAT assesses mental associations using a stimuli-sorting task (Carpenter et al., in press). Response latencies are recorded for each task and the assumption is that people will sort the stimuli faster when the conditions are consistent with their implicit attitudes (Greenwald et al., 1998; Carpenter et al., in press).

Studying implicit attitudes has been important to the study of a variety of topics, such as, prejudices (Rudman and Phelan, 2010; Keith et al., 2015; Ziegert and Hanges, 2005), persuasion (Horcajo et al., 2010; Smith et al., 2013), and politics (Arcuri et al., 2008; Kam, 2007; Albertson, 2011). Implicit attitudes have been useful in predicting who an individual will vote for during an election (Arcuri et al., 2008; Kam, 2007). Arcuri et al. (2008) studied how implicit attitudes could predict how undecided voters will vote. Participants who were still undecided on who they would vote for completed an Implicit Association Test between a left-wing candidate and right-wing candidate and reported who they voted for after the election. The researchers found that participants who had an implicit bias towards the right-wing candidate voted for the right-wing candidate and participants who had an implicit bias towards the left-wing candidate voted for the left-wing candidate (Arcuri et al., 2008). Cindy D. Kam (2007) studied how implicit attitudes towards Hispanics would influence willingness to support a Hispanic candidate. Positive attitudes towards Hispanics resulted in more willingness to support a Hispanic candidate, but only when party cues were absent (Kam, 2007). If a party cue (condition where party affiliation was included) was present, implicit attitudes did not have an effect on the willingness to support a Hispanic candidate. These studies are important to understand how implicit attitudes affect politics.

Researchers have questioned whether implicit attitudes are malleable and can be changed (Buckwalter, 2019; Horcajo et al., 2010; Smith et al., 2013). Horcajo et al. (2010) studied whether consumer advertisements could change implicit attitudes and whether thinking of persuasive messages could influence implicit attitudes of related concepts. In the first study, participants were presented with advertisements that contained arguments in favor of consuming vegetables and neutral advertisements. Horcajo and colleagues (2010) found that participants had more favorable implicit attitudes towards vegetables after reading the persuasive message in favor of vegetables. In the second study, the researchers found that reading arguments in favor of the color green for a university logo influenced implicit attitudes towards a beverage associated with the color green (Horcajo et al., 2010). Smith et al. (2013) examined how credibility of the source of a persuasive message had an effect on changing implicit evaluations. Persuasion research regarding implicit attitudes has suggested that implicit attitudes are malleable (Buckwalter, 2019; Horcajo et al., 2010; Smith et al., 2013).

Purpose of this Study

Anti-socialist propaganda does not necessarily reflect what socialism is and in fact, can influence individuals to view socialism negatively. Researchers have found that media influences opinions and beliefs. If propaganda and media can influence beliefs, can pro-socialism propaganda and media prime individuals to view socialism in a positive manner? While persuasion has been utilized for social psychological research in various studies, there is a lack of research focusing on persuasion and socialism. According to the research, implicit attitudes are held without conscious awareness and can be changed through persuasion. For this research study, persuasion will be used to assess mental associations between socialism and capitalism.

Participants will read persuasive historical accounts about socialism and then participate in an Implicit Association Test to assess whether persuasion can influence implicit attitudes towards socialism. It is hypothesized that participants who are presented with the pro-socialist media will have an implicit attitude favoring socialism, and participants who are presented with the anti-socialist media, will have an implicit attitude favoring capitalism.

METHOD

Participants

Two hundred and sixty participants were recruited from a midsized midwestern university via the SONA online research management for the Introduction to Psychology course and email, but after data cleaning a final sample of $n = 179$ resulted. Participants were given course credit for their participation. The sample of participants was composed of females ($n = 104$) and males ($n = 75$) with a mean age of 21.52 ($SD = 6.30$). The maximum age of participants was 52 years old and the minimum age was 18 years old. Eighty-three point twenty-four percent of participants were Caucasian, 6.70% were African/African American, 5.03% were Latinx/Hispanic, 3.91% were Asian/Pacific Islander, and 1.12% of participants selected other. The sample was composed of freshmen ($n = 89$), sophomores ($n = 30$), juniors ($n = 20$), seniors ($n = 13$), and graduate students ($n = 26$). Participants were asked about their political party affiliation: 24.02% Democrat, 25.14% Republican, 11.17% Independent, 3.91% Libertarian, 1.12% Green Party, 33.52% do not have a political party affiliation, and 1.12% reported other. Of the two participants who reported “other,” one of the participants is a Democratic Socialist. According to the political tendency scale, the average score was 5.61 ($SD = 2.40$) out of a scale from one to 10, which suggests the average political leaning was center. Approval from the Institutional Review Board (IRB) at Missouri State University was granted (IRB-FY2020-648) on April 15, 2020 (see Appendix A).

Materials

Qualtrics Survey Software. The study utilized Qualtrics Survey Software. A survey was created that contained the vignettes of persuasive arguments and an Implicit Association Test (IAT). Demographic questions and the manipulation checks were included in the Qualtrics survey. Participants needed to have access to a computer and an internet browser in order to complete the survey.

Vignettes. The vignettes for each group consisted of two stories from history. The vignettes in this study served as the persuasion. Some of the stories were written for the purpose of this study by using information from a variety of sources and other stories are directly from written articles. The vignettes for each group were determined by a pilot study. Participants in the pilot study were asked to rate how socialist the stories were on a scale from 1 (Anti-socialist) to 5 (Pro-socialist). Participants were also asked to rate how interesting the stories were on a scale from 1 (Not at all interesting) to 5 (Extremely interesting) and to provide a brief summary of the story that was read. The pilot study contained three vignettes for each group and the top two vignettes that were most related to the political condition were chosen for the study. Please see Appendix B for the vignettes.

The vignettes in the “pro-socialism” condition are stories that depict positive aspects of socialism. The “pro-socialism” vignettes include a story about Cuban healthcare and the story about the Spanish Civil War. The Cuban healthcare vignette is directly from an article by Castelló González et al. (2016) and contains a word count of 233 words. Vignette #2 in the pro-socialism condition is 302 words long and was written by Cody Yanez based on research from the Revolutionary Left Radio podcast (O’Shea, 2018) and Wikipedia articles about the Spanish Civil War (1936 Spanish General Election, n.d.; Popular Front, n.d.; Revolutionary Catalonia, n.d.).

The “anti-socialism” vignettes are stories that depict negative history of socialism and include a story about media in Vietnam and the story of Stalin’s Great Purges. Vignette #1 in the anti-socialism condition was written using a news article from the British Broadcasting Corporation (BBC) about media in Vietnam (BBC, 2018) and an article from the Facts and Details website (Hays, 2008). The vignette about Stalin’s Great Purges is directly from Boston University’s Guided History blog (Hill, 2013). The Vietnam media vignette is 263 words long and the Great Purge vignette is 279 words long.

In the control condition, the vignettes were comprised of random stories from history that do not relate to socialism, war, or politics. Those stories include the story of the steamboat Sultana and the story of America’s first subway. The vignettes from the control condition are taken from a Listverse article (Frater, 2019). The word count for the steamboat Sultana vignette is 207 words, and 315 words for the first subway vignette.

