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Superheroes, Safety, and Social Policy: Induced Levels of Physical Security may Produce Greater Liberal Policy Preferences

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Superheroes, Safety, and Social Policy:
Induced Levels of Physical Security may Produce Greater Liberal Policy Preferences

An Undergraduate Honors Thesis
Submitted in Partial Fulfillment of
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by
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Abstract

Preferences for conservative policies are thought to be, at least in part, the result of experiencing a more threatening world, and consequentially preferring to avoid, rather than approach, new information or situations (Hibbing, Alford & Smith, 2014; Jost, Federico, & Napier, 2013; Shook & Fazio 2009). In addition to explaining how policy attitudes may be formed, this recent research has helped to explain why attitudes may be more responsive to external influences (or manipulations) than previously thought, especially in regard to political attitudes such as ideology and partisanship. Therefore, as feelings of safety are increased, and feelings of threat are decreased, individuals' policy preferences may become less conservative. This study examines the relationship between economic & social policy attitudes, ideology, and feelings of safety. In order to explore this, we replicated Study 1 conducted by Napier and colleagues (2017), which demonstrated that when conservative individuals imagined a scenario in which they were invincible, and consequently felt physically safe, this increased their liberalism on social policy preferences. We find that while the manipulation successfully increased feelings of physical safety, this resulted in no significant effect on political attitudes for either Republicans or Democrats. This research demonstrates the importance of further exploration into the relationship of safety, rather than threat, and political attitudes.

Keywords: safety, threat, superhero, political attitudes, social policy preferences
Superheroes, Safety, and Social Policy:

Induced Levels of Physical Security may Produce Greater Liberal Policy Preferences

A growing body of research within political psychology has outlined the vast differences that exist between liberals and conservatives. Among these differences is a consistent theory that conservatives possess a heightened psychological response to both uncertainty and threat, and subsequently this is influential on the formation of political ideology (Jost, Glaser, Kruglanski, & Sulloway, 2003). More generally, some argue that the underlying mechanism for the conservative aversion to threat, is a general negativity bias (Hibbing, Smith, & Alford, 2014). For instance, Shook and Fazio (2009) found that compared to their liberal counterparts, conservative individuals were less willing to engage in a learning behavior of novel stimuli that was associated with a minor degree of risk. Combined with the theory that conservatives have a heightened response to both negative stimuli and threat, this demonstrates that conservative behavior can, to some degree, be explained by a drive to reduce that threat. This behavior is rooted in the basis that conservatives are more likely to perceive the world through a threatening lens. In fact, potentially threatening and negative stimuli, such as images of a hurricane or a shark, more readily attract the attention of conservative individuals (Carraro, Castelli, & Macchiella, 2011). As a result, conservatives view the world as a more dangerous place than liberals (Duckitt, Wagner, du Plessis, & Birum, 2002). Ultimately, the present study looks to explore whether this conservative threat reduction behavior could similarly manifest itself into a desire for safety, and furthermore, whether increasing personal feelings of safety will result in more liberal policy preferences.

To understand the reasoning as to why threat would be motivating to political ideology, one can look to the concept of system justification. The social psychological concept of system
justification is defined as a “psychological processes contributing to the preservation of existing social arrangements even at the expense of personal and group interest” (Jost & Banaji 1994). It has been well established that conservatives consistently report higher scores of system justification when compared to liberals (Jost, Ledgerwood, & Hardin, 2008). This general conservative quality appears to be a defining aspect of political ideology, and logically runs congruent with the conservative goal to preserve and bolster support for the status quo. However, threat’s influence appears to be intertwined with individual desires to support the status quo for both sides of the ideological spectrum. In fact, in the event that one’s sociopolitical system is threatened, both conservatives and liberals are motivated to “see the way things are as the way they should be” (Kay et al., 2009). Ultimately, since threat appears to entrench individuals into defending their social systems, this lends itself to the idea that conservatives are more threat perceptive than their liberal counterparts.