Implicit Association Test. To assess implicit biases, an Implicit Association Test was utilized. The IAT was constructed via the IATGen Shiny App (Carpenter et al., in press). The Shiny App uses a web browser to easily construct a survey-software IAT. The IAT contains two attribute stimuli and two target stimuli. The stimuli are made up of words. Positive and negative words are used for the two attribute stimuli categories and socialism and capitalism words are used for the target stimuli categories. The list of words for the socialism and capitalism categories were determined by a pilot study. Participants in the pilot study were asked to rate how familiar they are with each word in their respective categories. The top 10 most familiar words were chosen from the pilot study. Please see Appendix C for the list of words in each category.

After creating the Socialism IAT, the file was uploaded to Qualtrics Survey Software. The Qualtrics survey contains a pre-built template which includes the IAT, the option for pre-IAT survey content, and the option for post-IAT survey content. IATGen automatically creates four permutations of the IAT which are randomized. The permutations counterbalance the starting positions for the targets and the attributes. The first permutation called “RP” has Target A starting on the right side of the screen and it is initially paired with the positive attribute. The second permutation called “RN” has Target A starting on the right, initially paired with the negative attribute. The third permutation called “LP” has Target A starting on the Left and it is initially paired with the positive attribute and the last permutation called “LN” has Target A starting on the left, initially paired with the negative attribute (Carpenter et al., in press). Within each of these permutations, there are seven blocks, also known as the IAT trials. Reliability for the IAT often ranges from .70 to .90 (Hofmann et al., 2005). For this study, the internal consistency of the IAT that is based on split-half reliability with a Spearman-Brown correction was .83 (Carpenter et al., in press).

Manipulation check. The Socialist Ideology Measure, created by Jiang et al. (2018), was used for the manipulation check to assess the effectiveness of the persuasion. Jiang et al. (2018) created the scale to assess the strength of socialist ideology. The statements in the scale are based on the research of John T. Jost and colleagues and the classical works of Karl Marx, Frederick Engels, and Vladimir Lenin. The scale contains 10 statements that are measured on a 10-point rating scale ranging from 1 (strongly disagree) to 10 (strongly agree) and has a Cronbach’s alpha coefficient of .92. The Socialist Ideology Measure was chosen for the manipulation check to assess participants’ socialist ideologies that may affect the persuasion.

Demographic questions, informed consent, and debriefing form. A series of demographic questions were asked to gather information about the participant. Participants were asked to identify their gender, age, race/ethnicity, class status, political affiliation, and political tendency. Political tendency is measured on a scale from 1 (Conservative) to 10 (Progressive). The demographic questions were placed at the end of the study to control for effects from the political affiliation and political tendency questions. Please see Appendix D for the list of demographic questions. An informed consent explained the participants' rights and provided a brief explanation about the study. A debriefing was given to the participants at the end of the study that explained the study in more detail. Please see Appendix E for the informed consent and debriefing form.

Procedure

Participants were assigned randomly to one of the political conditions: pro-socialism, anti-socialism, or control. The pro-socialism condition read two vignettes of stories positively portraying socialism, the anti-socialism condition read two vignettes of stories negatively portraying socialism, and the control condition read two vignettes of random history stories. After each vignette, all three conditions completed the Implicit Association Test. Prior to completing the IAT, the list of words for each IAT category was provided to the participants. The decision to provide the words before completing the IAT was based on the survey structure from Project Implicit (Project Implicit, 2011). Each participant completed the manipulation check.

Five phases made up the procedure of this study. In *Phase I*, the participants were introduced to the study and presented with the informed consent. If the participants chose to

participate in the study, they continued onto *Phase II*, however, participants who did not consent to participate were redirected to the end of the survey.

During *Phase II*, the participants were presented with a vignette (content of the vignette was dependent upon the condition assignment) for an unlimited amount of time. After reading the vignette, participants were asked to rate how interesting the story was on a five point Likert scale. The participants were then presented with a second vignette and asked to rate how interesting the story was. The questions about the interestingness of the stories, were filler questions to aid the flow of the study and were not used in the primary analysis.

Phase III contained the Implicit Association Test. Participants were assigned randomly to a permutation of the test. This phase should have taken participants five minutes to complete. Response latencies and accuracy were recorded via the IAT software. If the participants chose an incorrect response, a red 'X' appeared on the screen and the participants had to correct the response before moving onto the next word.

During *Phase IV* participants completed the manipulation check and answered demographic questions.

During *Phase V*, the participants were debriefed and thanked for their participation. Altogether the study was estimated to take participants 20-30 minutes to complete.

RESULTS

Analyzing the Implicit Association Test

Carpenter et al. (in press) created a shiny app that can create the Qualtrics IAT and analyze the IAT data. Response latencies from the Implicit Association Test were averaged across the trials and converted to a standardized difference score, *D*-score, which is comparable to Cohen's *d* (i.e. mean latency differences between the combined blocks that is divided by overall pooled variability). Negative *D*-scores indicate a bias towards capitalism and positive *D*-scores indicate a bias towards socialism. *D*-scores that are closer to zero indicate little or no bias. Converting the latencies to standardized values, accounted for participants who responded faster on the IAT than others (Carpenter et al., in press). The app cleaned the IAT results and provided a *D*-score for each individual participant. Response latencies over 10,000ms were excluded for excessive time spent on the IAT and response latencies from more than 10 percent of the trials that were faster than 300ms were excluded due to excessive speed on the IAT. Thirty-four participants who completed the IAT were excluded because of excessive speed. A *D*-score was not calculated for the 34 participants who were dropped from the analysis. After calculating the IAT results, the *D*-scores were added to the remaining data and prepared for data screening.

Data Screening

The data were screened to assess accuracy, missing data, outliers, and the violation of assumptions prior to computing the analyses. Before screening the data there were 260 participants; however, 58 participants were excluded from the data set due to a lack of *D*-scores for the Implicit Association Test. Thirty-four of those participants completed the IAT but were

removed for excessive speed and 24 of the participants did not complete the IAT. The data was found to be accurate, however, a summary in R revealed more missing data. Twenty-two participants were missing more than five percent of their data, so those participants were excluded from the data. Ten participants were missing less than five percent of their data; therefore, the “MICE” package in R (Van Buuren, and Groothuis-Oudshoorn, 2011) was used to impute the missing data of those participants.

Prior to assessing outliers and the violation of assumptions, a summary score was computed for the Socialist Ideology Measure. Outliers and assumptions were assessed using the following variables: Political Condition, Political Tendency, Socialist Ideology Measure summary score, and IAT results. A Mahalanobis distance test revealed one outlier using the $p < .001$ criterion, which was excluded from the data. The assumptions of additivity, normality, and linearity were met, according to a symnum table and visual inspection of a standardized histogram and Q-Q plot. The correlations for the additivity assumption ranged from 0.3-0.6, which means the variables are not too highly correlated. The assumptions of homogeneity and homoscedasticity were met according to a multivariate residuals plot. The Levene’s Test for Equality of Variances was met using the criterion, $p < .001$. After completing data screening, the sample contained 179 participants.

Primary Analyses

Group Differences of IAT Results. A One-Way between-subjects analysis of variance (ANOVA) was computed to assess differences in the IAT *D*-scores between the three political conditions: pro-socialism ($n = 57$), anti-socialism ($n = 61$), and neutral ($n = 61$). There was not a statistically significant difference in *D*-scores between the political conditions, $F(2, 176) = 2.32$,

$p = .102$, $\eta^2 = .03$, indicating that the political condition did not have a significant effect on the IAT results. The effect size is $\eta^2 = .03$, which suggests that only three percent of the variance in the D -scores is attributed to the political condition variable. With the results being non-significant, *post hoc* analyses were not necessary to perform. The means for the political condition D -scores are displayed in Table 1 and Figure 1.

Table 1. Descriptive Statistics of Each Political Condition.

Political Condition	Mean	Std. Deviation	Std. Error	<i>n</i>
Pro-Socialism	-0.220	0.494	0.065	57
Anti-Socialism	-0.269	0.426	0.055	61
Neutral	-0.100	0.415	0.053	61

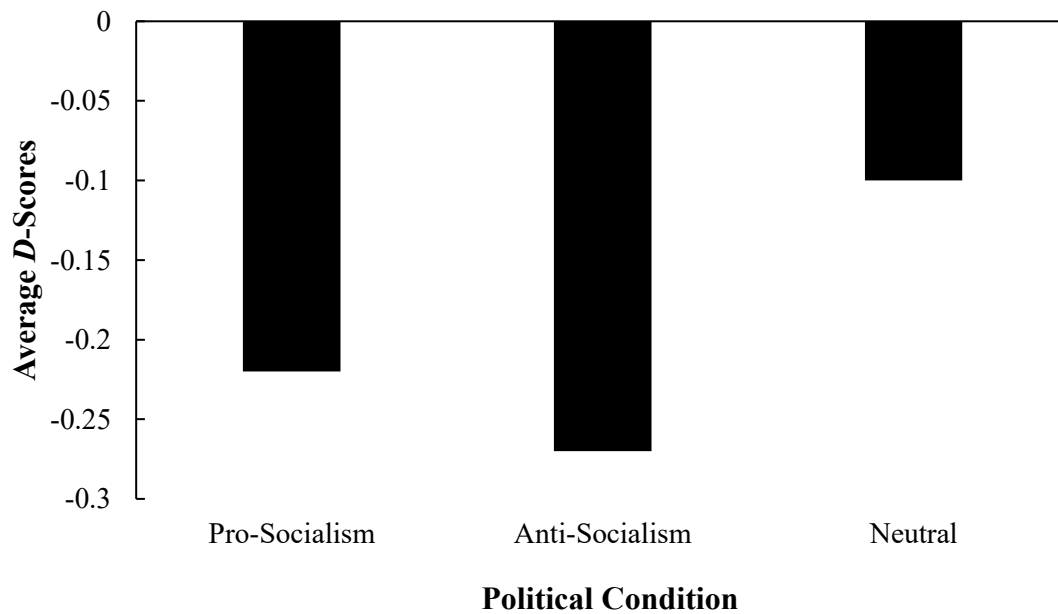


Figure 1. Mean D -scores for each political condition.

Predictors of IAT Results. A multiple linear regression was performed to assess predictors of implicit attitudes towards socialism. The IAT *D*-scores were predicted by political condition (pro-socialism, anti-socialism, and neutral), political tendency, racial identity (Caucasian and Other Races/Ethnicities), and political party affiliation (Democrat, Republican, Other, No Affiliation). The multiple linear regression model was statistically significant, $F(9, 178) = 5.94, p < .001, R^2 = .24, \text{adj. } R^2 = .20, \text{RMSE} = .40$. Political tendency and the pro-socialism condition were significant predictors of implicit bias towards socialism. Specifically, for political tendency, participants who rated themselves more progressive, had more implicit bias towards socialism, and participants who rated themselves more conservative, had more implicit bias towards capitalism. Participants in the pro-socialism condition had more implicit bias towards capitalism compared to participants in the neutral and anti-socialism condition. Regression coefficients and additional statistics can be found in Table 2.

There was also a significant interaction between political tendency and the pro-socialism condition (see Figure 2 for a depiction of the interaction). The interaction divided the political tendency scale between conservative (participants with a rating of 1-5) and progressive (participants with a rating of 6-10) and the political condition variable between pro-socialism and neutral condition. Progressives in the neutral condition had a slight implicit bias towards socialism, and progressives in the pro-socialism condition had a slightly stronger bias towards socialism. Conservatives in the neutral condition had a bias towards capitalism, and conservatives in the pro-socialism condition had a stronger implicit bias towards capitalism. Essentially, political tendency and political condition had an effect on participants' implicit bias towards socialism.

Table 2. Regression Coefficients and Additional Statistics for Predictors of Implicit Bias Towards Socialism.

Variable	<i>b</i>	β	<i>t(df)</i>	<i>p</i> -value	<i>pr</i> ²
Political condition: Pro-socialism	-0.468	-0.488	<i>t</i> (178) = -2.441	0.016*	0.034
Political condition: Anti-socialism	-0.011	-0.012	<i>t</i> (178) = -0.061	0.952	<0.001
Political tendency	0.062	0.331	<i>t</i> (178) = 2.901	0.004*	0.048
Racial Identity: Racial minority	0.104	0.088	<i>t</i> (178) = 1.270	0.206	0.009
Party affiliation: Democrat	0.030	0.028	<i>t</i> (178) = 0.359	0.720	0.001
Party affiliation: Republican	0.135	0.131	<i>t</i> (178) = 1.650	0.101	0.016
Party affiliation: Other	-0.072	-0.061	<i>t</i> (178) = -0.803	0.423	0.004
Pro-socialism X Political tendency interaction	0.063	0.423	<i>t</i> (178) = 2.054	0.041*	0.024
Anti-socialism X Political tendency interaction	-0.024	-0.155	<i>t</i> (178) = -0.788	0.432	0.004

**p* < .05

Secondary Analyses

A series of correlations and One-Way between-subjects ANOVAs were performed to assess the manipulation (persuasion in the vignettes) of the study. These analyses provide additional information about the results of the IAT and whether the independent variable solely affected the IAT or another factor aided the results. Total scores from the Socialist Ideology Measure were computed and included in the manipulation check analyses.

Three correlations with a Bonferroni correction (*p* < .017) were performed to assess the relationship between the IAT results and the Socialist Ideology Measure for each political

condition. Ideally, there is not a significant relationship between the variables, suggesting that pre-conceived Socialist ideologies did not affect the results of the Implicit Association Test.