The tendency to defend the status quo seems to be intrinsically connected to the desire to reduce threat, and subsequently achieve certainty. System justification, therefore, acts as a means to attain certainty. It has been demonstrated that individuals who report high levels of uncertainty become more committed to their social groups and prior attitudes in an attempt to mediate the negative feelings associated with uncertainty (McGregor, Zanna, Holmes & Spencer, 2001). The gravity of one’s desire for certainty appears to be associated with political ideology. This is illustrated by the fact that individuals who possess a high need for closure are more likely to express conservative attitudes and vote for right-wing party candidates (Chirumbolo, Areni, & Sensales 2004). The implications of individuals’ abilities to manage uncertainty are further exhibited by a study in which participants who ranked high in need for closure were more likely to support military action against Iraq and other conservative policies (Federico, Golec, & Dial
Conversely, the cognitive ability to work through abstract information, which requires reasoning beyond concrete ideas, is associated with social liberalism (Hodson & Busseri, 2012). As a result, the need to reduce uncertainty directly drives a motivation to preserve existing social systems.

In addition, the link between threat sensitivity and political ideology appears to be based in biological and physiological responses. Oxley and colleagues (2008) found that individuals who demonstrated increased physical responses to threatening stimuli were more likely to endorse socially conservative policies. Furthermore, neuroscientific studies have found that liberal individuals generally perform better on tasks that require the restraint of habitual responses, which is “associated with stronger conflict-related anterior cingulate activity” (Amodio, Jost, Master, & Yee, 2007, p. 1246). This supports the idea that conservative threat perceptions are, at least to some extent, associated with a biological predisposition. Overall, conservatives display almost a heightened biological need to reduce uncertainty compared to their liberal counterparts, which plays a major role in political attitude development.

While there is substantial evidence relating conservatism to threat, there is some disagreement on the effects of inducing threat and uncertainty, resulting in two major theories, the conservative shift hypothesis, and the worldview defense hypothesis. Those that defend the conservative shift hypothesis argue that increasing liberal perceptions of threat can cause individuals to become more socially conservative. This theory was examined by Jost and colleagues (2003) in their review, in which they report that conservatives, moderates, and liberals who had just thought about death all reported more conservative ideologies. As a result, the need to minimize threat appears to affect individuals across the political ideological spectrum. Similarly, in experiments conducted on politically liberal college students, they shifted to
become psychologically conservative after being exposed to mortality threats, demonstrating the salience of the theory (Nail et al., 2009). The effects of this phenomenon have real-world impacts. A study conducted on survivors of the September 11, 2001, terrorist attacks found that both Democrats and Republicans reported shifting towards conservatism in the 18 months after the attack (Bonanno and Jost, 2006). While this could indeed demonstrate the effect of threat on ideology, the findings may be a result of citizens rallying around the standing president, who at the time was a Republican. As a result, the conservative shift demonstrated in this study may have been the effect of respondents seeking to defend the status quo, and subsequently the Republican president of the time. Overall, however, this potentially illustrates the effect threat can have on the populace’s political ideology, and specifically how global events can result in social system justification.

Conversely, the worldview defense theory argues that inducing uncertainty or threat, makes individuals more likely to defend their prior political attitudes. In a study of undergraduate students, in which they induced feelings of uncertainty and threat by asking about personal dilemmas, they found that participants who felt threatened increased their convictions on their beliefs, and ultimately became more entrenched in their ideals (McGregor, & Marigold, 2003). Furthermore, research by Haas and Cunningham (2014), has found that while inducing only feelings of uncertainty makes individuals more tolerant, when individuals feel both threatened and uncertain they become less tolerant, with no major differences between liberals and conservatives in this effect. Overall, this supports the idea that uncertainty in combination to threat results in a defensive response to regain one’s perception of control, and ultimately entrench one’s self deeper in their beliefs. Therefore, the exact relationship that exists between
inducing threat and the resulting political attitudes remains complex, and necessary to explore further.