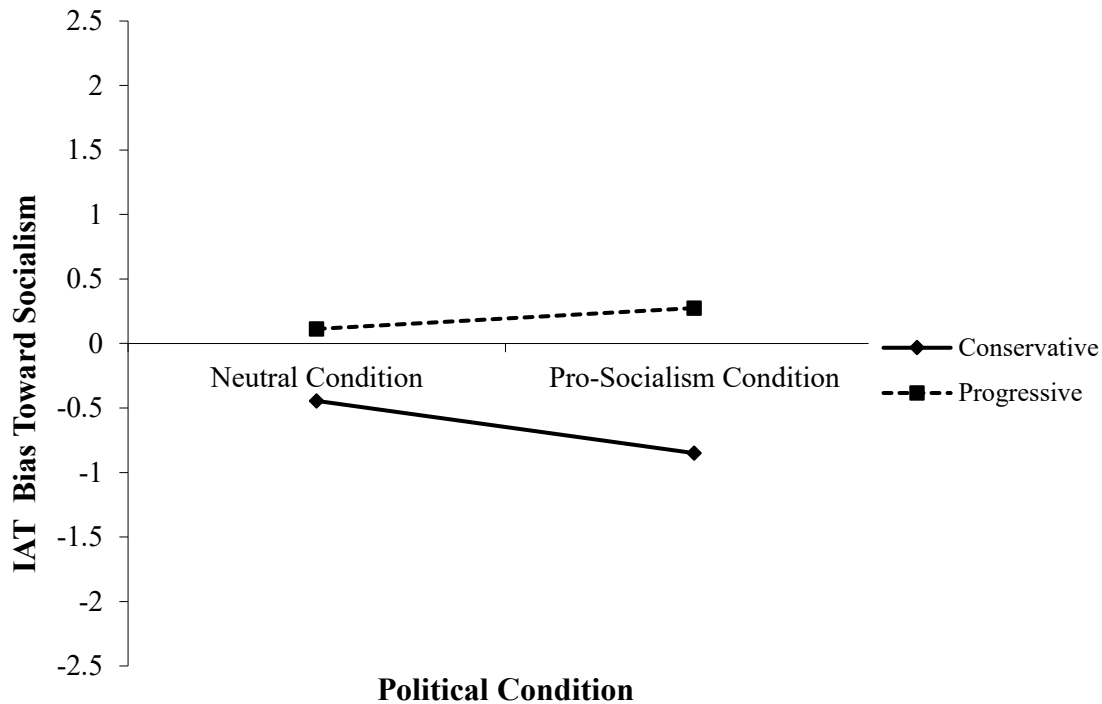


Figure 2. Two-way linear interaction between the pro-socialism and neutral conditions, split by political leaning.

There was a statistically significant positive relationship between the IAT results and the Socialist Ideology Measure for the pro-socialism political condition, $r(55) = .64, p < .001$, indicating that higher scores on the Socialist Ideology Measure had more implicit bias towards socialism. This would suggest that participants' explicit ideologies were related to the IAT results. The relationship between the Socialist Ideology Measure and the IAT results in the anti-socialism condition, was not statistically significant, $r(59) = .30, p = .021$, which indicates that pre-conceived notions about socialism did not influence the results of the IAT. There was a

statistically significant positive relationship between the Socialist Ideology Measure and the IAT results for the neutral condition, $r(59) = .57, p < .001$, indicating that prior beliefs about socialism could have affected responses on the Implicit Association Test.

A One-Way between subjects ANOVA was performed to assess whether there were differences in the Socialist Ideology Measure between the political conditions. There is not a statistically significant difference in Socialist Ideologies between the political conditions, $F(2, 176) = 0.78, p = .463, \eta^2 = .01$, indicating variability of socialist ideologies in each political condition.

Three correlations with a Bonferroni correction ($p < .017$) were performed to assess the relationship between self-identified political leaning and the IAT results for each political condition. Ideally, a relationship will not exist between the variables, suggesting that one's political leaning did not influence the results of the Implicit Association Test. A statistically significant positive relationship exists between political leaning and the IAT results for the pro-socialism condition, $r(55) = .59, p < .001$, which indicates that prior beliefs could have influenced the IAT results. The relationship between political leaning and the IAT was non-significant and positive for the anti-socialism condition, $r(59) = .18, p = .169$, which suggests that political leaning did not influence the IAT results. There was a statistically significant positive relationship between political leaning and the IAT for the neutral condition, $r(59) = .38, p = .003$, indicating that political leaning could have affected the IAT results.

A One-Way between-subjects ANOVA was performed to assess differences in political leaning between the political conditions. There is not a statistically significant difference in political leaning between the political conditions, $F(2, 176) = 0.64, p = .528, \eta^2 = .01$, indicating variability of political tendencies in each political condition.

DISCUSSION

The primary purpose of this study was to assess whether participants could be persuaded to have an implicit bias towards socialism. According to research, anti-socialist propaganda can portray inaccurately socialism and influence biases against it. The Propaganda Model has established that media is biased and promotes an implicit agenda. Propaganda is deemed a subcategory of persuasion and media uses persuasion to influence its viewers. Researchers have shown that implicit attitudes are malleable and can be affected by persuasion. Therefore, persuasion for or against socialism could affect implicit attitudes towards socialism. Ideally, the participants in the pro-socialism condition would be persuaded to have an implicit bias towards socialism; the participants in the anti-socialism condition would be persuaded to have an implicit bias towards capitalism; and the participants in the neutral condition would have implicit biases congruent with their ideological beliefs. The results did in fact reveal that persuasion can affect implicit attitudes towards socialism; however, the persuasion did not affect implicit biases in the manner predicted for each condition and demographic.

Initially, it was found that political condition persuasion did not affect the participants' implicit bias. The results of the One-Way between-subjects ANOVA were non-significant with a miniscule effect size, suggesting that there were no implicit bias differences between the pro-socialism, anti-socialism, and neutral conditions. However, after assessing predictors of implicit bias towards socialism, the results revealed that the persuasion did have an effect on implicit attitudes towards socialism. Political tendency and the pro-socialism condition were significant predictors of implicit bias towards socialism, and there was a significant interaction between the two variables. As participants rated themselves as more progressive, they had stronger implicit

attitudes towards socialism. This is an expected result because individuals on the political left are more likely to be socialists, favor socialism, or favor socialist policies. Individuals on the political right are more likely to lean towards conservative policies and favor capitalism. The results of the pro-socialism condition revealed that participants in the neutral condition, had more implicit bias towards socialism than the participants in the pro-socialism condition. This result seems peculiar because the participants in the pro-socialism condition should have been persuaded to have a stronger implicit bias towards socialism, as opposed to the other two conditions. However, examining a graph of the two-way interaction, sheds some light on the pro-socialism condition result.

In the interaction, the participants were separated by their political tendency between conservatives and progressives. Progressives in the neutral condition, had a slight implicit bias towards socialism, which is to be expected. In the pro-socialism condition, the progressives had a slight increase in implicit bias towards socialism. This result aligns with the hypothesis, in that these participants were likely to have a slight bias towards socialism which strengthened after being persuaded with pro-socialism accounts.

Conservatives in the neutral condition displayed an implicit bias towards capitalism, as anticipated. In the pro-socialism condition, it was expected that conservatives would be persuaded to have an implicit bias towards socialism (or at the very least a weaker bias towards capitalism) when compared to the neutral and anti-socialism conditions. Interestingly, instead of a shift towards socialism, conservatives displayed a stronger bias towards capitalism. In fact, conservatives in the pro-socialism condition had the strongest bias towards capitalism than any other condition or demographic.

While this result runs contrary to the expectation, it is nonetheless compelling. It may be that the conservatives in the pro-socialism condition recognized the persuasion effect and specifically acted against it. Previous research has found that it is more difficult to persuade individuals who have high belief certainty (Swann et al., 1988) and when faced with persuasion antithetical to their beliefs, move more strongly in favor of their beliefs. It is possible that the conservatives in the sample were not easily persuaded because of a strong belief certainty in capitalism. Another conceivable explanation is party influence. Group influence can be a strong aspect of attitude development and research has found that political party affiliation can have a dominating influence on attitudes (Cohen, 2003). The message, itself, could have caused the reverse effect, especially if the conservatives responded based on high belief certainty. It is possible that the persuasion rooted in the pro-socialism historical accounts, was not strong enough to persuade the conservatives in the direction towards socialism. A paradoxical method may have benefited the effectiveness of the persuasion for individuals high in belief certainty, such as using extreme examples of socialism. Due to the considerable change in implicit bias towards capitalism, the pro-socialism condition in the aggregate had more bias towards capitalism. This shift in bias sheds light on the interpretation of the pro-socialism condition variable. The conservatives of the group had more influence on the overall group, effectively lowering the mean of the *D*-score.

While the anti-socialism condition was not a significant predictor, a visualization of the data is informative and aids in the interpretation of the results. See Figure 3 for a depiction of the means from each political condition split by political tendency. The progressives and conservatives in the anti-socialism condition had an implicit bias towards capitalism. This result was expected because the participants were persuaded to view socialism in a negative manner,

which would result in a bias towards capitalism. Even though the result is not significant statistically, it does show that the participants in the condition, responded to the implicit association test in an expected manner. Interestingly, when faced with opposing persuasion, progressives conceded to the anti-socialism persuasion and conservatives rebelled against the pro-socialism persuasion. Figure 3 depicts the drastic nature of change in implicit bias for the conservatives in the pro-socialism condition. The means of each condition by political leaning are in a predicted range, except for the conservatives of the pro-socialism condition.

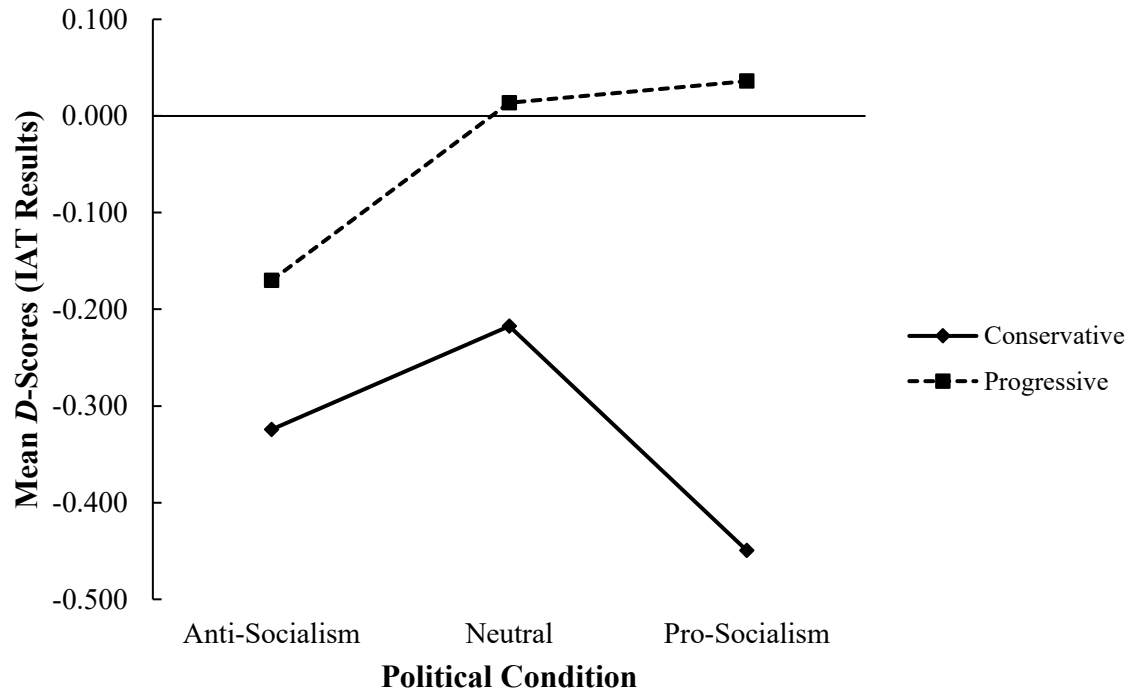


Figure 3. Mean *D*-scores for each political condition, split by political leaning.

It is important to assess the manipulation of the study to see if it may have affected the results. To assess the manipulation, a number of analyses were conducted to verify that there was variability in the sample and that prior beliefs or attitudes did not influence the Implicit

Association Test. The Socialist Ideology Measure was used to assess prior beliefs about socialism and the political tendency scale was utilized to assess political leaning. Ideally, the political conditions would not have relationships between the Socialist Ideology Measure and the IAT results and political leaning and the IAT results, which would indicate that prior beliefs did not have an effect on the Implicit Association Test. A moderate relationship existed between the Socialist Ideology Measure and the IAT results, as well as, political leaning and the IAT results. This demonstrates that prior beliefs about socialism and political leaning may have affected how the participants responded on the IAT. It is possible that the persuasion had an effect on the participants, but prior ideological beliefs and political leaning also contributed to the results. Based on the results of the two-way linear interaction, I would suggest that the persuasion, ideological beliefs, and political tendency influenced the results of the Implicit Association Test. The anti-socialism condition did not have a significant relationship between the Socialist Ideology Measure and IAT results and political tendency and the IAT results, which suggests that the persuasion had more influence on the IAT than prior beliefs or tendencies. The neutral condition had significant results, however, this is anticipated because the neutral condition acts as a control, so the participants should have responded based on their implicit attitudes towards socialism. An ANOVA confirmed that there was a variety of socialist ideologies and political leanings in each condition, meaning one condition was not ideologically homogenous, skewing the results.

To thoroughly assess the results of this study, the limitations should be considered. The first limitation is the sample. While the sample size was adequate, the demographic sample is lacking. A majority of the participants were Caucasian and college-aged. There was a fairly

representative sample of political party affiliations and gender, but racial identity and age could be important demographics to consider in the discussion of politics.

The method and materials used in the study could pose as limitations. The Implicit Association Test and studying implicit attitudes, possesses limitations because such attitudes cannot be directly measured. The words used in the IAT for the socialism and capitalism categories could also be a limitation due to unfamiliarity with the words. A pilot study was conducted to assess familiarity, but a more thorough assessment could be beneficial. If participants were less familiar with the words, their IAT results could be reflecting familiarity issues rather than implicit bias. The vignettes used in the political conditions were assessed in a pilot study as well, but the persuasive arguments contained limited effectiveness. More research on persuasion and socialism could aid the manipulation. On the one hand, the vignettes may not have been weak in persuasion and message, and on the other hand, participants' belief certainty could have affected the effectiveness of the vignettes. Another limitation to consider is order effects. The political conditions and IAT permutations were randomized, but the order of the study was not counterbalanced. Counterbalancing the order could explain unknown variance in the study. Considering these limitations could improve the research and help further explain the results.

There is a lack of research on the effect of persuasion on implicit attitudes towards socialism. The current study has begun to scratch the surface; however, more research on this topic is essential to having a more comprehensive understanding of the topic. There are numerous possibilities for future research, whether that be revising the current study with the limitations considered or branching off of the current study in a specific direction. Future research utilizing knowledge based on the three elements of persuasion, could aid the effect of

the persuasion on implicit attitudes. Further consideration of the political nature of the United States could also benefit research on this topic. Overall, this study has found that progressives and conservatives respond differently to pro-socialism persuasion and opens the door to greater understanding of socialism, implicit attitudes, and persuasion.