**Overview of Present Research**

While most prior research has explored conservative shifts among individuals, not much is known about how to induce the reverse effect – what makes individuals more liberal. The present study, in line with Napier and colleagues (2017), argues that this can be tested by fostering the opposite of threat, which we assert is safety. For the purpose of this paper, we seek to create a sense of personal safety, which we define not only as the opposite of threat, but also as a sense of security from physical harm and injury. By increasing one’s sense of physical safety, this ought to reduce threat driven behavior, and allow for examination of any subsequent changes in political attitudes.

The present study aims to explore the dynamics of the relationship between threat, safety, and political ideology by replicating the research of Napier and colleagues (2017). Using a novel experimental design, they manipulated individuals' feelings of safety by having participants visualize a scenario in which they were endowed with one of two superpowers: flying or physical invincibility. This functioned to elicit a sense of physical safety for the experimentally invulnerable participants, and they consequently analyzed the impacts of reduced feelings of threat on political attitudes. Through their design, they explored a key relationship between physical safety and social policy attitudes. They found that when conservative individuals imagined a scenario in which they were invincible, and consequently felt physically safe, this increased their liberalism on social policy preferences. Replication of this study is necessary in order to gauge the generalizability of their novel experimental design, which could better inform our understanding of how policy attitudes are formed and how they may be manipulated.
Consequently, the present research is critical to disentangle the true effects of threat and safety on political attitudes for a myriad of reasons. First, the study conducted by Napier and colleagues (2017) effectively isolates feelings of threat from polarizing political issues, to identify whether political attitude formation is affected by seemingly nonpolar issues. In other words, the manipulation functions outside the political realm, reducing any interference from individual preconceived notions. While some research has focused on using nonpolitical stimuli to test political attitudes (Hibbing, Smith, & Alford, 2014), most prior research has focused primarily on inducing threat through social scenarios that are invariably connected to political ideology, such as immigration policy or terrorist threats. By using nonpolitical means, this can ideally provide greater insight into the relationship that exists between threat and ideology. More specifically, Napier and colleagues (2017) proposed a manipulation that focuses on physical safety, rather than utilizing an external political factor. Through the novel manipulation of inducing safety, Napier and colleagues were able to test whether this would reduce individuals desire to seek comfort in their established ideas, and potentially be more open to change. Moreover, the present research is important in expanding on prior research, in that it analyzes the inverse relationship. A majority of literature establishing the link between threat and conservatism utilizes manipulations that induce greater feelings of threat for participants. This generally has been found to lead to individuals reporting more conservative policy preferences (Jost et al., 2003). However, the present study reverses this relationship, and analyzes whether increasing feelings of safety results in individuals supporting more liberal policies. Furthermore, this research is important because it is critical to understand how external political events cause political shifts in ideology within a population. For example, it has been found that populations can experience a socially conservative ideological shift, following terrorist threats and attacks.
(Nail et al., 2009). During these periods of time, individuals are more likely to rally around a call for tradition, and thus conservative values. Therefore, this research is important to expand, by exploring the converse: Are political attitudes similarly affected by a reduction in threat?

In sum, political ideology is meaningful beyond simply demarking differing policy preferences and attitudes. Rather, it extends into individual psychological and physiological predispositions, and with regards to the present study, is potentially rooted in threat perceptions. Therefore, with the aforementioned information in mind, we offer the following hypotheses for the replication of the Napier and colleagues (2017) study: First, when endowed with the “invulnerable” superpower, individuals will report more liberal policy preferences compared to those endowed with the "flying" superpower. Second, in line with the Napier et. al. findings, we hypothesize that individuals in the “invulnerable” superpower condition will report stronger social, but not economic, liberal policy preferences. Finally, similar to Napier and colleagues, we predict that attitude changes may be observed for both Democrats and Republicans, however, the gravity of liberal policy shifts will be more substantial for Republicans rather than Democrats. We suggest this trend because compared to liberals, conservatives are more likely to perceive threat and subsequently have a psychological response. As a result, we expect the inverse of this to be true as well, in which conservatives will be more responsive to safety manipulations due to the intrinsic connection to threat.