REFERENCES

- 1936 Spanish General Election. (n.d.). In *Wikipedia*.
https://en.m.wikipedia.org/wiki/1936_Spanish_general_election
- Albertson, B. L. (2011). Religious appeals and implicit attitudes. *Political Psychology*, 32(1), 109-130. doi:10.1111/j.1467-9221.2010.00793.x
- Arcuri, L., Castelli, L., Galdi, S., Zogmaister, C., & Amadori, A. (2008). Predicting the vote: Implicit attitudes as predictors of the future behavior of decided and undecided voters. *Political Psychology*, 29(3), 369-387.
- BBC. (2018, November 20). Vietnam profile – Media. *BBC News*.
<https://www.bbc.com/news/world-asia-pacific-16567840>
- Benoit, W. L. (n.d.). The Yale Approach. Retrieved June 14, 2020, from
http://www.cios.org/encyclopedia/persuasion/Byale_approach1.htm
- Brewer, P., Graf, J., & Willnat, L. (2003). Priming or framing: Media influence on attitudes toward foreign countries. *Gazette*, 6, 493-508. doi:10.1177/0016549203065006005
- Buckwalter, W. (2019). Implicit attitudes and the ability argument. *Philosophical Studies*, 176, 2961-2990. doi:10.1007/s11098-018-1159-7
- Carpenter, T., Pogacar, R., Pullig, C., Kouril, M., Aguilar, S., LaBouff, J. P., Isenberg., N., & Chakroff, A. (in press). Survey-software Implicit Association Tests: A methodological and empirical analysis. *Behavior Research Methods*.
- Castelló González, M., Pons Vázquez, R., Rodríguez Bencomo, D., & Choonara, I. (2016). International medical collaboration: Lessons from Cuba. *Children*, 3(4), 20. doi:10.3390/children3040020
- Cereseto, S., & Waitzkin, H. (1986). Capitalism, socialism, and the physical quality of life. *International Journal of Health Services*, 16(4), 643-658. doi:10.2190/AD12-7RYT-XVAR-3R2U
- Chaiken, S., & Eagly, A. H. (1983). Communication modality as a determinant of persuasion: The role of communicator salience. *Journal of Personality and Social Psychology*, 45(2), 241–256. doi:10.1037/0022-3514.45.2.241
- Chan, G., & Yanos, P. T. (2018). Media depictions and the priming of mental illness stigma. *Stigma and Health*, 3(3), 253–264. doi:10.1037/sah0000095.supp

- Cohen, G. L. (2003). Party over policy: The dominating impact of group influence on political beliefs. *Journal of Personality and Social Psychology*, 85(5), 808–822. doi:10.1037/0022-3514.85.5.808
- Frater, J. (2019, November 8). *10 unforgettable stories history forgot*. Listverse. <https://listverse.com/2010/12/28/10-unforgettable-stories-history-forgot/>
- Good, J. E. (2008). The framing of climate change in Canadian, American, and international newspapers: A media propaganda model analysis. *Canadian Journal of Communication*, 33(2), 233–255. doi:10.22230/cjc.2008v33n2a2017
- Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. K. (1998). Measuring individual differences in implicit cognition: The implicit association test. *Journal of Personality and Social Psychology*, 74(6), 1464–1480. doi:10.1037/0022-3514.74.6.1464
- Hartmann, G. W. (1936). A field experiment on the comparative effectiveness of "emotional" and "rational" political leaflets in determining election results. *The Journal of Abnormal and Social Psychology*, 31(1), 99–114. doi:10.1037/h0056079
- Hays, J. (2008). *Media in Vietnam: Television, television shows, newspapers, radio, censorship, and repression*. Facts and Details. http://factsanddetails.com/southeast-asia/Vietnam/sub5_9e/entry-3437.html
- Hendershot, C. (2003). *Anti-communism and popular culture in mid-century America*. North Carolina: McFarland & Company, Inc.
- Herman, E. S. (2000). The propaganda model: A retrospective. *Journalism Studies*, 1(1). doi:10.1080/146167000361195
- Herman, E., & Chomsky, N. (1988). A propaganda model. In N. Chomsky (Eds.), *Manufacturing consent* (pp. 1-35). Pantheon Books. Retrieved from <https://chomsky.info/consent01/>
- Hill, L. (2013). The great purge of Stalinist Russia. *Guided History*. <http://blogs.bu.edu/guidedhistory/moderneurope/laura-hill/>
- History.com Editors. (2020, February 28). *Red scare*. History. <https://www.history.com/topics/cold-war/red-scare>
- Hofmann, W., Gawronski, B., Gschwendner, T., Le, H., & M. Schmitt. (2005). A meta-analysis on the correlation between the Implicit Association Test and explicit self-report measures. *Personality and Social Psychology Bulletin*, 31(10): 1369–1385.
- Horcajo, J., Briñol, P., & Petty, R. E. (2010). Consumer persuasion: Indirect change and implicit balance. *Psychology & Marketing*, 27(10), 938-963. doi:10.1002/mar.20367

- Hovland, C.I., Janis, I.L., & Kelley, H.H. (1953). *Communication and persuasion*. Yale University Press.
- Jiang, F., Zalan, T., Tse, H. H. M., & Shen, J. (2018). Mapping the relationship among political ideology, CSR mindset, and CSR strategy: A contingency perspective to Chinese managers. *Journal of Business Ethics*, 147, 419-444. doi:10.1007/s10551-015-2992-7
- Kam, C. D. (2007). Implicit attitudes, explicit choices: When subliminal priming predicts candidate preference. *Political Behavior*, 29, 343-367. doi:10.1007/s11109-007-9030-0
- Keith, J. M., Bennetto, L., & Rogge, R. D. (2015). The relationship between contact and attitudes: Reducing prejudice toward individuals with intellectual and developmental disabilities. *Research in Developmental Disabilities*, 47, 14-26. doi:10.1016/j.ridd.2015.07.032
- Klaehn, J. (2009). The propaganda model: Theoretical and methodological considerations. *Westminster Papers in Communication & Culture*, 6(2), 43–58. doi:10.16997/wpcc.123
- Kogen, L., & Dilliplane, S. (2019). How media portrayals of suffering influence willingness to help: The role of solvability frames. *Journal of Media Psychology: Theories, Methods, and Applications*, 31(2), 92–102. doi:10.1027/1864-1105/a000232
- Marková, I. (2008). Persuasion and propaganda. *Diogenes*, 217, 37-51. doi:10.1177/0392192107087916
- Marx, K. (1875, May). [Letter to Social Democratic Worker's Party of Germany]. Retrieved from <https://www.marxists.org/archive/marx/works/1875/gotha/>
- Marx, K., & Engels, F. (2005). *The communist manifesto and other writings*. Barnes & Noble.
- Mull, C., & Wallin, M. (2013). *Propaganda: A tool of strategic influence* [Fact sheet]. <https://www-jstor-org.proxy.missouristate.edu/stable/resrep06038>
- Nguyen, T. (2020). 'Army of Trump' prepares at CPAC to battle socialism. *Politico*. Retrieved March 13, 2020, from <https://www.politico.com/news/2020/02/27/cpac-trump-socialism-117974>
- O'Shea, B. (Host). (2018, July 28). The Spanish Civil War [Audio podcast episode]. In *Revolutionary Left Radio*. Brett O'Shea. <https://podcasts.apple.com/us/podcast/revolutionary-left/radio/id1218054701?i=1000416787347>
- Persuasion. (n.d.). In *Wikipedia*. <https://en.wikipedia.org/wiki/Persuasion>