**Methods**

For the purposes of this experiment, we replicated the methods outlined in study one of Napier and colleagues (2017), in which they manipulated individuals' feelings of safety by having participants visualize a scenario in which they were endowed with one of two superpowers: flying or physical invincibility. Individuals who were asked to imagine themselves
as physically invulnerable were the experimental group, as this was intended to increase the perception of individual safety, whereas the flying condition served as the control for the experiment.

**Participants**

Data for this project was collected from October 2017 to December 2017, from 356 students enrolled in introductory political science courses. This was consistent with Napier and colleagues’ (2017) sample of 158 individuals who were “recruited from a University-hosted online subject pool” (p. 189). Of the individuals sampled for the present study, the average age was 19.4 ($SD = 2.12$), with 49.6% of the sample identifying as male, and the remaining 50.4% identifying as female. In the Napier and colleagues study (2017), the average age was 35.31 ($SD = 13.18$), with 33.1% identifying as male, and the remaining 66.1% identifying as female. With regards to race, 89.8% of respondents identified as white in the present study, and 74.5% identified as white in the Napier study. The measure of partisanship for the present study revealed that 28.1% of participants supported the Republican candidate in the 2016 U.S. presidential election, 34.0% supported the Democrat, 14.5% identified supporting a candidate from another party, and 23.4% did not support a candidate in the 2016 presidential election. With regards to the sample from the Napier and colleagues study (2017), after accounting for individuals who did not support a candidate in the most recent election, 31% reported a preference for the Republican candidate, and the remaining 69% reported a preference for the Democrat. Moreover, in the present study, 56 participants were removed from the analysis as they did not respond to the manipulation check, and 77 participants were removed because they did not identify with a candidate when measuring for partisanship. This left a final sample size of 223 for analysis (See table 3).
Materials

Alongside Napier and colleagues (2017), we adapted the superhero manipulation developed by Huang, Ackerman, and Bargh (2013). In this visualization task, participants in both conditions were presented with the following introduction scenario:

“On a shopping trip, you wander into a strange store with no sign out front. Everything is dimly lit and the shopkeeper calls you by name even though you have never seen him before. He tells you to come close and he says to you in a weird voice ‘I have decided to give you a gift. Tomorrow, you will wake to find that you have a super-power. It will be an amazing ability, but you must keep it absolutely secret. If you purposely tell anyone or show off your power, you will lose it forever.’”

For those in the physical invulnerability condition (N=113), the following passage followed the introduction:

“That night, you have a hard time sleeping, but when you wake, you find that you do indeed have a super-power. A glass falls on the floor and without meaning to you accidentally step on the broken glass. It doesn't hurt you at all though, and you realize that you are completely invulnerable to physical harm. Knives and bullets would bounce off you, fire won't burn your skin, a fall from a cliff wouldn't hurt at all. You don't have any other super-powers though (for example, no super-strength). Everything else is exactly the same as it was yesterday.”

Finally, participants assigned to the control condition (N=110) were presented with the following continuation of the story:

“You miss a step going down on the stairs, but instead of tumbling down, you float gently to the bottom of the banister. You try jumping from the top of the stairs again and
realize that you are able to fly. You can propel yourself through the air as if you were a bird. You can travel entire distances without even touching the ground.”