- Petty, R. E., Fazio, R. H., & Briñol, P. (2009). The new implicit measures: An overview. In R. E. Petty, R.H. Fazio,& P. Briñol (Eds.). *Attitudes: Insights from the new implicit measures* (pp. 3–18). New York: Psychology Press.
- Popular Front (Spain). (n.d.). In *Wikipedia*.
[https://en.m.wikipedia.org/wiki/Popular_Front_\(Spain\)](https://en.m.wikipedia.org/wiki/Popular_Front_(Spain))
- Project Implicit. (2011). *Take a test*. Project Implicit.
<https://implicit.harvard.edu/implicit/takeatest.html>
- Propaganda. (n.d.). In *Merriam-Webster*. <https://www.merriam-webster.com/dictionary/propaganda>
- Revolutionary Catalonia. (n.d.). In *Wikipedia*.
https://en.m.wikipedia.org/wiki/Revolutionary_Catalonia
- Roemer, J. E. (1994). A future for socialism. *Politics and Society*, 22(4), 451-478.
doi:10.2307/20710620
- Roskos-Ewoldsen, D., Roskos-Ewoldsen, B., & Dillman Carpentier, F. (2008). Media priming: An updated synthesis. In J. Bryant & M. B. Oliver (Eds.), *Media effects: Advances in theory and research* (pp. 74-93). Routledge Publishers.
- Rudman, L. A. & Phelan, J. E. (2010). The effect of priming gender roles on women's implicit gender beliefs and career aspirations. *Social Psychology*, 4(3), 192-202.
doi:10.1027/1864-9335/a000027
- Scheufele, D. A., & Tewksbury, D. (2007). Framing, agenda setting, and priming: The evolution of three media effects models. *Journal of Communication*, 57(1), 9–20.
doi:10.1111/j.0021-9916.2007.00326.x
- Schroeder, C. (2007). *Red scare propaganda in the United States: A visual and rhetorical analysis* [Unpublished master's thesis]. Georgia State University.
- Slusher, M. P., & Anderson, C. A. (1996). Using causal persuasive arguments to change beliefs and teach new information: The mediating role of explanation availability and evaluation bias in the acceptance of knowledge. *Journal of Educational Psychology*, 88(1), 110–122. doi:10.1037/0022-0663.88.1.110
- Smith, C. T., De Houwer, J., & Nosek, B. A. (2013). Consider the source: Persuasion of implicit evaluations is moderated by source credibility. *Personality & Social Psychology Bulletin*, 39(2), 193–205. doi:10.1177/0146167212472374
- Swann, W. B., Pelham, B. W., & Chidester, T. R. (1988). Change through paradox: Using self-verification to alter beliefs. *Journal of Personality and Social Psychology*, 54(2), 268–273. doi:10.1037/0022-3514.54.2.268

- Van Buuren, S. & Groothuis-Oudshoorn, C. (2011). MICE: Multivariate imputation by chained equations in R. *Journal of Statistical Software*, 45. doi:10.18637/jss.v045.i03.
- Ziegert, J. C. & Hanges, P. J. (2005). Employment discrimination: The role of implicit attitudes, motivation, and a climate for racial bias. *Journal of Applied Psychology*, 90(3), 553-562. doi:10.1037/0021-9010.90.3.553

APPENDICES

Appendix A. Institutional Review Board Approval



To:

D Mitchell
Psychology

Date: Apr 15, 2020 8:46 AM PDT

RE: Notice of IRB Exemption

Study #: IRB-FY2020-648

Study Title: Priming Effects, Implicit Attitudes, and Socialism

This submission has been reviewed by the Missouri State University Institutional Review Board (IRB) and was determined to be exempt from further review. However, any changes to any aspect of this study must be submitted, as a modification to the study, for IRB review as the changes may change this Exempt determination. Should any adverse event or unanticipated problem involving risks to subjects or others occur it must be reported immediately to the IRB.

This study was reviewed in accordance with federal regulations governing human subjects research, including those found at 45 CFR 46 (Common Rule), 45 CFR 164 (HIPAA), 21 CFR 50 & 56 (FDA), and 40 CFR 26 (EPA), where applicable.

Researchers Associated with this Project:

PI: D Mitchell

Co-PI:

Primary Contact: Amber Yanez

Other Investigators: David Zimmerman, Leslie Echols

Appendix B. Political Condition Vignettes

Pro-Socialism:

Vignette #1

Pro-socialism Vignette #1 was written by Castelló González et al., (2016). (Word Count = 233)

Castelló González, M., Pons Vázquez, R., Rodríguez Bencomo, D., & Choonara, I. (2016). International medical collaboration: Lessons from Cuba. *Children*, 3(4), 20. doi:10.3390/children3040020

Vignette #2

In 1936, a broad coalition of left and center-left republicans known as the “Popular Front” swept the Spanish parliament in a historic election. This left the region of Catalonia under the administration of libertarian communists. Their central tenant was that economic and public life should be regulated by small, local, democratically elected councils of working people and not by big governments with big guns and bigger egos. Under this model, large sections of the economy were reorganized into worker-owned and self-managed cooperatives. For the first time, laborers were able to use their collective expertise to come to important decisions democratically. They finally received proportionate compensation since there weren't any bosses to hoard up their labor-value to keep as profits.

While collectivization was the model for agriculture and industry, the Catalans made special provisions for small mom-and-pop businesses as well as self-employed handymen and artisans. However, these changes weren't coerced, and several companies remained privatized. Yet, these private companies would soon find they had chosen the wrong model in prizing profit over human decency. After a few initial bumps, the collectivized industries and farms experienced a massive leap in productivity, output, and innovation.

The working-class also saw progress in the soaring rates of female literacy, the provision of healthcare and childcare services, the free access to public goods like food and transportation, and the decrease in necessary work hours for everyday laborers. But, the fascist military lead by Franco sought to destroy this progress. While many working-class Americans relocated to Spain to volunteer in the democratic forces, the U.S. took an official stance of so-called “non-intervention.” Yet, this policy included important carve outs, like allowing Texaco to continue selling oil to the Nazi-backed Francoists. Under Franco's brutal dictatorship, the democratic forces were soon decimated, and Spain was plunged into decades of oppressive nationalism. (Word Count = 302)

Pro-socialism Vignette #2 was written using the following resources:

1936 Spanish General Election. (n.d.). In *Wikipedia*. Retrieved from

https://en.m.wikipedia.org/wiki/1936_Spanish_general_election

O'Shea, B. (Host). (2018, July 28). The Spanish Civil War [Audio podcast episode]. In *Revolutionary Left Radio*. Brett O'Shea. <https://podcasts.apple.com/us/podcast/revolutionary-left/radio/id1218054701?i=1000416787347>

Popular Front (Spain). (n.d.). In *Wikipedia*. Retrieved from

[https://en.m.wikipedia.org/wiki/Popular_Front_\(Spain\)](https://en.m.wikipedia.org/wiki/Popular_Front_(Spain))

Revolutionary Catalonia. (n.d.). In *Wikipedia*. Retrieved from

https://en.m.wikipedia.org/wiki/Revolutionary_Catalonia

Anti-Socialism:

Vignette #1

Vietnam, also known as the Socialist Republic of Vietnam, is a one-party socialist republic ruled by the Communist Party of Vietnam. The country became a socialist state in 1945 and despite fighting various wars, remains a socialist country today. The Communist Party of Vietnam strictly regulates the media within the country. All of the local media is controlled by the government and is tasked with casting the Communist Party and its activities in a positive light. Content that is controversial or threatens the party's rule is blocked by the government and those who put forth such content are at risk for intimidation and physical attack. There are hundreds of newspapers, but the government owns almost all of them. Bloggers and citizen journalists are the only sources of independent news and they often face harsh persecution. The Communist Party of Vietnam also controls all broadcast media within the country, excluding foreign television broadcasts.