**Procedure**

Following the story visualization task, the participants were all asked to write a few sentences describing their feelings towards the new superpower which functioned as a manipulation check, and subsequently 56 participants were removed for failing to complete this question. Safety was then measured through a nine-point scale, which asked participants to report how safe they feel ($M = 6.74$, $SD = 2.33$). Similarly, participants were also asked to report how certain they felt about the powers ($M = 3.45$, $SD = 1.11$), how positive they felt about the power’s influence ($M = 6.70$, $SD = 2.07$), and how positive they felt about the powers in general ($M = 7.16$, $SD = 1.97$). Additionally, political orientation was tested through a nine-point scale through the following item: “Labels are often misleading but in general, do you see yourself as liberal, conservative or something in between when it comes to social/economic issues?” Participants reported a mean social conservatism score of 4.69 ($SD = 2.72$) and a mean economic conservatism score of 5.59 ($SD = 2.54$). Unlike the procedure described by Napier and colleagues (2017), political orientation was also measured by asking individuals to report their policy preferences on specific contemporary policy issues, as well as using the Wilson-Patterson Attitude Inventory (Wilson & Patterson, 1968). This addition was included to measure political attitudes beyond the general measurement items, which allows for a more specific and potentially more accurate analysis of policy preferences. \(^1\)

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\(^1\) In addition to the measures mentioned, participants were also asked to complete a Political Tolerance Scale (Haas, & Cunningham, 2014), the Haidt and Graham measure of moral foundations (2007), and the Social Dominance Orientation Scale (Pratto, Sidanius, Stallworth, & Malle, 1994). However, these measures were beyond the scope of the present research.
Similar to the previous study, participants were asked to report their feelings of safety, political ideology, and opinions on a series of economic and social policy preferences. However, there are a couple notable deviations from the protocol described by Napier and colleagues (2017). First, with regards to analyzing participants’ partisanship, Napier and colleagues (2017) opted to ask “which party (Democrat vs. Republican) they voted for in the most recent election.” In the present study, participants were asked first whether they voted in the 2016 election, and if so, which presidential candidate did they support. This change in wording was necessary due to the replication study occurring after the 2016 election, unlike the previous study. The second major discrepancy is that Napier and colleagues (2017) assess participants’ reactions to their superpower by asking them to report their mood and liking. Whereas, in the present replication, participants were asked to report whether they believed the superpower would positively or negatively influence their life, and whether they feel positive or negative about the superpower in general.

Results

Manipulation Check

Consistent with Napier and colleagues (2017), feelings of physical safety increased for participants in the invulnerability condition compared to those in the flying condition (see Tables 1a, & 1b. This suggests that, as intended, the manipulation successfully elicited emotions of safety for the experimental group. However, unlike the previous study, feelings of positivity towards the flying condition were significantly higher than those towards the invulnerable condition. These findings run contrary to previous research by Huang, Ackerman and Bargh (2013), who found flying and invulnerability to be equally desirable qualities. This could
potentially have confounding effects on the manipulation’s ability to successfully isolate feelings of safety as the independent variable.

**Manipulation and Political Attitudes**

First, we conducted a series of tests beyond the specific results reported by Napier and colleagues (2017) to further examine the relationship between the manipulation and political attitudes. Among these, a univariate ANOVA was conducted to examine the effect of the manipulation (flying and invulnerability) on the participants’ combined political attitude score. The combined political attitude score was obtained by averaging the responses for social and economic policy attitudes on a nine-point scale for each individual (1 = strong liberal; 9 = strong conservative). In contrast to the aforementioned first hypothesis, individuals in the invulnerable condition did not have a significantly different combined political attitude score than those in the flying condition \(F(1, 357) = 0.345, p = 0.557\). Individuals in the flying condition reported a mean total political attitude score of 4.98 \((SD = 2.23)\), while individuals in the invulnerable condition reported a mean political attitude score of 4.84 \((SD = 2.21)\).

The manipulation was then analyzed against political attitudes when separated into social and economic preferences, as an additional test beyond those conducted by Napier and colleagues (2017). Contrary to the second hypothesis, individuals in the invulnerable condition did not have significantly different social conservatism scores than those in the flying condition \(F(1, 357) = 0.854, p = 0.356\). Individuals in the flying condition reported a mean social conservatism score of 4.54 \((SD = 2.53)\), while individuals in the invulnerable condition reported a mean social conservatism score of 4.30 \((SD = 2.36)\). In line with the second hypothesis, individuals in the invulnerable condition did not have a significantly different economic conservatism scores than those in the flying condition \(F(1, 357) = 0.023, p = 0.880\). Individuals
in the flying condition reported a mean economic conservatism score of 5.41 (SD = 2.28), while individuals in the invulnerable condition reported a mean economic conservatism score of 5.38 (SD = 2.30).

Similar to Napier and colleagues (2017), three multivariate ANOVA tests were also conducted in which partisanship and manipulation condition were fixed variables, and social, economic, or combined policy attitudes were the dependent variable. This test was important in examining whether the effect of the superpower condition was moderated by the participant’s political identification. As in the Napier and colleagues paper (2017), we expected that Republicans in the invulnerable condition would become more socially, but not economically, liberal. With regards to the combined political attitude score, results unsurprisingly revealed a significant main effect of partisanship on political attitudes (F(1,219) = 477.19, p < 0.001), demonstrating that Republicans are indeed more conservative than Democrats. However this was not qualified by the condition-by-partisanship interaction (F(1,219) = 0.015, p = 0.90). For social conservatism, results revealed a significant main effect of partisanship (F(1,219) = 439.653, p < 0.001). Contrary to the results found by Napier and colleagues, this was not qualified by the predicted condition-by-partisanship interaction (F(1,219) = 0.04, p = 0.85), meaning that the safety manipulation did not result in increased social liberalism for individuals in either party (see Figure 1a). Finally, for economic conservatism, results also revealed a significant main effect of partisanship (F(1,219) = 304.230, p < 0.001). Similar to the results demonstrated by Napier and colleagues (2017), this was also not qualified by the condition-by-partisanship interaction (F(1,219) = 0.151, p = 0.698), meaning that the safety condition did not influence economic political attitudes for individuals of either party identification (see Figure 1b). Overall,
the results failed to replicate the effects demonstrated by Napier and colleagues (2017), as the manipulation had no significant impact on social policy preferences for Republicans.

**Discussion**

The major discrepancy between the present study and the findings from Napier and colleagues (2017) is that social policy attitudes for Republicans were found to be unchanged as a result of the superhero manipulation. Similar to the findings in the previous study, however, social policy attitudes were unchanged for Democrats, and economic policy attitudes were not affected for individuals of both parties. This major finding could suggest that the manipulation is unsuccessful in evaluating the effects of safety on political attitudes, or even more broadly, that promoting feelings of safety does not induce liberal policy preferences as predicted. However, it ought to be mentioned that it is difficult to draw conclusions from null findings, such is in the present replication, which may suggest the presence of an untested moderator in the study. The gap in between these findings could be due to a number of reasons, and most notably, this could be a temporal effect. The data utilized in the Napier and colleagues (2017) paper was collected just prior to the 2016 presidential election. This was a time fraught with radical shifts in party identities, and strong individual and emotional connections to political ideas. More importantly, however, this was a time in which the president was a Democrat. Therefore, in the previous study, Republican respondents may have experienced a heightened sense of political threat, and as a result, may have been more malleable to shifts in personal safety.

This study is important in adding to the growing body of research concerned with threat and its relationship to conservatism. More specifically, the general pattern of research has established that inducing feelings of threat can make liberals behave more like conservatives in their political attitudes (Nail et al., 2009). The present study may suggest that the reverse
relationship is not as likely. In other words, inducing feelings of safety for conservatives may potentially not result in the same shift towards social liberalism. Furthermore, while threat has been found to cause individuals to defend the status quo, and particularly social systems (Kay, Gaucher, Peach, Laurin, Friesen, Zanna, & Spencer, 2009), the present study may suggest that safety does not have a significant effect in moderating this relationship. Rather, safety does not appear to reduce the general conservative attitude of maintaining the social system.