While the government prohibits certain speech, the constitution still recognizes freedom of expression. However, repressive laws constrain journalists and bloggers. The speech that is prohibited by the government is vaguely defined and broadly interpreted, meaning, the government has more reigns to interpret acts as being in violation of the law. When journalists report on sensitive topics, usually topics that are not permitted by the government, the police will use violence and intimidation to silence the reporters. The police will also raid homes and offices to silence the journalists. The Vietnamese government is intolerant of citizens using prohibited speech and will go to great lengths to verify that Communist propaganda is promoted. (Word Count = 263)

Anti-socialism Vignette #1 was written using the following resources:

BBC. (2018, November 20). Vietnam profile – Media. *BBC News*. <https://www.bbc.com/news/world-asia-pacific-16567840>

Hays, J. (2008). *Media in Vietnam: Television, television shows, newspapers, radio, censorship, and repression*. Facts and Details. http://factsanddetails.com/southeast-asia/Vietnam/sub5_9e/entry-3437.html

Vignette #2

Anti-socialism Vignette #2 was written by Laura Hill (2013). (Word Count = 279)

Hill, L. (2013). The great purge of Stalinist Russia. Guided History. <http://blogs.bu.edu/guidedhistory/moderneurope/laura-hill/>

Control:

Vignette #1

Control Vignette #1 was written by Jamie Frater (2019) and is about the steamboat Sultana. (Word count = 207)

Frater, J. (2019, November 8). *10 unforgettable stories history forgot*. Listverse. <https://listverse.com/2010/12/28/10-unforgettable-stories-history-forgot/>

Vignette #2

Control Vignette #2 was written by Jamie Frater (2019) and is about America's first subway. (Word count = 315)

Frater, J. (2019, November 8). *10 unforgettable stories history forgot*. Listverse. <https://listverse.com/2010/12/28/10-unforgettable-stories-history-forgot/>

Appendix C. Implicit Association Test Stimuli Words

Attribute Stimuli		Target Stimuli	
Positive Attributes	Negative Attributes	Target A	Target B
Positive words	Negative words	Socialism words	Capitalism words
1. good	1. nasty	1. socialism	1. capitalism
2. awesome	2. awful	2. socialist	2. private property
3. great	3. terrible	3. Karl Marx	3. commercialism
4. excellent	4. bad	4. Bernie Sanders	4. consumerism
5. marvelous	5. disastrous	5. worker ownership	5. private sector
6. wonderful	6. dreadful	6. anarchy	6. Wall Street
7. fabulous	7. appalling	7. redistribution	7. entrepreneurship
8. splendid	8. disappointing	8. communism	8. big business
9. terrific	9. depressing	9. labor union	9. individualism
10. nice	10. gloomy	10. Communist Manifesto	10. investment banking

Appendix D. Demographic Questions

1. What is your gender?
 - a. Male
 - b. Female
 - c. Other
 - d. Prefer not to respond
2. What is your age?
 - a. _____
3. What is your race/ethnicity?
 - a. African/African American
 - b. Caucasian
 - c. Latino/Hispanic
 - d. Asian/Pacific Islander
 - e. Native American
 - f. Other
4. What is your class status?
 - a. Freshman
 - b. Sophomore
 - c. Junior
 - d. Senior
 - e. Graduate student
5. What is your political party affiliation?
 - a. Democrat
 - b. Republican
 - c. Independent
 - d. Libertarian
 - e. Green Party
 - f. I do not have a political affiliation
 - g. Other

6. What is your political tendency?

Conservative			Center Right			Center Left			Progressive
1	2	3	4	5	6	7	8	9	10

****Note. Participants used a sliding scale to determine where their political tendency falls on the spectrum.***

Appendix E. Informed Consent and Debriefing

Informed Consent

Missouri State University Consent of Participation

This study is part of the Missouri State University Psychology Graduate Program designed to give us more information and to fulfill a thesis requirement for Amber Yanez. The following information is provided so that you can decide whether you wish to participate in this study. If you agree to participate, you will (not necessarily in this order) read two history stories, complete a memory test, and complete an attitudes assessment. The study will be conducted using Qualtrics and a computer and is estimated to take 20-30 minutes.

Please be assured that if you agree to participate, you are free to withdraw from the study even after you have provided consent. If you wish to withdraw, simply stop, and exit Qualtrics.

Since it is our policy to protect the confidentiality of all our participants, your answers will be sent to a link at Qualtrics where data will be stored in a password protected electronic format. Qualtrics does not collect identifying information such as your name, email address, or IP address. Therefore, your responses will remain anonymous. No one will be able to identify you or your answers, and no one will know whether or not you participated in the study.

HOW WILL MY DATA BE PROTECTED? The informed consent forms for this study are confidential and only the investigators will have access to the information which will be securely stored. Your name or personal identifying information will not be used in any published reports of this research.

If questions arise after you have left the research laboratory, feel free to contact Amber Yanez at Yanez94@live.missouristate.edu or D. Wayne Mitchell, Ph.D. at 417-836-6941 or at WayneMitchell@missouristate.edu. We do not anticipate any risk to you as a result of participating in this study, but it is unlikely that this study will provide you with any direct benefits. Your participation will, however, make an important contribution to our scientific knowledge, and we very much appreciate your cooperation.

If you feel you have not been treated according to the descriptions in this form, or that your rights as a participant in research have not been honored during the course of this project, or you have any questions, concerns, or complaints that you wish to address to someone other than the investigator, you may contact the Missouri State University Institutional Review Board at 901 S. National Avenue, Springfield, MO 65897, or by telephone at 417-836-5972 OR 417-836-4132.

Please select your choice below. If you wish to print a copy of this consent form for your records, right-click while on the informed consent page and click print.

Clicking on the “Agree” button indicates that you have read the above information, that you agree voluntarily to participate, and you are 18 years of age or older.

- Agree (1)

- Disagree (2)

Debriefing

Thank you for your participation in this experiment. The goal of this study was to determine the effect of priming on beliefs about Socialism. In the experiment, you read two history stories that either presented positive aspects of Socialism, negative aspects of Socialism, or did not include any information related to Socialism. After reading the stories, you completed an Implicit Association Test (IAT) to assess if you had any implicit biases for or against Socialism. The researcher is interested in assessing whether reading the history stories would affect your implicit biases. Ideally, if you read stories that positively represent Socialism then the IAT would detect an implicit bias for Socialism and if you read stories that negatively represent Socialism then the IAT would detect an implicit bias against Socialism. If you read history stories that were not related to Socialism, then you were in the control group.

The nature of the phenomenon I am investigating required minor deception on my part; for instance, I did not disclose the fact that the study is investigating priming effects on Socialism. This information was excluded because knowledge of the true purpose of the study could have affected the results.

Your participation is greatly appreciated by the researcher. If you have any questions about this study, please contact Amber Yanez at Yanez94@live.missouristate.edu or D. Wayne Mitchell, Ph.D. at 417-836-6941 or at WayneMitchell@missouristate.edu.

Finally, I urge you not to discuss this study with anyone else who is currently participating or might participate at a future point in time. As you can certainly appreciate, I will not be able to examine priming effects on Socialism in participants who know about the true purpose of the project beforehand.

Thank you!