While the superhero manipulation may not have had the hypothesized effect on social conservatism, this may still run congruent with established theories regarding threat. For example, some argue that the relationship between threat and conservatism is entrenched in a “negativity bias” in which conservative individuals experience heightened psychological and physiological responses to negative stimuli (Hibbing, Smith, & Alford, 2014). The superhero manipulation examined in this study is almost devoid of objectively negative experiences. In fact, respondents generally reported their feelings of positivity towards the superpower as highly favorable, as demonstrated in the manipulation check. To some extent, the lack of movement in political attitudes in this study is congruent with the negativity bias theory. Since conservatives are more attendant to negative stimuli, it would suggest that in a positive manipulation, there would be little alterations in political attitudes as demonstrated by the results of the present study.

While the present study adds to the body of literature, there are a number of limitations within the replication. First, it is notable to mention the demographic differences that exist between the replication, and the study by Napier and colleagues (2017). Among these disparities is the age distribution of both samples. While the present study had a mean sample age of 19.4 ($SD = 2.12$), Napier and colleagues (2017) reported a mean age of 35.31 ($SD = 13.18$). The
significantly higher mean age reported by the previous study, and subsequent wider spread of individuals according to age, may partially account for the difference in results. Since individuals in early adulthood generally partake in more risk associated behaviors (Steinberg, 2004), this could potentially be associated with an already perceived degree of invulnerability in youth. As a result, the manipulation may not have had as significant of an effect on a younger population, which may be less perceptive to alterations to feelings of safety. Beyond demographic differences in age, the present study differed from Napier and colleagues (2017) in the population’s partisanship. The present study’s population consisted of 122 individuals who supported the Republican candidate in the 2016 (54%), compared to the 45 individuals reported in the Napier and colleagues (2017) study (31%). The more even partisan distribution in the present study could potentially account for the failure to replicate, as sampling fewer Republican participants would reduce the power of the study to reach the correct conclusion.

While the results in this replication failed to match those represented in the Napier and colleagues study (2017), the manipulation still holds interesting implications for the future. First, the manipulation could be improved in several ways. Namely, future studies utilizing the manipulation could include a pre-manipulation check of initial feelings of safety. By including an initial safety check for participants, this would allow for analysis of only individuals for which feelings of safety increased. This would ultimately result in a more reliable test of the relationship between feelings of personal safety and political attitudes, as this would more effectively isolate the independent variable. Moreover, future studies utilizing the manipulation should consider including a third condition, in which individuals are endowed with no superpower whatsoever. The inclusion of this third condition would act as a positive control, in which it would be understood that before and after the manipulation there would be no changes
in feelings of personal safety. By including this extra condition, this would not only check that flying is a proper control condition, but also allow for a more direct comparison between individuals who properly feel a heightened sense of safety, and those who experienced no change at all.

In sum, the idea of inducing feelings of personal safety for conservatives opens up the possibilities for many future explorations into the flexibility of political attitude changes in society. More specifically, most prior research has focused on how increasing threat can cause dramatic shifts in political attitudes. The superhero manipulation is a major stepping stone in designing interventions to manipulate political attitudes in a more applied way than previously researched. Rather than using threat as a tool to be more divisive, qualities such as safety can be used in a way that is more unifying.
References


Tables and Figures

Table 1a. Replication study means and standard deviations for manipulation check items.

<table>
<thead>
<tr>
<th>Superpower (condition)</th>
<th>Flying</th>
<th>Invulnerability</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certainty</td>
<td>3.50 (1.09)</td>
<td>3.38 (1.13)</td>
<td>0.99</td>
<td>0.12</td>
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<tr>
<td>Influence</td>
<td>6.71 (1.92)</td>
<td>6.38 (2.07)</td>
<td>1.58</td>
<td>0.12</td>
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<tr>
<td>Safety</td>
<td>6.00 (2.36)</td>
<td>7.45 (2.09)</td>
<td>-6.14</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Feeling</td>
<td>7.33 (1.83)</td>
<td>6.85 (2.07)</td>
<td>2.29</td>
<td>0.02</td>
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</table>

Table 1b. Napier and colleagues (2017) means and standard deviations for manipulation check items.

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<th>Flying</th>
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<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certainty</td>
<td>4.52 (2.33)</td>
<td>4.29 (2.08)</td>
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<tr>
<td>Influence</td>
<td>6.22 (1.97)</td>
<td>5.68 (2.28)</td>
<td>1.54</td>
</tr>
<tr>
<td>Safety</td>
<td>5.49 (1.69)</td>
<td>6.12 (2.18)</td>
<td>-2.00</td>
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<tr>
<td>Feeling</td>
<td>5.58 (1.97)</td>
<td>5.49 (1.89)</td>
<td>0.29</td>
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</table>
Table 2a. Replication study means and standard deviations for Republicans on manipulation check items.

<table>
<thead>
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<th>Invulnerability</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certainty</td>
<td>3.55 (1.06)</td>
<td>3.69 (1.14)</td>
<td>-0.72</td>
<td>0.47</td>
</tr>
<tr>
<td>Influence</td>
<td>7.17 (1.80)</td>
<td>6.73 (2.16)</td>
<td>1.22</td>
<td>0.22</td>
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<tr>
<td>Safety</td>
<td><strong>6.32 (2.23)</strong></td>
<td><strong>7.35 (2.20)</strong></td>
<td><strong>-2.59</strong></td>
<td><strong>0.01</strong></td>
</tr>
<tr>
<td>Feeling</td>
<td>7.47 (1.65)</td>
<td>7.21 (2.03)</td>
<td>0.767</td>
<td>0.45</td>
</tr>
</tbody>
</table>

Table 2b. Replication study means and standard deviations for Democrats on manipulation check items.

<table>
<thead>
<tr>
<th>Superpower (condition)</th>
<th>Flying</th>
<th>Invulnerability</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certainty</td>
<td>3.24 (1.18)</td>
<td>3.25 (1.03)</td>
<td>-0.02</td>
<td>0.98</td>
</tr>
<tr>
<td>Influence</td>
<td>6.33 (2.24)</td>
<td>6.42 (2.03)</td>
<td>-0.23</td>
<td>0.82</td>
</tr>
<tr>
<td>Safety</td>
<td><strong>5.43 (2.65)</strong></td>
<td><strong>7.98 (1.62)</strong></td>
<td><strong>-5.81</strong></td>
<td>&lt;<strong>0.001</strong></td>
</tr>
<tr>
<td>Feeling</td>
<td>6.98 (2.25)</td>
<td>6.90 (1.95)</td>
<td>0.181</td>
<td>0.86</td>
</tr>
</tbody>
</table>
Table 3. Comparison of demographic data for both the present replication and the Napier and colleagues study (2017).

<table>
<thead>
<tr>
<th>Source</th>
<th>Present Study</th>
<th>Napier et. al. (2017)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Age</td>
<td>19.4 (SD = 2.12)</td>
<td>35.31 (SD = 13.18)</td>
</tr>
<tr>
<td>Gender</td>
<td>50.4% Female</td>
<td>66.9% Female</td>
</tr>
<tr>
<td>Race</td>
<td>89.8% White</td>
<td>74.5% White</td>
</tr>
<tr>
<td>Partisanship</td>
<td>45% Republican; 55% Democrat</td>
<td>31% Republican; 69% Democrat</td>
</tr>
<tr>
<td>Total Sample Size (N)</td>
<td>223</td>
<td>145</td>
</tr>
</tbody>
</table>
Figure 1a. Replication study mean social conservatism among Democrats and Republicans as a function of superpower condition.

Figure 1b. Replication study mean economic conservatism among Democrats and Republicans as a function of superpower condition.